

निविदा पूछताछ **TENDER ENQUIRY**

[वेब निविदा] [WEB TENDER]

माझगांव डॉक शिपबिल्डर्स लिमिटेड (भारत सरकार) का उपक्रम) MAZAGON DOCK SHIPBUILDERS LIMITED

(Formerly known as Mazagon Dock Limited) (A Govt. of India Undertaking)

CIN: L35100MH1934GOI002079 Dockyard Road, Mumbai 400 010 Website- www.mazagondock.in

Certified - ISO 9001: 2008 for Shipbuilding Division GST ID: 27AAACM8029J1ZA

निविदा सं./Tender No 1200003228 क्रय अधिकारी/Purchase Exec. Ranjeet Kumar

सेवा में /To

विभाग/Department EY COMMERCIAL

क्रय अधिकारी/Purchase Exec. Ranjeet Kumar

दूरभाष सं./Telephone No 23763570 फैक्स सं./Fax No 23741386

ई-मेल/E-Mail ranjeetkumar100261@mazdock.com

निविदा सं./Tender No 1200003228 निविदा तिथि/ Tender Date 22.05.2024 निविदा बंद की तिथि/Tender Closing Date 30.05.2024 निविदा बंद होने का समय/Tender Closing Time 12:00:00 आरएफक्यू सं./RFQ No 2130000451

दूरभाष सं./Telephone

निविदा श्ल्क/Tender Fee

फैक्स सं./Fax ई-मेल/E-Mail

> रू/Rs 0.00

बयाना राशि/EMD Amount रू/Rs 420,000.00

पुर्व बिड बैठक तिथि और समय/Pre Bid Meeting Date & Time

निविदा खोलने की तिथि और समय/Tender Opening Date & Time

प्रस्ताव वैधता तिथि है/Offer should be valid up to

सुरक्षा जमा/Security Deposit वरीय बैंक जमानत /Perf. Bank Guarantee

5.00 %आदेश मूल्य का/PO value 5.00 %आदेश मूल्य का/PO value

(आगे के विवरण हेतु कृपया सम्बंद्ध नियम शर्तों को पढ़े । सुनिश्चित करें कि कोटेशन और संबंधित पत्राचार के लिए विभाग का नाम, क्रय अधिकारी का नाम ,निविदा संख्या, बंद होने का समय एवं तिथि एवं आरएफक्यू सं. अपने कोटेशनमें लिखें।

,00:00:00

04.06.2024,15:00:00

Kindly read and refer relevant terms & conditions for further details. Do ensure to Quote Department Name, Purchase Executive 's Name , Tender Number, closing date & time and RFO Number in your Ouotation & related correspondence)

प्रिय महोदय/महोदया

Dear Sir / Madam,

विषय /SUB:- PROCUREMENT OF CARBON STEEL FLANGES SUBSEA (SOUR SERVICE) FOR PART REPLACEMENT

माझगाँव डॉक शिपबिल्डर्स लिमिटेड प्रतिष्ठित/संभावित आपूर्तिकर्ताओं से निम्न हेतु, प्रतियोगितात्मक दो बोली प्रणाली में (भाग -। तकनिकी - वाणिज्य बोली एवं भाग ।। मूल्य बोली) बोली ओमंत्रित करती है।

Mazagon Dock Shipbuilders Limited (MDL) invites Competitive - Bid from reputed Supplier for the following in TWO BID system (Part - | Techno - Commercial Bid & Part - | Price Bid).

क्रसं.	सामग्री / सेवा विवरण	मात्रा / इकाई	आपूर्ति तिथि
SL.No.	Material / Service Details	Quantity / unit	Delivery Date
04600	सामग्री सं./ Material Number :- 3500000000000080908 Sr No 1a Weld Neck Flange for SB-SA	6 Number	10.06.2024
	सामग्री वर्णन/Material Description :Weld Necl	x Flange for SB-SA	

Page: 1 of 14

क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date	
	Diameter (Inch): 10.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 95.6 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60			
4700	सामग्री सं./ Material Number :- 3500000000000000000099 Sr No 1b Swivel Flange for SB-SA सामग्री वर्णन/Material Description :Swivel Fla Diameter (Inch) : 10.75 Flange class #900 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 95.6 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	4 Number	10.06.2024	
)4800	सामग्री सं./ Material Number :- 35000000000000000000000000000000000000	3 Number for SB-SA	10.06.2024	

क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	ामग्री सं./ Material Number :- 35000000000000000000011 No 2a Weld Neck Flange for RS 8- ID सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 10.75 Flange class #900 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 93.7 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	6 Number Flange for RS 8- ID	10.06.2024
	ामग्री सं./ Material Number :- 35000000000000000000000000000000000000	4 Number ge for RS 8- ID	10.06.2024

<u>नेविदा सं./</u>	Tender No:- 1200003228 निविदा तिथि/ Tender Date	:- 22.05.2024 आरएफव	च्यू सं./RFQ No:- 21300004
		,e	
क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	सामग्री वर्णन/Material Description :Weld Neck SE-MSP Diameter (Inch) : 12.75 Flange class #900 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 93.7 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	Flange for Segment N16-M	INP, W12-N3, SQ-BHS,
5200	सामग्री सं./ Material Number :- 35000000000000000000000000000000000000	16 Number nge for Segment N16-MNP,	10.06.2024 W12-N3, SQ-BHS,
05300	सामग्री सं./ Material Number :- 350000000000000000915 Sr No 3c Test Rings for N16-MNP सामग्री वर्णन/Material Description :Test Rings Diameter (Inch) : 12.75 Flange class #900 Wall thickness (mm) : 14.3	3 Number for Segment N16-MNP	10.06.2024

निविदा सं./ Tender No:- 1200003228					
क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date		
	Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60 Length: 500 mm				
05400	सामग्री सं./ Material Number :- 3500000000000080922 Sr No 7a Weld Neck Flange for ZB-ICD	6 Number	10.06.2024		
	सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 16	Flange for Segment ZB-ICD)		
	Flange class #900				
	Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7				
	Design Temp (Degree C): 93				
	Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60				
)5500	सामग्री सं./ Material Number :- 350000000000080923	4 Number	10.06.2024		
	Sr No 7b Swivel Flange for ZB-ICD सामग्री वर्णन/Material Description :Swivel Flange for Segment ZB-ICD				
	सामग्रा वर्णन/Material Description :Swivei Flan	ge for Segment ZB-ICD			
	Flange class #900				
	Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7				
	Design Tessure (Regentle): 93.7 Design Temp (Degree C): 93				
	Pipeline Grade: API 5L X 60				
	Type CS NACE Grade A694 F-60				
05600	सामग्री सं./ Material Number :- 3500000000000080924 Sr No 7c Test rings for ZB-ICD	3 Number	10.06.2024		
	सामग्री वर्णन/Material Description :Test rings f	or Segment ZB-ICD			
	Diameter (Inch): 16 Flange class #900				
	Wall thickness (mm): 15.9				
	Design Pressure (Kg/cm2): 93.7				
	Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60				
	Type CS NACE				

क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	Grade A694 F-60 Length : 500 mm		
05700	सामग्री सं./ Material Number :- 35000000000000080925 Sr No 8a Weld Neck Flange for HSD-HRC सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 16 Flange class #900 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 94.9 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60	6 Number Flange for Segment HSD-H	10.06.2024 RC
05800	Type CS NACE Grade A694 F-60 सामग्री सं./ Material Number :- 3500000000000080926 Sr No 8b Swivel Flange for HSD-HRC	4 Number	10.06.2024
	सामग्री वर्णन/Material Description :Swivel Fland Diameter (Inch) : 16 Flange class #900 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 94.9 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	ge for Segment HSD-HRC	
05900	सामग्री सं./ Material Number :- 35000000000000080927 Sr No 9a Weld Neck Flange for HSC-HRG सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 16 Flange class #900 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 93.8 Design Temp (Degree C) : 83 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	6 Number Flange for Segment HSC-H	10.06.2024 RG
06000	सामग्री सं./ Material Number :- 35000000000000080929 Sr No 9b Swivel Flange for HSC-HRG सामग्री वर्णन/Material Description :Swivel Flan Diameter (Inch) : 16 Flange class #900 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 93.8	4 Number ge for HSC-HRG	10.06.2024

	0.2.0		
क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	Design Temp (Degree C): 83 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60		
06100	सामग्री सं./ Material Number :- 350000000000000080930 Sr No 10a Weld Neck Flange for HRG-HX सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 6.625 Flange class #1500 Wall thickness (mm) : 12.7 Design Pressure (Kg/cm2) : 151.6 Design Temp (Degree C) : 55 Pipeline Grade : API 5L X 52 Type CS Grade A594	6 Number Flange for Segment HRG-F	10.06.2024 HX
06200	सामग्री सं./ Material Number :- 35000000000000080931 Sr No 10b Swivel Flange for HRG-HX सामग्री वर्णन/Material Description :Swivel Flan Diameter (Inch) : 6.625 Flange class #1500 Wall thickness (mm) : 12.7 Design Pressure (Kg/cm2) : 151.6 Design Temp (Degree C) : 55 Pipeline Grade : API 5L X 52 Type CS Grade A594	4 Number age for Segment HRG-HX	10.06.2024
06300	सामग्री सं./ Material Number :- 350000000000000080932 Sr No 10c Test Rings for HRG-HX सामग्री वर्णन/Material Description :Test rings f Diameter (Inch) : 6.625 Flange class #1500 Wall thickness (mm) : 12.7 Design Pressure (Kg/cm2) : 151.6 Design Temp (Degree C) : 55 Pipeline Grade : API 5L X 52 Type CS Grade A594 Length : 500 mm	3 Number for Segment HRG-HX	10.06.2024
	सामग्री सं./ Material Number :- 350000000000080933	6 Number	10.06,2024

निविदा सं./ Tender No:- 1200003228 विविदा तिथि/ Tender Date:- 22.05.2024 आरएफक्यू सं./RFQ No:- 213000045				
क्र सं.	सामग्री / सेवा विवरण	मात्रा / इकाई	आपूर्ति तिथि	
SL.No.	Material / Service Details	Quantity / unit	Delivery Date	
	Diameter (Inch): 8.625 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594			
06500	सामग्री सं./ Material Number :- 3500000000000080934 Sr No 11b Swivel Flange for N12-NS	4 Number	10.06.2024	
	सामग्री वर्णन/Material Description :Swivel Flat Diameter (Inch) : 8.625 Flange class #1500 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 151.6 Design Temp (Degree C) : 55 Pipeline Grade : API 5L X 52 Type CS Grade A594			
06600	सामग्री सं./ Material Number :- 350000000000000080935 Sr No 11c Test Rings for N12-NS सामग्री वर्णन/Material Description :Test rings to Diameter (Inch) : 8.625 Flange class #1500 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 151.6 Design Temp (Degree C) : 55 Pipeline Grade : API 5L X 52 Type CS	3 Number for Segment N12-NS	10.06.2024	

निविदा सं./ Tender No:- 1200003228 निविदा तिथि/ Tender Date:- 22.05.2024 आरएफक्यू सं./RFQ No:- 213000045			
क्र सं.	सामग्री / सेवा विवरण	मात्रा / इकाई	आपूर्ति तिथि
SL.No.	Material / Service Details	Quantity / unit	Delivery Date
	Grade A594 Length : 500 mm		
06700	सामग्री सं./ Material Number :- 35000000000000080936 Sr No 12a Weld Neck Flange for SV-SHD सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 12.75 Flange class #1500 Wall thickness (mm) : 14.3	6 Number Flange for Segment SV-SH	10.06.2024 D
	Design Pressure (Kg/cm2): 140 Design Temp (Degree C): 93.3 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60		
06800	सामग्री सं./ Material Number :- 35000000000000080937 Sr No 12b Swivel Flange for SV-SHD सामग्री वर्णन/Material Description :Swivel Flan Diameter (Inch) : 12.75 Flange class #1500 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 140 Design Temp (Degree C) : 93.3 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	4 Number ge for Segment SV-SHD	10.06.2024
06900	सामग्री सं./ Material Number :- 35000000000000080938 Sr No 13a Weld Neck Flange for SJ2-SA सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 12.75 Flange class #1500	6 Number Flange for Segment SJ2-SA	10.06.2024

क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 143.07 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60		
7000	सामग्री सं./ Material Number :- 35000000000000080939 Sr No 13b Swivel Flange for SJ2-SA सामग्री वर्णन/Material Description :Swivel Flan Diameter (Inch) : 12.75	4 Number age for Segment SJ2-SA	10.06.2024
	Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 143.07 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60		
7100	सामग्री सं./ Material Number :- 3500000000000000000940 Sr No 14a Weld Neck Flange for SF-BHS सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 12.75 Flange class #1500 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 142 Design Temp (Degree C) : 93.3 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	6 Number Flange for Segment SF-BH	10.06.2024 S
7200	सामग्री सं./ Material Number :- 3500000000000000000941 Sr No 14b Swivel Flange for SF-BHS सामग्री वर्णन/Material Description :Swivel Flan Diameter (Inch) : 12.75 Flange class #1500 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 142 Design Temp (Degree C) : 93.3 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	4 Number ge for Segment SF-BHS	10.06.2024
7300	सामग्री सं./ Material Number :- 3500000000000080942 Sr No 15a Weld Neck Flange for MNW-N15	6 Number	10.06.2024

निविदा सं./	Tender No:- 1200003228 निविदा तिथि/ Tender Date	- 22.05.2024 आरएफक्र	पू सं./RFQ No:- 2130000451
क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 17.5 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594		
07400	सामग्री सं./ Material Number :- 350000000000000080943 Sr No 15b Swivel Flange for MNW-N15 सामग्री वर्णन/Material Description :Swivel Flan Diameter (Inch) : 12.75 Flange class #1500 Wall thickness (mm) : 17.5 Design Pressure (Kg/cm2) : 151.6 Design Temp (Degree C) : 55 Pipeline Grade : API 5L X 52 Type CS Grade A594	4 Number age for Segment MNW-N15	10.06.2024
07500	सामग्री सं./ Material Number :- 350000000000000000944 Sr No 15c Test rings for MNW-N15 सामग्री वर्णन/Material Description :Test rings f Diameter (Inch) : 12.75 Flange class #1500 Wall thickness (mm) : 17.5 Design Pressure (Kg/cm2) : 151.6	3 Number for MNW-N15	10.06.2024

निविदा सं./	Tender No:- 1200003228 निविदा तिथि/ Tender Date	e:- 22.05.2024	रू सं./RFQ No:- 2130000451
क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594 Length: 500 mm		-
07600	सामग्री सं./ Material Number :- 35000000000000080945 Sr No 16a Weld Neck Flange for HS-HRG सामग्री वर्णन/Material Description :Weld Necl Diameter (Inch) : 12.75 Flange class #1500 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 93.7 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	6 Number Flange for Segment HS-HR	10.06.2024 G
07700	सामग्री सं./ Material Number :- 35000000000000080946 Sr No 16b Swivel Flange for HS-HRG सामग्री वर्णन/Material Description :Swivel Fla Diameter (Inch) : 12.75 Flange class #1500 Wall thickness (mm) : 14.3 Design Pressure (Kg/cm2) : 93.7 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	4 Number Inge for Segment HS-HRG	10.06.2024
07800	सामग्री सं./ Material Number :- 35000000000000080948 Sr No 17a Weld Neck Flange for NM-MNP सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 14 Flange class #1500 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 141 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	6 Number K Flange for Segment NM-M	10.06.2024 NP
07900	सामग्री सं./ Material Number :- 3500000000000080949 Sr No 17b Swivel Flange for NM-MNP सामग्री वर्णन/Material Description :Swivel Fla Diameter (Inch) : 14	4 Number nge for Segment NM-MNP	10.06.2024

निविदा सं./ Tender No:- 1200003228			
क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 141 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60		
08000	सामग्री सं./ Material Number :- 3500000000000080950 Sr No 17c Test rings for NM-MNP	3 Number	10.06.2024
	सामग्री वर्णन/Material Description :Test rings for Diameter (Inch) : 14 Flange class #1500 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 141 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60 Length : 500 mm	or Segment NM-MNP	
08100	सामग्री सं./ Material Number :- 350000000000000080951 Sr No 18a Weld Neck Flange for HE-HRG सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 14 Flange class #1500 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 93.7 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	6 Number Flange for Segment HE-HR	10.06.2024 RG
08200	सामग्री सं./ Material Number :- 35000000000000080952 Sr No 18b Swivel Flange for HE-HRG सामग्री वर्णन/Material Description :Swivel Flan Diameter (Inch) : 14 Flange class #1500 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 93.7 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	4 Number age for Segment HE-HRG	10.06.2024
08300	सामग्री सं./ Material Number :- 3500000000000080953 Sr No 19a Weld Neck Flange for IU-ICG	6 Number	10.06.2024

क्र सं. SL.No.	सामग्री / सेवा विवरण Material / Service Details	मात्रा / इकाई Quantity / unit	आपूर्ति तिथि Delivery Date
	सामग्री वर्णन/Material Description :Weld Neck Diameter (Inch) : 16 Flange class #1500 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 148 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	Flange for Segment IU-ICC	
08400	सामग्री सं./ Material Number :- 350000000000000080954 Sr No 19b Swivel Flange for IU-ICG सामग्री वर्णन/Material Description :Swivel Fland Diameter (Inch) : 16 Flange class #1500 Wall thickness (mm) : 15.9 Design Pressure (Kg/cm2) : 148 Design Temp (Degree C) : 93 Pipeline Grade : API 5L X 60 Type CS NACE Grade A694 F-60	4 Number nge for IU-ICG	10.06.2024

नियम और शर्ते : भाग ए मे लिखी हुई और इतर संलग्नपत्रे इस निविदा एक अभिन्न अंग हैं ।हमें आशा हैं की,हमें प्रतियोगित्मिक और उचित प्रस्ताव इस निविदा के लिए प्राप्त होगा ।

Terms & Conditions as indicated in Part A of this tender and other enclosures / annexures form an integral part of this tender document. We look forward to receive your most competitive and reasonable offer against this Tender.

माझगाँव डॉक शिपबिल्डर्स लिमिटेड के लिए /For Mazagon Dock Shipbuilders Ltd

Mazagon Dock Shipbuilders Limited

Open tender (Two-Bid System)

TENDER ENQUIRY FORM (TEF)

DIVISION: SUBMARINE & HEAVY ENGINEERING DEPARTMENT- COMMERCIAL (EAST YARD)

MAZAGON DOCK SHIPBUILDERS LIMITED (MDL), Mumbai India, a premier Warship building, Ship repair, Submarine Construction & Refits and Heavy Engineering Company owned by Government of India under Ministry of Defence.

Issue of E - Tender Enquiry Document: This e-tender enquiry can be downloaded from our E-procurement website *http://eprocuremdl.nic.in.* To login and quote against this e-tender on E-procurement portal, bidders should have Digital Signature Certificate (DSC). The details of DSC are available on the MDL website.

Tender opening: Technical bid (PART-I) will be opened immediately after the tender closing date and time through e-procurement portal. Bidders can view details of quotation received against tender after tender opening on e-procurement website.

Price bid opening: Similarly, after completion of Technical scrutiny/evaluation, price bid (PART-II) opening will be done and intimation will be forwarded to Techno-Commercially accepted bidders. Bidders can view the details of price bid opening against the tender on e-procurement web site.

Subject: - PROCUREMENT OF CARBON STEEL FLANGES SUBSEA (SOUR SERVICE) FOR PART REPLACEMENT PIPELINES PROJECT (PRPP) FOR ONGC.

1. Description:

PROCUREMENT OF CARBON STEEL FLANGES SUBSEA (SOUR SERVICE) FOR PART REPLACEMENT PIPELINES PROJECT (PRPP) FOR ONGC.

SR NO.	Material /service details	QTY	Unit
130	Material Number:-35000000000000080908 Weld Neck Flange for SB-SA Diameter (Inch): 10.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 95.6 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos

140	Material Number:-35000000000000000099 Swivel Flange for SB-SA Diameter (Inch): 10.75 Flange class #900		
	Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 95.6 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos
150	Material Number:-35000000000000000000000000000000000000	3	Nos
160	Material Number:-350000000000000000011 Weld Neck Flange for RS 8- ID Diameter (Inch): 10.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos
170	Material Number:-35000000000000000000000000000000000000	4	Nos
180	Material Number:-35000000000000000000000000000000000000	24	Nos

190	Material Number:-35000000000000000000000000000000000000	16	Nos
200	Material Number:-35000000000000000000000000000000000000	3	Nos
270	Material Number:-3500000000000080922 Weld Neck Flange for Segment ZB-ICD Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos
280	Material Number:-3500000000000080923 Swivel Flange for Segment ZB-ICD Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos
290	Material Number:-3500000000000000924 Test rings for Segment ZB-ICD Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60 Length: 500 mm	3	Nos

300	Material Number:-350000000000000000925 Weld Neck Flange for Segment HSD-HRC Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 94.9 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos
310	Material Number:-35000000000000000000000000000000000000	4	Nos
320	Material Number:-35000000000000000000000000000000000000	6	Nos
330	Material Number:-3500000000000000929 Swivel Flange for HSC-HRG Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.8 Design Temp (Degree C): 83 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos
340	Material Number:-35000000000000000000000000000000000000	6	Nos

350	Material Number:-35000000000000000000000000000000000000	4	Nos
360	Material Number:-35000000000000000000000000000000000000	3	Nos
370	Material Number:-3500000000000000333 Weld Neck Flange for Segment N12-NS Diameter (Inch): 8.625 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CSGrade A594	6	Nos
380	Material Number:-3500000000000080934 Swivel Flange for Segment N12-NS Diameter (Inch): 8.625 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594	4	Nos
390	Material Number:-35000000000000000000000000000000000000	3	Nos

400	Material Number:-3500000000000080936 Weld Neck Flange for Segment SV-SHD Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 140 Design Temp (Degree C): 93.3 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos
410	Material Number:-3500000000000080937 Swivel Flange for Segment SV-SHD Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 140 Design Temp (Degree C): 93.3 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos
420	Material Number:-3500000000000080938 Weld Neck Flange for Segment SJ2-SA Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 143.07 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos
430	Material Number:-3500000000000080939 Swivel Flange for Segment SJ2-SA Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 143.07 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos
440	Material Number:-35000000000000080940 Weld Neck Flange for Segment SF-BHS Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 142 Design Temp (Degree C): 93.3 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos

450	Material Number:-35000000000000000000000000000000000000	4	Nos
460	Material Number:-35000000000000080942 Weld Neck Flange for Segment MNW-N15 Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 17.5 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594	6	Nos
470	Material Number:-3500000000000000943 Swivel Flange for Segment MNW-N15 Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 17.5 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594	4	Nos
480	Material Number:-35000000000000000944 Test rings for MNW-N15 Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 17.5 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594 Length: 500 mm	3	Nos
490	Material Number:-3500000000000080945 Weld Neck Flange for Segment HS-HRG Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos

500	Material Number:-3500000000000080946 Swivel Flange for Segment HS-HRG Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos
510	Material Number:-3500000000000080948 Weld Neck Flange for Segment NM-MNP Diameter (Inch): 14 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 141 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos
520	Material Number:-3500000000000000949 Swivel Flange for Segment NM-MNP Diameter (Inch): 14 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 141 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos
530	Material Number:-35000000000000000000000000000000000000	3	Nos
540	Material Number:-3500000000000080951 Weld Neck Flange for Segment HE-HRG Diameter (Inch): 14 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos

550	Material Number:-35000000000000000000000000000000000000	4	Nos
560	Material Number:-35000000000000000953 Weld Neck Flange for Segment IU-ICG Diameter (Inch): 16 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 148 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos
570	Material Number:-3500000000000000954 Swivel Flange for IU-ICG Diameter (Inch): 16 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 148 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos

- i) Scope & Detailed specification As detailed in Annexure-1 (Spec. No-2024B Rev.0, PRPP-RFQ-PL-03). Line items are indicative; details specs are applicable.
- ii) Inspection & Test requirements:
 - a. 3.2 final inspection certificate by TPI (ONGC CA)
 - b. Impact testing, IGC testing, DPI/MPI & UST
 - c. Finite Element Analysis (FEA) of each size
 - d. Hydro test- 01 test of each combination of size & rating
 - e. HIC testing
 - f. Paint coating as per specification
 - g. Hardness Tests & reports as per ASTM 370
- iii) Documentation COC from supplier and Material inspection certificate (Chemical and Physical) from NABL laboratory or 3.1 Mill test certificate / dimensional reports/ warranty certificate, etc.
- iv) Receipt Inspection MDL User
- v) Location Mundra Port (Onsite at fabricator premises)
- vi) Delivery- 06 weeks to 10 weeks from issue date of PO
- vii) Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit

viii) The Dimensional Design for the Flanges Shall Cater for the use of Hydraulic Bolt Tensioning Equipment.

Note: - Any technical guery related to SOW shall be forwarded to following:

Mr. Rupesh Mahajan, Chief Manager (PLG-EY).

E-mail: rpmahajan@mazdock.com

Or

Mr Hemantkumar Rathod, DGM (PLG-EY)

E-mail: hrathod@mazdock.com **Phone - 022-2376 3622**

2. Instructions to the bidder:

- a. Bidders should submit all documents strictly through e-procurement only. Physical copy of the bid will not be accepted except for the physical copies of documents requested in the tender.
- b. In case of supply/services of duplicate / spurious / substandard items by the firm, MDL will resort to prosecution of the firm by legal action with all the stringent measures against the firm for supplying such items which had led to delay of the project of national importance and has endangered the national security. The firm will also be blacklisted in MDL & will be debarred from quoting in future MDL tenders and the same will be intimated to all other public sector undertakings and other Government organization.
- c. Bidders are requested to ensure that only relevant documents complete in all respect as indicated in the tender should be attached with their offer. The first page of every uploaded set of scanned document shall be an index of its contents. In case the offers received against this tender are more than 20, no opportunity will be extended for submission of deficient documents after opening of bids. The evaluation of the offers will be carried out and bidders will be qualified based on the documents received along with their offer.
- d. Delivery date mentioned in the RFQ/Tender is tentative. However, bidders have to follow delivery schedule as per purchase order. Non-compliance of the same beyond the contractual terms may lead to imposition of liquidated damages or cancellation of contract/ Purchase order.
- e. Where requests are made by bidders with reasons for extension of the tender closing date provided such an extension will not adversely affect the project schedule and bidders are instructed for submission of such request in the concerned commercial department at least 2 days in advance excluding the day of tender closing date, amendment to the tender enquiry may be issued.
- f. Any participating firm which has been debarred/blacklisted by Central/State Governments or by any entity controlled by Central/State Governments from participating in any of their project, as on date of submission of Tender, shall not be eligible to submit the Tender.

3. Pre-Qualification Criteria(PQC):

a) Technical PQC

Bidder should be the manufacturer (OEM) and should be in ONGC (SVL) or ONGC confirmation about in process of their approval.

- i) The bidder should have regularly for at least the last 02 years, ending 31st March (of any other year ending followed in the relevant country) of the previous financial year, manufactured and supplied Subsea flanges (Carbon steel- Sour Services) with similar specifications i.e. NC#900 class or above as per current requirement.
- ii) Documentary evidence to be provided in the form of PO copies/WCC from customer/Inspection reports/customer letter for completion of job for ONGC projects.

b) Commercial PQC:

- i) The average annual financial turnover of 'The bidder' during the last three years, ending 31st March (or any other year ending followed in relevant country) of the previous financial year excluding the calendar year of tendering should be at INR 1,05,00,000/- as per the annual report (audited balance sheet and profit and loss account) of the relevant period, duly authenticated by a Chartered Accountant/Cost Accountant in India or equivalent in relevant countries.
- ii) Bidders Shop and establishment registration certificate or registration certificate from registrar of firms or certificate of incorporation from Registrar of Companies (Not required for permanent registered vendors with MDL).

c) Applicability to 'Make in India':

Bidders (manufacturer or principal manufactures of authorised representative) who have a valid/approved on going 'Make in India' agreement/program and who while meeting all other criteria above, except for any or more of sub-criteria in Experience and Past Performance above, would also be considered to be qualified provided:

- (i) their foreign 'Make-in-India' associates meet all the criteria above without exemption, and
- (ii) the Bidder submits appropriate documentary proof for a valid/approved on going 'Make in India' agreement/program.
- (iii) the bidder (manufacturer or principal of authorised representative) furnishes along with the bid a legally enforceable undertaking jointly executed by himself and such foreign Manufacturer for satisfactory manufacture, Supply (and erection, commissioning if applicable) and performance of 'The Product' offered including all warranty obligations as per the general and special conditions of contract.

d) Authorized Representatives:

Bids of bidders quoting as authorised representative of a principal manufacturer would also be considered to be qualified, provided:

- i) their principal manufacturer meets all the criteria above without exemption, and
- ii)—the principal manufacturer furnishes a legally enforceable tender-specific authorisation in the prescribed form (Deed of Agreement) assuring full guarantee and warranty obligations and all contractual obligation as per the tender terms and conditions; and
- iii) the bidder himself should have been associated, as authorised representative of the same or other Principal Manufacturer for same set of services as in present bid (supply, installation, satisfactorily commissioning, after sales service as the case may be) for same or similar 'Product' for past three years.

e) Joint Ventures and Holding Companies:

Credentials of the partners of Joint ventures cannot (repeat cannot) be clubbed for the purpose of compliance of PQC in supply of Goods/Equipment, and each partner must comply with all the PQC criteria independently. However, for the purpose of qualifying the Financial Standing Criteria, the Financial Standing credentials of a Holding Company can be clubbed with only one of the fully owned subsidiary bidding company, with appropriate legal documents proving such ownership.

- f) The condition of prior turnover and prior experience is relaxed only for all Start-ups recognised by Department for Promotion of Industry and Internal Trade (DPIIT) subject to meeting of quality & technical specifications. Start-ups may be MSMEs or otherwise. Start-ups shall be given relaxation in prior turnover and prior experience as specified under:
 - i) Start-ups shall be given 100% relaxation in prior turnover and prior experience subject to meeting of quality & technical specifications.

ii) If L-1 bidder is Start-up, then Start-up firms are eligible for ordering of 100% of tendered quantity.

Note: The above provisions are subject to meeting purchase preference policies which will prevail over above provision.

g) MSEs shall be given 100% relaxation of prior turnover and prior experience subject to meeting of quality and technical specifications.

Note: Bidders need to upload / submit supporting documentary evidence in support of the Pre-Qualification Criteria Viz. Work / Purchase Order, Work Completion Certificate/ Proof of payment with Tax Invoice / Store Receipt and Acceptance Report or any other evidence that confirms that the work is completed which is issued by the party for whom the work is done. HOD-C (East Yard) or TNC has a right to verify / cause verification of authenticity of the said documents whenever felt necessary.

4. Earnest Money Deposit (EMD) / Bid Security: INR 4,20,000/-

EMD shall be obtained by way of NEFT/ Demand Draft / Pay order / Bank Guarantee / Insurance Security Bond / e-Bank Guarantee in favour of Mazagon Dock Shipbuilders Limited, Mumbai from the list of Banks approved by SBI / Canara Bank published on MDL website. Crossed DD / Pay Order issued by Co-operative banks however may be considered to be accepted and the bid would be considered accordingly.

Bids / Offers without EMD/Bid Bond along with Part-I bid will not be considered. EMD of unsuccessful bidders will be returned after finalization of the tender and shall be interest free.

Firm should submit the original EMD in closed envelope (Sealed), Super scribed as EMD/BID Bond for Bid No....., due date, time, and addressed to, HOD (EY-Commercial Dept.), Alcock Yard, MAZAGON DOCK SHIPBUILDERS LIMITED, Dock Yard Road, Mumbai, 400010, INDIA, and should be Submitted at below address within 7 working days from the Bid closing date.

HOD (Commercial – EY), 4th floor, North Block, SSA Work Shop, Office building, Alcock Yard, MAZAGON DOCK SHIPBUILDERS LIMITED, Dockyard Road, Mumbai-400010, India.

Timely submission of the original EMD is the responsibility of the bidders and no reasons / excuses in this regard will be entertained by MDL. Original EMD reached after 7 working days from tender closing date & time will render the e-bid (submitted by bidder) liable for rejection.

Exemption from submission of EMD / BID Bond: Following bidders shall be exempted from submission of EMD/Bid Bond:

- i) State & Central Government of India Departments & Public Sector Undertakings.
- ii) Firms registered with MDL. To qualify for EMD exemption, firms should necessarily submit valid copy of the Registration Certificate issued by MDL, for the items for which the offer is being submitted. Firms in the process of obtaining MDL registration will not be considered for EMD exemption.
- iii) Micro and Small Enterprises who are manufacturer or Service Provider and give specific confirmation to this effect at the time of bid submission and whose credentials are validated online through Udyam Registration (as validated by Government from time to time) and through uploaded supporting documents.
- iv) Firms registered with NSIC under its "Single Point Registration Scheme". (Exemption will apply only to items/services for which they are registered. To qualify for EMD exemption, firms should

necessarily submit valid copy of the Registration Certificate along with the list of items / services for which they are registered, as issued by NSIC, in Part-I offer / bid. Firms in the process of obtaining NSIC registration will not be considered for EMD exemption.

- v) Start-ups as recognized by Department of Industrial Policy and Promotion (DIPP).
- vi) The recognised institutes such as VJTI/IIT.
- vii) Common/Deemed DPSU registered vendors qualify for EMD exemption. Such firms shall submit valid copy of the registration certificate issued by DPSUs (other than MDL) for the items / services for which the offer is being submitted in Part-I offer/bid. Firms in process of obtaining registration in other DPSUs will not be considered for EMD exemption.
- viii) Green Channel Status vendors qualify for EMD exemption. Such firms shall submit valid copy of the Green channel certificate issued by MoD for the items for which the offer is being submitted in Part-I offer/bid. Firms in process of obtaining this certificate will not be considered for EMD exemption.

5. Forfeiture of EMD:

EMD shall be forfeited in the following cases:

- i) Bidder withdraws, amends, impairs or derogates from the tender, agreed conditions of TNC /PNC in any respect within the period of validity of his offer.
- ii) Non-acceptance of order.

6. Validity Period of Bid:

Bid shall remain valid for a period of not less than **180 days** after the deadline date for bid submission. Technically accepted bidder shall be given opportunity to accept validity as per the tender in case of shorter validity quoted by him. Non-acceptance there after shall be rejected by MDL as nonresponsive.

7. Delivery Schedule/period:

Delivery shall start within 6 weeks from the date of PO and shall be completed within 10 weeks from the date of PO.

8. Receipt of Bids / Offers:

Bidders have to submit their offers through E-procurement Portal only.

9. Submission of Revised Bids:

The bidders if so desire may modify their bids prior to the closing date and time of the tender enquiry. However, it shall be the responsibility of the bidder to ensure that they have submitted the revised bid in E-Procurement portal.

10. Bid Rejection Criteria:

i) Categorical Rejection Criteria

The following conditions / deviations are non-negotiable and therefore, any bid falling under these conditions / deviations shall be summarily rejected. Bidders to note that they shall not be provided any opportunity to rectify these conditions / deviations post bid opening:

- a) Bidders who are debarred under PPP MII order 2017, CPPP including Tender holiday issued by MDL.
- b) Bids received without EMD (other than those who are exempted from payment of EMD).

ii) Liable for Rejection Criteria:

- a) Non-compliance/non-acceptance to any of the terms and conditions of the tender shall render the bid liable for rejection. Equal time and opportunity for submission of deficient techno commercial documents and clarification shall be given to the bidders. Bidders are required to submit such documents / clarifications within the duration / date stipulated by MDL failing which their bids will be rejected.
- b) Bids received without Integrity Pact duly signed by the bidder on each page.

11. OEM/Authorised Dealer/Agents of Supplier:

Except in case of Commercially-Off-The-Shelf (COTS) items, when a firm sends quotation for an item manufactured by some different company, the firm is also required to attach, in its quotation, the manufacturer's authorisation certificate and also manufacturer's confirmation of extending the required warranty for that product. This is necessary to ensure quotation from a responsible party offering genuine product, also backed by a warranty obligation from the concerned manufacturer. In the tender, either the manufacturer or its authorised dealer can be considered as valid bidders. In case of large contracts, especially capital equipment, the manufacturer's authorisation must be insisted upon on a tender specific basis, not general authorisation/dealership, by so declaring in the bid documents clearly. In cases where the manufacturer has submitted the bid, the bids of its authorised dealer will not be considered and EMD will be returned. And in case of violations, both infringing bids will be rejected.

There can be only one bid from the following:

- i)—The principal manufacturer directly or through one Indian agent on his behalf; and
- ii)-Indian/foreign agent on behalf of only one principal.

12. Guarantee & warranty:

Warranty period shall be for 12 months from the date of supply of the materials. Valid warranty certificate must be submitted. During this period, all defect arising out of defective material and faulty workmanship will be rectified by repairing or replacing part or whole material as necessary free of charge on delivery basis. Any consequential damage/defect or loss of item due to poor workmanship/poor material quality/ negligence etc. attribute to the bidder to be rectified / replaced by the bidder free of cost.

Note:

Any material, equipment, infrastructure facility, required directly or indirectly for completing the subject work, as per the scope of work & drawing given, if not mentioned in MDL's scope, has to be arranged by the subcontractor without any extra cost to MDL.

In case of the performance of the contractor is not satisfactory MDL reserves the right to cancel the order and lift the material from contractor.

13. Performance Security (Performance Bank Guarantee cum Security Deposit):

Successful bidders need to submit Performance Bank Guarantee (PBG) cum Security Deposit (SD) for an amount of 5% of the value of the contract (excluding taxes & duties). Performance security may be furnished in the form of NEFT/ Demand Draft / Pay order / Bank Guarantee / Insurance Security Bond / e-Bank Guarantee in favour of Mazagon Dock Shipbuilders Limited, Mumbai from the list of Banks approved by SBI / Canara Bank published on MDL website. Performance Security is to be furnished within **25 days** after notification of the award of contract and it should remain valid for a period of **60 (sixty)** days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations.

14. Non submission of Performance Security:

- i. In case of failure to submit performance security by the supplier within 25 days of transmission / notification of order by any mode, EMD (if available) will be forfeited and MDL reserves the right to cancel the order and invoke the risk purchase clause. If it is established that the contractor has failed to comply with the Guarantee/warranty obligations, the PSBG will be enchased by MDL. MDL's decision in this regard shall be final and binding on the supplier / contractor.
- ii. In cases where the supplier / contractor has not submitted the PS and already commenced supply / services, Performance security will be retained from the bills, if any. In such case, interest will be recovered for the period starting from 26th day of transmission / notification of order/contract by any mode and amount involved at the relevant rate of interest for that quarter. For Indian suppliers, it will be SBI BPLR plus 2%.

15. Forfeiture of Performance Security:

Forfeiture of Performance Security shall be done in case of non-performance of agreed terms and or default/breach by bidder / supplier with application of risk purchase provisions or tender holiday where applicable.

16. Free issue materials:

- i) In cases where the materials such as MS / AL sheets, Steel, Components etc. are required to be issued free of cost to the Supplier for Galvanizing, Heat treatment, Fabrication, Fitment etc. on returnable basis, the Supplier shall furnish Bank Guarantee equivalent to the value of materials supplied by MDL free of cost for works undertaken outside MDL premises.
- ii) Undertaking needs to be submitted on the Letterhead in case of Foreign Firm from their Authorised Signatory. In case of Indigenous firm, Indemnity Bond on INR 500 Non-Judicial Stamp Paper to be submitted.
- iii) In cases such as low value contracts involving high value materials etc., the submission of Indemnity Bond and provision of insurance cover with MDL as the beneficiary may be acceptable. For any items that are being taken out for repairs during warranty period then a separate BG equivalent to the value of item need not be submitted if valid PBG is available to cover the cost of item. Such Bank Guarantee / Indemnity Bond / Insurance Cover shall be valid up to the execution of the contract / delivery of material, inspected /accepted and receipt at MDL.
- iv) The Free Issue Material can be issued against holding of equivalent amount from the payment due to the firm.
- v) On completion / execution of the Order / Contract as per approved drawings and plans such as nesting plan, this should be returned within a period of 15 days from the date of receipt of finished product and leftover material in MDL OR any other location specified in the order along with the certified statement of reconciliation of MDL's property showing following details;
 - a. Quantity of material issued.
 - b. Quantity of materials consumed / vis-a vis percentage of job completed.
 - c. Quantity of material returned to respective stores / held in stock by Contractor at his end.
 - d. Actual quantity wasted / scrapped as a by-product of process as against stipulated amount.
- vi) Supplier / Contractor shall also furnish undertaking regarding protection of intellectual property rights and that issued design drawing will be returned without reproducing and retaining any copies at their end.

17. Pricing:

- i) Bidder shall quote the prices in the Rate Sheet Format provided in e-tender.
- ii) The quoted prices shall remain firm and fixed during the currency of the order / contract unless agreed otherwise by MDL.
- iii) The reference price, if any, indicated anywhere in the tender document against each line item is only notional and has no commercial relevance. Therefore, such reference price should not be considered as guidance price and the bidders shall quote their price based on their costing and pricing policies.

18. Firm Price / Price Variation:

Prices quoted by bidder shall remain firm and fixed during the period of the contract and not subject to variation on any account.

19. Payment Terms:

No Advance in any manner will be paid to the Supplier / Bidder / Vendor / Contractor.

100% payment of line items will be made against complete (100%) supply of the line items of the order and as reduced by any deductibles and/or the amount liveable towards liquidated damages, if any and after including statutory taxes, duties and levies as applicable may be payable through

RTGS/NEFT within 15 days for actual quantities of work executed and on submission of relevant documents as mentioned below: -

- i) Set of Original + 2 Copies of signed Tax Invoice showing item / activity wise prices as per the Contract / Order to be submitted to Commercial Department, East Yard.
- ii) Set of Original+2 copies of Warranty Certificate as per Enclosure.
- iii) Set of Original+2 copies of PSBG as per the Enclosure.
- iv) Signed copy of Material acceptance report by MDL-User not below the rank of Chief Manager.

Note:

Wherever GST is applicable, payment will be released against e-Invoice, or Invoice accompanied with vendor's self-declaration that

"We do not fall under the category of registered persons notified under Rule 48(4) of the Central GST Rules, 2017 and we are not required to comply with e-Invoicing provisions under GST Act, as our aggregate turnover in any preceding financial year from 2017-18 onwards has not exceeded Rs. 5 Cr. as per GST Act."

20. Trade Receivable Discounting System (TReDS) for MSEs:

- a) TReDS is a digital platform to help MSMEs to address their financial needs for facilitating the financing of trade receivables from buyers, through multiple financiers. TReDS is governed by the Reserve Bank of India under the Payment and Settlement Systems Act, 2017 and the Factoring Regulations Act, 2011. Under the TReDS initiative, at present, RBI has given licenses to three participants (A. TREDS Ltd, RXIL, M1 Xchange). MDL is registered for TReDS online platform with A. TREDS Ltd, and M1Xchange to facilitate payments to MSMEs through TReDS. At TReDS, auctioning of invoices at competitive and transparent environment is done by financers based on Buyer's credit profile.
- b) MSE bidders desirous to receive payments through TReDS platform may avail the facility if they are already registered on TReDS platform or by registering on any one of the service provider. Contact details of TReDS platform service providers are to be indicated. MSE bidders upon successful delivery shall submit their invoices along with the mandated enclosures at MDL, central receipt section. MSE vendors, desirous to receive payments through a particular TReDS platform must submit their TReDS details along with the invoice at MDL, central receipt section. Upon receipt and acceptance of the supplied material and receipt of invoices with the mandated enclosures, MDL shall process the invoice for payment on that particular TReDS platform. Any unfinanced invoices / invoices of MSE bidders seeking payment from MDL directly shall be processed as per the standard payment terms agreed in PO / contract.

21. Taxes and Duties:

- i) Bidders must quote the amounts of Taxes and Duties as applicable, separately, duly indicating the base amount(s) and the applicable rate(s), under each of the heads indicated above. Wherever Exemption Certificates are issued, no liability for payment of taxes and duties arises and hence taxes and duties shall not be reimbursed / allowed.
- ii) Supplier / contractor will not be entitled to any increase in rate of taxes occurring during the period of extended delivery completion schedule if there is delay in supplies / completion attributed to him.
- iii) However, if there is a decrease in taxes, the same must be passed on to MDL.
- iv) Wherever all-inclusive prices are quoted by the Tenderer(s) without bifurcation of tax elements, no escalation can be considered in respect of any variations in statutory levies arising subsequently because of the absence of the required base figures in the purchase order / contract.

Note:

a) GST shall be payable extra as quoted and agreed as per GST Laws.

- b) In case of purchases of goods/services from unregistered dealers under GST Laws, GST will be paid by MDL under reverse charge mechanism.
- c) Benefits from reduction in rate of tax/ITC is required to be passed on to consumer. Where "applicable GST" has been quoted as extra, Goods and service providers (except unregistered dealers under GST Law) have to submit declaration that they have complied with 'Anti profiteering clause' under GST Law. Such declaration be given in technical bid.
- d) If the vendor is registered under GST, vendor shall mention the HSN code for goods and/or services in their tax invoice, etc. These codes must be in accordance with GST Laws and responsibility of specifying correct HSN codes for goods and/or services is that of the vendor. MDL shall not be responsible for any error in HSN code for goods and/or services specified by supplier / contractor. Supplier /Contractor shall pay penalty and/ or interest imposed on MDL or any loss due to delay in availing ITC by MDL or any loss of ITC to MDL due to errors by vendors at any stage. MDL reserves right to recover any such interest, penalty or loss from any amount due to supplier /contractor or otherwise.
- e) In case, MDL is unable to avail ITC, supplier/contractor at their own cost shall rectify the shortcoming in the returns to be filed immediately thereafter. Further, if the ITC is delayed / denied to MDL / reversed subsequently as per GST Laws due to non / delayed receipt of goods and / or services and / or tax invoice or expiry of timelines prescribed in GST Laws for availing ITC, non-payment of taxes or non-filing of returns or any other reason not attributable to MDL, supplier /contractor shall pay any loss of amount along with interest and penalty on MDL under GST Laws for the number of days the ITC was delayed. If the short coming is not rectified by supplier/contractor and MDL ends up in reversal of credits and / or payments, supplier /contractor is fully liable for making good all the loss incurred by MDL. MDL reserves right to recover any interest, penalty or loss from any amount due to supplier /contractor or otherwise.
- f) If the vendor is registered under GST, the GST registration number (15 digit GSTIN) issued by GoI shall be mandatorily provided by the vendor. Vendor having multiple business verticals within state / at multiple states with separate GST registration numbers shall forward GSTIN of only that vertical which is involved in supply of goods and/or services. MDL GSTIN is 27AAACM8029J1ZA and vendor shall mention the same while invoicing and avoid any data entry error on GST portal.
- g) If the vendor is registered under GST; Vendor shall ensure timely submission of invoice as per the provisions / requirement / timeline promulgated by GOI in relation to GST Law with all required supporting documents to enable MDL to avail input tax credit promptly. The vendors invoice inter alia should contain GSTIN of vendor, GSTIN of MDL (i.e.27AAACM8029J1ZA), GST tax rate separately, HSN code wise goods or services, place of supply, signature of vendor, etc. Original invoice needs to be submitted to Bill Receipt Centre at MDL gate, and a copy of the invoice should be given to the goods receiving section (GRS).
- h) If the vendor is registered under GST, vendor shall file all applicable returns under GST Laws in the stipulated time and any losses of tax credit to MDL arising due to delay in filing will be recovered from their invoice wherever MDL is eligible to avail tax credit. Any default towards payment of tax and / or uploading of monthly returns by supplier/contractor, MDL retains right to withhold payments towards tax portion until the same is corrected and complied by the supplier/contractor with the requirement of GST along with satisfactory evidence.
- i) The rate sheet enclosed with the tender will indicate the rates to be entered under each head wherever applicable. Bidders must clearly mention the applicable taxes and duties. The itemwise rates (Inclusive of packing forwarding, freight & insurance) quoted in the rate sheet should exclude taxes and duties. Bidder should indicate GST rates as applicable separately under each of the head in the same Rate sheet, which will be paid extra based on tax invoice to the extent applicable. The GST will be applicable on total basic rate of each item (Inclusive of packing forwarding, freight & insurance).

22. E-invoice:

The vendors, whose aggregate turnover in any preceding financial year from FY 2017-18 onwards, exceeds INR 5 crore as per GST Act or as applicable from time to time, will have to issue an e-Invoice with a Quick Response (QR) code and Invoice Registration No.(IRN), It is important to note that MDL will not be entitled for Input Tax Credit (ITC)/GST on a vendor Invoice which is not compliant with the above e-Invoice notification. Wherever GST is applicable, payment will be released against e- Invoice, or Invoice accompanied with vendor's self-declaration that "we do not fall under the category of registered persons notified under Rule 48(4) of the Central GST Rules, 2017 and we are not required to comply with e-Invoicing provisions under GST Act, as our aggregate turnover in any preceding financial year from 2017-18 onwards has not exceeded INR 5 crore as per GST Act".

23. Ranking of Bids:

All line items are separable. Evaluation of the L1 bidder will be done line item wise. The comparison of the responsive tenders shall be on total outgo on Least Cost Net of Credit Basis (LCNC), for the procurement to be paid to the supplier or service provider, including all elements of costs, duties, levies, freight, insurance etc. excluding GST (where ITC is available). Therefore, it should normally be on the basis of CIF/ FOR destination basis, duly delivered, commissioned, as the case may be.

24. Loading Criteria:

- a) Varied payment terms quoted by indigenous bidders as compared to the terms stated in the tender document shall be normalized by adopting the Prime Lending Rate of State Bank of India plus 2% thereon on the amount (s) at variation and / or for the period (in no. of days) at variation and LIBOR / EURIBOR rates plus 2 % or 6% whichever is higher in case of foreign bidders.
- b) Contingency charges, if technically accepted (Guarantee extension charges, delivery extension charges, re-preservation charges, extra man-days charges etc.) as applicable should be added to decide L-1. For the additional delivery period sought by the bidder over the stipulated date of delivery/completion of tender, 0.50% per completed week will be loaded to the quoted price.
- c) Deviations in respect of the period of Warranty / Guaranty shall be loaded to the quoted price @ 0.25% per month or part thereof. This does not arise if the bidder quotes additional price for the differential period.

25. Purchase Preference to Micro and Small Enterprises(MSEs):

Micro and Small Enterprises (MSEs) registered under Udyam Registration or as directed by government are eligible to avail the benefits under the policy. This Policy is meant for procurement of only goods produced and services rendered by MSEs. Traders/Distributors/Sole Agents/Works Contract are excluded from the purview of the policy. MDL has right to place order on MSE Manufacturer and MSE Service Provider meeting following criteria:

- a) In tender, participating Micro and Small Enterprises (MSE) quoting price within price band of L1+15 (fifteen) per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply up to 25(twenty-five) per cent of total tendered value. The 25(twenty-five) per cent quantity is to be distributed proportionately among these bidders, in case there are more than one MSEs within such price band.
- b) Within this 25% (Twenty Five Percent) quantity, a purchase preference of four (4) per cent is reserved for MSEs owned by Scheduled Caste (SC)/ Scheduled Tribe (ST) entrepreneurs and three (3) percent is reserved for MSEs owned by women entrepreneur (if they participate in the tender process and match the L1 price). However, in event of failure of such MSEs to participate in tender process or meet tender requirements and L1 price, four percent sub-target for procurement earmarked for MSEs owned by SC/ST entrepreneurs and three (3) percent earmarked to women entrepreneur will be met from other MSEs. . MSEs would be treated as owned by SC/ST entrepreneurs:
 - i) In case of proprietary MSE, proprietor(s) shall be SC /ST;

- ii) In case of partnership MSE, the SC/ ST partners shall be holding at least 51% (fifty-one percent) shares in the unit;
- iii) In case of Private Limited Companies, at least 51% (fifty-one percent) share shall be held by SC/ ST promoters.
- c) If subcontract is given to MSEs, it will be considered as procurement from MSEs.
- d) In case of tender item cannot be split or divided, etc. the MSE quoting a price within the band L1+15% may be awarded for full/ complete supply of total tendered value to MSE, considering the spirit of the Policy for enhancing Govt. Procurement from MSEs.
- e) In respect of items reserved for MSE-Manufacturers, extant guidelines shall be followed. Presently Circular No. S.O. 581(E) dated 23.03.2012 is applicable. The latest list may be seen from the website of the MSME Ministry.

26. Purchase Preference to Make in India 2017:

The Government of India has issued revised Public Procurement (Preference to Make in India) order 2017 on 16th Sep 2020 as part of its policy to encourage "Make in India" and promote manufacturing and production of goods and services in India with a view to enhancing income and employment. Subject to the provisions of this order and to any specific instructions issued by Nodal Ministry or in pursuance of this order, Purchase Preference shall be given to local suppliers in all the procurements undertaken by MDL in the manner specified below.

Aspects of 'Preference to Make in India':

a) "Local content" means the amount of value added in India which shall be the total value of item (goods, services or works or their combination) under procurement (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in percent. Different definition of Local Content may be specified by the Nodal Ministry for items assigned to them, which will prevail over above.

Note: The local content can be increased by vendors through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them.

- b) "Class-I Local Supplier" means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-I local supplier' under this Order.
- c) "Class-II Local Supplier" means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum local content as prescribed for 'Class-II local supplier' but less than that prescribed for 'Class-I local supplier' under this Order.
- d) "Non-Local Supplier" means a supplier or service provider, whose goods, services or works offered for procurement, has local content less than that prescribed for 'Class-II local supplier' under this Order.
- e) "L1" means the lowest tender or lowest bid or lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.
- f) "Margin of Purchase Preference" means the maximum extent to which the price quoted by a "Class-I Local Supplier" may be above the L1 for the purpose of purchase preference. The margin of purchase preference shall be 20% which is to be indicated in tender.

Note: Price/s of all Class I local supplier/s in a tender is more than 20% of L1's price no purchase preference shall be applicable.

- g) "Nodal Ministry" means the Ministry or Department identified pursuant to the said Order in respect of a particular item of goods or services or works.
- h) "Procuring entity" means a Ministry or department or attached or subordinate office of or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

Note: Mazagon Dock Shipbuilders Limited (MDL) shall be a procuring entity.

- i) "Works" means all works as per Rule 130 of GFR-2017 and will also include "turnkey works", Engineering, Procurement and Construction (EPC) contracts.
- j) "Services" includes System Integrator (SI) contracts among other services.

k) Eligibility of Suppliers to bid in a tender

- i) In procurement of all goods, services or works in respect of which the Nodal Ministry / Department has communicated that there is sufficient local capacity and local competition, only 'Class-I local supplier', as defined under the Order, shall be eligible to bid irrespective of purchase value.
- ii) Both 'Class-I local supplier' and 'Class-II local supplier' shall be eligible to bid in procurements not covered above para (i) and undertaken by procuring entities, except when Global tender enquiry has been issued. In global tender enquiries (GTE), 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'. In procurement of all goods, services or works, not covered above para (i), and with estimated value of purchases less than INR 200 Crore, in accordance with Rule 161(iv) of GFR, 2017, Global tender enquiry (GTE) shall not be issued except with the approval of competent authority as designated by Department of Expenditure. For the cases pertaining to MoD, Defence Secretary will be the competent authority to approve issue of GTE up to INR 200 Crore based on adequate justification as per MoF DoE PP Division ID Note No F.20/36/2020-PPD dtd 28.10.2020.

1) Special Conditions in GTE Procurements: Agency Commission:

The amount of Agency Commission, (normally not exceeding five percent) payable to the Indian Agent should not be more than what is specified in the Agency agreement (a certified copy should be submitted along with the bid) between the bidder and the Indian Agent. The Indian Agent will be required to submit a certificate along with their Agency Commission bill, confirming that the amount claimed as Agency Commission in the bill has been spent/will be spent, strictly to render services to the foreign Principal, in terms of the Agency Agreement. The Purchaser or their authorized agencies and/or any other authority of the Government of India shall have rights to examine the books of the Indian Agent and defects or misrepresentations in respect of the afore indicated confirmation coming to light during such examinations will make the foreign Principal (i.e. the Contractor) and their Indian Agent liable to be banned/suspended from having business dealings with the Purchaser, following laid down procedures for such banning/suspension of business dealings.

m) DPIIT vide OM No. P-45021/102/2019-BE-II Part (1) (E-50310) dated 04 Mar 2021 has clarified that bidders offering imported products will fall under the category on Non-local suppliers and they cannot claim themselves as Class-I local suppliers / Class-II local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC / CMC, etc. as local value addition. Hence, bidders offering imported products will be treated as Non-local suppliers.

27. Purchase preference:

- a) Purchase preference shall be given to only "Class-I Local Supplier" (Class II Local Supplier are not eligible for purchase preference) in procurements undertaken in the manner specified in the succeeding sub-paras:
- b) The Class-I local suppliers, under PPP-MII Order, participating in any government tender, may or may not be MSEs, as defined under the MSME Act. Similarly, MSEs participating in any government

tender, may or may not be Class-I local suppliers. Suppliers may be categorised in following four broad categories for consideration or applicability of purchase preference:

Category	Terminology
Supplier is both MSE & Class- I local supplier	MSE Class-I local supplier
Supplier is MSE but not Class- I local supplier	MSE but non-Class-I local supplier
Supplier is not MSE but is Class-I local supplier	Non-MSE but Class-I local supplier
Supplier is neither MSE nor Class-I local	Non-MSE non-Class-I local supplier

- c) In the procurement covered by para 23 (K) (i) above (Para 3(a) of PPP-MII Order, 2017) for which Nodal Ministry has notified sufficient local capacity and competition, only Class-I local suppliers are eligible to bid irrespective of purchase value. Hence, Class-II local suppliers or Non-local suppliers, including MSEs which are Class-II local suppliers/ Non-local suppliers, are not eligible to bid. Purchase preference shall be accorded as under:
 - i) L-1 is "MSE Class-I local supplier": 100% of the tendered quantity shall be awarded to L-1.
 - ii) L-1 is "Non-MSE but Class-I local supplier"(Divisible in nature): Purchase preference shall be given to MSEs as per PPP-MSE Order. Balance quantity be awarded to the L-1 bidder.
 - iii) L-1 is "Non-MSE but Class-I local supplier" (Non- Divisible in nature): Purchase preference shall be given to lowest quoting MSE Class-I local supplier as per PPPMSE Order. If lowest quoting MSE Class-I local supplier does not accept the L-1 rates, the next higher eligible MSE Class-I local supplier is to be given purchase preference and so on. 100% of the tendered quantity shall be awarded to MSE Class-I local supplier accepting L-1 rates. If MSE Class-I local suppliers do not accept L- 1 rates, then contract shall be awarded to L-1
- d) In the procurement of goods and services reserved exclusively for procurement from MSEs as per PPP-MSE Order, non- MSEs are not eligible to bid for these items and Purchase preference shall be accorded as under:
 - i) L-1 is "MSE Class-I local supplier": 100% of the tendered quantity shall be awarded to L-1
 - ii) L-1 is "MSE non-Class-I local supplier"(Divisible in nature): Purchase preference shall be given to MSE Class-I local supplier as per PPP-MII Order. Balance quantity be awarded to L-1 bidder.
 - iii) L-1 is "MSE non-Class-I local supplier" (Non-Divisible in nature): First opportunity shall be given to lowest quoting "MSE Class-I local supplier" for matching L-1 bidder as per PPP-MII Order for 100% of the tendered quantity and if lowest quoting "MSE Class-I local supplier" does not accept the L-1 rates, the next higher eligible "MSE Class- I local supplier" is to be given purchase preference and so on. If all "MSE Class-I local suppliers" decline to accept the L-1 rates, then contract shall be awarded to L-1 for 100% of the tendered quantity.
- e) In the procurement of goods or service which are covered in para 23 (K) (ii) above which are divisible in nature (Para 3A(b) of PPP-MII Order), both MSEs as well as Class-I local suppliers are eligible for purchase preference and the Purchase preference shall be accorded as under:
 - i) L-1 is "MSE Class-I local supplier": 100% of the tendered quantity shall be awarded to L-1.
 - ii) L-1 is "Non-MSE but Class-I local supplier": Purchase preference shall be given to MSEs, if eligible, as per PPP-MSE Order. Balance quantity be awarded to L-1 bidder.
 - iii) L-1 is "MSE but non-Class-I local supplier": Purchase preference shall be given to Class-I local suppliers, if eligible, as per PPP-MII Order. Balance quantity be awarded to L-1 bidder.

- iv) L-1 is "Non-MSE non-Class-I local supplier": Firstly, Purchase preference shall be given to MSEs as per PPPMSE Order. Thereafter, purchase preference is to be given to Class-I local suppliers for "50% of the tendered quantity minus quantity allotted to MSEs above" as per PPP- MII Order. For the balance quantity, contract be awarded to L-1 bidder. (Kindly refer to the illustrative example in the MoF, DoE OM at Enclosure-II).
- f) In the procurement of goods, services which are covered in para 23 (K) (ii) above and which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone (Items covered under Para 3A(c) of PPP-MII Order, 2017) and both MSEs as well as Class-I local suppliers are eligible for purchase preference Purchase preference shall be accorded as under:
 - i) L-1 is "MSE Class-I local supplier": Contract shall be awarded to L-1.
 - ii) L-1 is not "MSE Class-I local supplier" but the "MSE Class-I local supplier" falls within 15% margin of purchase preference. Purchase preference shall be given to lowest quoting "MSE Class-I local supplier". If lowest quoting "MSE Class-I local supplier" does not accept the L-1 rates, the next higher "MSE Class-I local supplier" falling within 15% margin of purchase preference is to be given purchase preference and so on. If all "MSE Class-I local supplier" do not accept L-1 rates, then (f)(iii) shall be followed.
 - iii) If conditions mentioned in sub paras (f)(i) and (f)(ii) above are not met i.e. L1 is not "MSE Class-I local supplier" and "MSE Class-I local supplier" is not eligible to take benefit of purchase preference as per PPP-MSE Order or all "MSE Class-I local supplier" do not accept L-1 rates, the contract is to be awarded / purchase preference to be given in different possible scenarios as under:
 - a) L-1 is "MSE but non-Class-I local supplier" or "Non- MSE but Class-I local supplier": Contract be awarded to L-1.
 - b) L-1 is "Non-MSE non-Class-I local supplier": Firstly, purchase preference shall be given to eligible MSE as per PPP-MSE Order. If MSEs not eligible or does not accept then purchase preference to be given to eligible Class- I Local supplier as per PPPMII Order. If Class-I Local supplier is also not eligible or does not accept then contract be awarded to L-1.
- g) Items reserved for both MSEs and Class-I local suppliers: These items are reserved exclusively for purchase from MSEs as well as Class-I local suppliers. Hence, only "MSE Class-I local supplier" are eligible to bid for these items. Non-MSEs / Class-II local suppliers / Non-local suppliers cannot bid for these items. Hence the question of purchase preference does not arise.
- h) Non-local suppliers, including MSEs falling in the category of Non-local suppliers, shall be eligible to bid only against Global Tender Enguiry.

28. Minimum Local Content:

- i) The 'local content' requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%. For 'Class-II local supplier', the 'local content' requirement is minimum 20%. However, Nodal Ministry / Department may prescribe only a higher percentage of minimum local content requirement to categorize a supplier as 'Class-I local supplier' / 'Class-II local supplier'. For the items, for which Nodal Ministry / Department has not prescribed higher minimum local content notification under the Order, it shall be 50% and 20% for 'Class-I local supplier' and 'Class-II local supplier' respectively.
- ii) The Nodal Ministry may keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing the higher minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.

29. Reciprocity Clause:

i) Entities of countries which have been identified by the nodal Ministry / Department as not allowing Indian companies to participate in their Government procurement for any item related to that nodal Ministry shall not be allowed to participate in Government procurement in India for all items

related to that nodal Ministry / Department, except for the list of items published by the Ministry / Department permitting their participation.

ii) The term 'entity' of a country shall have the same meaning as under the FDI Policy of DPIIT as amended from time to time.

30. Debarment of bidders / suppliers:

- i) False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of GFR 2017 for which a bidder or its successors can be debarred for up to 2 years as per Rule 151(iii) of GFR 2017 along with such other actions as may be permissible under law.
- ii) A supplier who has been debarred by any procuring entity for violation of said Order shall not be eligible for preference under said Order for procurement by any other procuring entity for the duration of debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in such a manner that ongoing procurements are not disrupted.

31. Export License:

The Export licence that may be required for delivery of various items / equipment to MDL shall be arranged by the respective Bidders / Suppliers / Contractors from the concerned authorities in their respective countries. The Bidders / Suppliers / Contractors shall take in to account the period required for obtaining such license while indicating delivery / completion periods for the items / equipment and delays in supplies for non-availability of such licenses are to be accounted for by the Supplier / Contractor. The 'End User' certificate if required by the supplier for obtaining the license is to be forwarded by MDL. However, the format and details of the end user certificate required should be forwarded by the supplier to MDL along with the order acceptance. The dealing commercial executive shall arrange the end user certificate and dispatch the same to the supplier most expeditiously.

32. Provisions of Official Secrets Act, 1923:

Extract of provisions of the Official Secret Act as per the enclosure should be signed stamped and enclosed in the offer.

33. Public Grievance Cell:

A Public Grievance Cell headed by Shree R R Kumar (ED-Production), President, has been set up in the Company. Members of public having complaints or grievances are advised to contact him on Wednesday between 10.00 hours and 12.30 hours in his office on 3rd floor, west Block, MAZAGON DOCK SHIPBUILDERS LTD, Dock Yard Road, Mumbai 400010, INDIA or send their complaints / grievances to him in writing for redressal. His Telephone No. is 022 2378 2338, 2376 2106.

34. Book Examination Clause (BEC):

In case it is found to the satisfaction of MDL that the Supplier has engaged an Agent or paid commission or influenced any person to obtain the contract as described in clauses relating to Agents/Agency Commission and penalty for use of undue influence, the supplier, on a specific request of MDL shall provide necessary information/inspection of the relevant financial documents/information.

35. Liquidated Damages:

If the contractor fails to deliver any or all of the Goods or fails to perform the incidental Works/ Services (e.g. installation, commissioning or operator training) within the time frame(s) incorporated in the contract, MDL shall, without prejudice to other rights and remedies available to MDL under the contract, deduct from the contract price, as agreed liquidated damages, but not as a penalty, a sum equivalent to the 0.5 % percent (excluding taxes) of the delivered price of the delayed Goods and/ or incidental Works/ Services for each week of delay or part thereof until actual delivery or performance, subject to a maximum deduction of the 5% of the delayed Goods' or incidental Works/ Services' contract price(s). Besides liquidated damages during such a delay, the denial clause shall also apply. Any failure or delay by any subcontractor, though their employment may have been sanctioned shall not be admitted as aground for any extension of time or for exempting the contractor from liability for any such loss or damage as aforesaid.

36. Integrity Pact:

- i) The bidder has to submit Integrity Pact as per the attached format in the enclosure.
- ii) Each page of Integrity pact shall be duly signed by the bidder. Non-submission of Integrity pact by the bidders duly signed on each page along with Part-I bid shall be categorically rejected.
- iii) In case of issues related to Integrity Pact (IP) please contact Independent External Monitor (IEM) whose details are as below:

a) Mr. M N Krishnamurthy, IPS (Retd.)

b) Mr. P V Rao, IRS (Retd.)

Email id: pasupuletirao@yahoo.co.in

37. Option Clause:

MDL retains the right to increase/decrease the ordered quantity by up to 50 % at any time, till final delivery date (or the extended delivery date of the contract), by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of the delivery period (or the extended delivery period).

38. Common / Deemed DPSU registration and Green Channel Status clause:

- i) Suppliers / Contractors registered in other Defence PSUs for the tendered item / service shall be considered by MDL as Deemed Registered.
- ii) Green Channel Policy is formulated by DDP, MoD and promulgated vide O.M. No. 43(5)/2015/D(QA) dated 24.03.2017. Suppliers holding Green Channel Certificate for the tendered item shall be considered by MDL as Deemed Registered.

39. Land Border Clause:

(Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017)

- i) MoF DoE vide OMs No 6/18/2019-PPD dated 23 Jul 2020 & 24 Jul 2020 and OM No F.7/10/2021/-PPD (1) dated 23.02.2023 has promulgated restrictions and procedure for buying from a bidder from a country which shares a land border with India under GFR Rule 144 (xi) on the grounds of Defence of India and National Security for information and compliance.
- ii) The Orders stipulate mandatory registration with competent authority and seeking certificate of compliance with this Order from the bidder from a country which shares a land border with India in the tender process. Exclusions from these restrictions have also been enlisted in the Order. The Competent authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT).
- iii) A bidder is permitted to procure raw material, components etc. from the vendors from countries which shares a land border with India. Such vendors will not be required to be registered with Competent Authority, as it is not regarded as "sub-contracting". However, if bidder has proposed to supply finished goods procured directly/ indirectly from the vendors from the countries sharing land border with India, such vendor will be required to be registered with the Competent Authority.
- iv) The bidder has to enclose filled signed and stamped certificate for "Declaration of Compliance on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017" as per the enclosure.

40. Consignee details:

Firm shall arrange dispatch of good by appropriate transport mode as per the order and consign the same to Onsite at Mundra Port (Onsite at fabricator premises).

41. Inspection and Testing:

- a) 3.2 final inspection certificate by TPI (ONGC CA)
- b) Impact testing, IGC testing, DPI/MPI & UST
- c) Finite Element Analysis (FEA) of each size
- d) Hydro test- 01 test of each combination of size & rating

- e) HIC testing
- f) Paint coating as per specification
- g) Hardness Tests & reports as per ASTM 370
- h) COC from supplier and Material inspection certificate (Chemical and Physical) from NABL laboratory or 3.1 Mill test certificate / dimensional reports/ warranty certificate, etc.
- i) Receipt Inspection- MDL User
- j) Charges for TPI shall be borne by the bidder.

42. Work Done Certificate (WDC) (for Works):

Work Completion certificate (WCC) shall be issued on Satisfactory completion of respective work with inspection and acceptance reports. Additional Project team executive of rank Chief manager and above will issue WCC.

43. Breach of Obligation Clause with respect to Bid Submitted:

In case of breach of any obligation mentioned under, the bidder shall be disqualified / debarred from the bidding process for a period of one year from the date of notification,

- i) Bidder has withdrawn / modified / amended / impaired / derogated from the tender during the period of bid validity.
- ii) Bidder fails or refuses to execute the contract upon notification of acceptance of bid by MDL during the period of bid validity.

44. Right to reject any or all bids:

MDL reserves its right to accept or reject any or all bids, abandon / cancel the tender process, and issue another tender for the same or similar Goods/Services at any time before the award of the contract. It would have no liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for such action(s).

45. Contacting MDL during the evaluation:

From the time of bid submission to awarding the contract, no bidder shall contact MDL on any matter relating to the submitted bid. If a Bidder needs to contact MDL for any reason relating to this tender and/ or its bid, it should do so only in writing or electronically. Any effort by a Bidder to influence MDL during the processing of bids, evaluation, bid comparison or award decisions shall be construed as a violation of the Code of Integrity, and bid shall be liable to be rejected as nonresponsive in addition to other punitive actions for violation of Code of Integrity as per the Tender Document.

46. Claims by firms:

No claims by the firms will be entertained after 03 years from date of execution/completion of order.

47. Cancellation / Foreclosure / Termination of order:

Action for cancellation / foreclosure / termination of order shall be taken in any of the following conditions / circumstances.

- i) On the basis of Government Order.
- ii) Defaults / Breach on part of the contractor / Supplier / supplier in complying with agreed terms of order / contract.
- iii) Liquidation / Dissolution of the Firm or entity on whom the original order is placed.
- iv) Unreasonable delays in supply of ordered articles or services or documentation.
- v) Supplies made not meeting the ordered specifications.
- vi) Activities of any of the Proprietor / Partner being found to be Antisocial / Anti -National liable for penal action under Indian Penal Code or imposed with penalty of black listing / debarred by MDL, Owners, Govt. of India or any such authorities at any time during validity of the contract / order.
- vii) The Purchase Order not accepted by the vendor within the stipulated period.

When the contractor / Supplier is found to be liable for action under any of the above provisions, MDL may terminate or cancel the contract / order in part or full by written notice of default sent to the contractor / Supplier without prejudice to any other remedy invoking risk purchase clause and execution of work / order through other agencies.

48. Cartel Formation/Pool Rates:

- i) Pool/cartel formation is against the basic principle of competitive bidding and defeats the very purpose of an open and competitive tendering system. Such and similar tactics to avoid/control true competition in a tender leading to "Appreciable Adverse Effect on Competition" (AAEC) have been declared as an offence under the Competition Act, 2002, as amended by the Competition (Amendment) Act, 2007.
- ii) If this is found, suitable administrative actions can be resorted to, such as rejecting the offers, reporting the matter to trade associations, the Competition Commission or NSIC, etc., and requesting them, inter-alia, to take suitable strong actions against such firms. The purchaser may also debar the tenderers indulging in cartel formation/collusive bidding/bid rigging for a period of two years from participation in the tenders of the Purchaser.

49. Conflict of Interest Among Bidders/ Agents:

A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of MDL's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- (i) they have controlling partner (s) in common; or
- (ii) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
- (iii) they have the same legal representative/agent for purposes of this bid; or
- (iv) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
- (v) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.
- (vi) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:
- (a) The principal manufacturer directly or through one Indian agent on his behalf; and
- (b) Indian/foreign agent on behalf of only one principal.
- (vii) Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
- (viii) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/similar line of business.

Note: The undertaking by the bidders for above para (Conflict of Interest among Bidders/Agents) to be submitted along with the bid.

50. Order Acceptance:

Successful bidder shall acknowledge the receipt and communicate in writing their unconditional acceptance of order within 03 working days from the date of placement of the order. If nothing to the contrary is received within 03 working days from the date of placement of order, it shall be understood that the order has been accepted.

Any other terms and conditions not mentioned above but mentioned in Scope of work at the enclosure will be applicable.

We look forward to receive your most competitive and reasonable offer against this tender.

For MAZAGON DOCK SHIPBUILDERS LIMITED

Ranjeet Kumar, DM (C-EY) (Purchase Executive) Email: ranjeetkumar100261@mazdock.com

Phone: 022 2376 2615

List of enclosures:

- 1. Enclosure 1: TEF acceptance Format.
- 2. Enclosure 2: Rate sheet
- 3. Enclosure 3: General Conditions of Contract (GCCs)
- 4. Enclosure 4: Acceptance format for General Conditions of Contract (GCCs)
- 5. Enclosure 5: Declaration of Compliance on Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017
- 6. Enclosure 6: Declaration certificate for local content
- 7. Enclosure 7: Extract of provisions of the official secrets act, 1923
- 8. Enclosure 8: Performa Performance Bank Guarantee cum Security Deposit
- 9. Enclosure 9: Format for Integrity Pact
- 10. Enclosure 10: Format for warranty certificate
- 11. Enclosure 11: Deed of guarantee
- 12. Enclosure 12: Undertaking for Conflict of Interest among Bidders/ Agents
- 13. Enclosure 13: NEFT/RTGS format
- 14. Enclosure 14: Deviation sheet format
- 15. Enclosure 15: Scope of Work

Note: Bidders have to upload filled and signed enclosures along with the offers on their letterhead except for the bonds and the bank guarantees.

Enclosure-1

TEF ACCEPTANCE FORMAT

TEF CLAUSE No.	BIDDER'S REMARK	TEF CLAUSE No.	BIDDER'S REMARK	TEF CLAUSE No.	BIDDER'S REMARK
1.	ACC / DEV	2.	ACC / DEV	3.	ACC / DEV
4.	ACC / DEV	5.	ACC / DEV	6.	ACC / DEV
7.	ACC / DEV	8.	ACC / DEV	9.	ACC / DEV
10.	ACC / DEV	11.	ACC / DEV	12.	ACC / DEV
13.	ACC / DEV	14.	ACC / DEV	15.	ACC / DEV
16.	ACC / DEV	17.	ACC / DEV	18.	ACC / DEV
19.	ACC / DEV	20.	ACC / DEV	21.	ACC / DEV
22.	ACC / DEV	23.	ACC / DEV	24.	ACC / DEV
25.	ACC / DEV	26.	ACC / DEV	27.	ACC / DEV
28.	ACC / DEV	29.	ACC / DEV	30.	ACC / DEV
31.	ACC / DEV	32.	ACC / DEV	33.	ACC / DEV
34.	ACC / DEV	35.	ACC / DEV	36.	ACC / DEV
37.	ACC / DEV	38.	ACC / DEV	39.	ACC / DEV
40.	ACC / DEV	41.	ACC / DEV	42.	ACC / DEV
43.	ACC / DEV	44.	ACC / DEV	45.	ACC / DEV
46.	ACC / DEV	47.	ACC / DEV	48.	ACC / DEV
49.	ACC / DEV	50.	ACC / DEV		

COMPANY'S NAME & ADDRESS:	
	SIGNATURE:
	DATE:
	NAME:
	DESIGNATION:
	BIDDER'S COMPANY SEAL:

Note:

- 1. Bidder confirms to have carefully read the Terms & Conditions enclosed only with this Tender Enquiry Form (TEF) prior to filling up this acceptance format.
- 2. Bidder confirms that this format has been **properly filled**, **signed and returned** along with our technical offer (Part-I) for considering the Bid.
- 3. Bidder confirms to have indicated "ACC" for Accepted, "DEV" for Deviation taken for each clause number in the above table.
- 4. In case of any deviations taken the bidder confirms to have attached **Separate Sheet** indicating all relevant details such as Number & Title / brief description of the Clause, **Reasons for Deviation and suggested alternative(s).**
- 5. Clause numbers shown in the above format also includes the sub-clauses under these clauses. For example, Clause no. 8 means Clause nos. 8–a (i) to (iv), b (i) to (xiii)& c

Enclosure-2

RATE SHEET PRESCRIBED FORMAT

(Please quote on your letter head only)

Note: Do not mention prices.

SR NO.	Material /service details	QTY	Unit	Quoted/Not quoted
130	Material Number:-35000000000000080908 Weld Neck Flange for SB-SA Diameter (Inch): 10.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 95.6 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	
140	Material Number:-350000000000000000909 Swivel Flange for SB-SA Diameter (Inch): 10.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 95.6 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
150	Material Number:-35000000000000000000000000000000000000	3	Nos	
160	Material Number:-35000000000000080911 Weld Neck Flange for RS 8- ID Diameter (Inch): 10.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	

170	Material Number:-350000000000000000912 Swivel Flange for RS 8- ID Diameter (Inch): 10.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
180	Material Number:-35000000000000080913 Weld Neck Flange for Segment N16-MNP Diameter (Inch): 12.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	24	Nos	
190	Material Number:-35000000000000000914 Swivel Flange for Segment N16-MNP Diameter (Inch): 12.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	16	Nos	
200	Material Number:-350000000000000000915 Test Rings for Segment N16-MNP Diameter (Inch): 12.75 Flange class #900 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60 Length: 500 mm	3	Nos	
270	Material Number:-35000000000000080922 Weld Neck Flange for Segment ZB-ICD Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	

280	Material Number:-35000000000000080923 Swivel Flange for Segment ZB-ICD Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
290	Material Number:-35000000000000080924 Test rings for Segment ZB-ICD Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60 Length: 500 mm	3	Nos	
300	Material Number:-35000000000000080925 Weld Neck Flange for Segment HSD-HRC Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 94.9 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	
310	Material Number:-35000000000000080926 Swivel Flange for Segment HSD-HRC Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 94.9 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
320	Material Number:-3500000000000080927 Weld Neck Flange for Segment HSC-HRG Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.8 Design Temp (Degree C): 83 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	

330	Material Number:-3500000000000080929 Swivel Flange for HSC-HRG Diameter (Inch): 16 Flange class #900 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.8 Design Temp (Degree C): 83 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
340	Material Number:-3500000000000080930 Weld Neck Flange for Segment HRG-HX Diameter (Inch): 6.625 Flange class #1500 Wall thickness (mm): 12.7 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594	6	Nos	
350	Material Number:-3500000000000080931 Swivel Flange for Segment HRG-HX Diameter (Inch): 6.625 Flange class #1500 Wall thickness (mm): 12.7 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594	4	Nos	
360	Material Number:-3500000000000080932 Test rings for Segment HRG-HX Diameter (Inch): 6.625 Flange class #1500 Wall thickness (mm): 12.7 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594 Length: 500 mm	3	Nos	
370	Material Number:-3500000000000080933 Weld Neck Flange for Segment N12-NS Diameter (Inch): 8.625 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CSGrade A594	6	Nos	

380	Material Number:-3500000000000080934 Swivel Flange for Segment N12-NS Diameter (Inch): 8.625 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594	4	Nos	
390	Material Number:-35000000000000000000000000000000000000	3	Nos	
400	Material Number:-3500000000000080936 Weld Neck Flange for Segment SV-SHD Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 140 Design Temp (Degree C): 93.3 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	
410	Material Number:-3500000000000080937 Swivel Flange for Segment SV-SHD Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 140 Design Temp (Degree C): 93.3 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
420	Material Number:-3500000000000080938 Weld Neck Flange for Segment SJ2-SA Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 143.07 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	

430	Material Number:-3500000000000080939 Swivel Flange for Segment SJ2-SA Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 143.07 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
440	Material Number:-3500000000000080940 Weld Neck Flange for Segment SF-BHS Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 142 Design Temp (Degree C): 93.3 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	
450	Material Number:-35000000000000080941 Swivel Flange for Segment SF-BHS Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 142 Design Temp (Degree C): 93.3 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
460	Material Number:-35000000000000080942 Weld Neck Flange for Segment MNW-N15 Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 17.5 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594	6	Nos	
470	Material Number:-35000000000000080943 Swivel Flange for Segment MNW-N15 Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 17.5 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594	4	Nos	

100	TM		1	
480	Material Number:-35000000000000000944 Test rings for MNW-N15 Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 17.5 Design Pressure (Kg/cm2): 151.6 Design Temp (Degree C): 55 Pipeline Grade: API 5L X 52 Type CS Grade A594 Length: 500 mm	3	Nos	
490	Material Number:-35000000000000080945 Weld Neck Flange for Segment HS-HRG Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	
500	Material Number:-35000000000000080946 Swivel Flange for Segment HS-HRG Diameter (Inch): 12.75 Flange class #1500 Wall thickness (mm): 14.3 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
510	Material Number:-35000000000000080948 Weld Neck Flange for Segment NM-MNP Diameter (Inch): 14 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 141 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	
520	Material Number:-3500000000000080949 Swivel Flange for Segment NM-MNP Diameter (Inch): 14 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 141 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	

530	Material Number:-35000000000000080950 Test rings for Segment NM-MNP Diameter (Inch): 14 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 141 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60 Length: 500 mm	3	Nos	
540	Material Number:-3500000000000080951 Weld Neck Flange for Segment HE-HRG Diameter (Inch): 14 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	
550	Material Number:-35000000000000080952 Swivel Flange for Segment HE-HRG Diameter (Inch): 14 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 93.7 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	
560	Material Number:-3500000000000080953 Weld Neck Flange for Segment IU-ICG Diameter (Inch): 16 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 148 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	6	Nos	
570	Material Number:-35000000000000000954 Swivel Flange for IU-ICG Diameter (Inch): 16 Flange class #1500 Wall thickness (mm): 15.9 Design Pressure (Kg/cm2): 148 Design Temp (Degree C): 93 Pipeline Grade: API 5L X 60 Type CS NACE Grade A694 F-60	4	Nos	

GST

Any other Taxes/Duties (Bidder to specify)

Name:

a. The seller has read, unders (Yes/No)	scope of work.	
	Taxes and duties	
Tax head	Rate applicable	Percentage of total Amount on which the tax is applicable

Note:

The bidder shall provide the quoted price breakup of all the items after price bid opening.

Designation:

Date:	Bidders Company Seal

Enclosure-3

GENERAL CONDITIONS OF CONTRACT (GCC)

The word 'Purchaser' refers to MAZAGON DOCK SHIPBUILDERS LIMITED, (MDL), a Company within the meaning of Companies Act, 2013 and it includes its successors or assignees.

The word 'Bidder' (including the term 'tenderer', 'consultant' 'vendor' or 'service provider' in certain contexts) means any legal entity such as firm(s) of Proprietorship / Partnership Firm / Limited Liability Partnership / Private Limited / Limited company / Society registered under Society's Act / Statutory Bodies/ Consortium/ Joint Venture etc. participating in a procurement process.

The word 'Owner' means the person or authority with whom Mazagon Dock Shipbuilders Limited (Purchaser) has contracted to carry out work in relation to which orders are placed by the Purchaser on the Bidder/Supplier/Contractor under this contract for supply or manufacture of certain items and would include Department of Defence Production, Ministry of Defence, Government of India, the Indian Navy, the Coast Guard and any other specified authority. Unless otherwise indicated specifically by the bidder / contractor in his bid, it shall be construed as his acceptance of all the conditions mentioned in this GCC.

1. TENETS OF INTERPRETATION

Unless where the context requires otherwise, throughout the contract:

- (a) The heading of these conditions shall not affect the interpretation or construction thereof.
- (b) Writing or written includes matter either whole or in part, in digital communications, manuscript, typewritten, lithographed, cyclostyled, photographed, or printed under or over signature or seal or digitally acceptable authentication, as the case may be.
- (c) Words in the singular include the plural and vice-versa.
- (d) Words importing the masculine gender shall be taken to include other genders, and words importing persons shall include any company or association or body of individuals, whether incorporated or not.
- (e) Terms and expression not herein defined shall have the meanings assigned to them in the Contract Act, 1872 (as amended) or the Sale of Goods Act, 1930 (as amended) or the General Clauses Act, 1897 (as amended) or of INCOTERMS, (current edition published by the International Chamber of Commerce, Paris) as the case may be.
- (f) Any reference to 'Goods' shall be deemed to include the incidental Works/ Services also.
- (g) Any generic reference to GCC shall also imply a reference to TEF as well.
- (h) In case of conflict, provisions of TEF shall prevail over those in GCC.
- (i) Any reference to 'Contract' shall be deemed to include all other documents (inter-alia GCC, TEF).
- (j) Any reference to any legal Act, Government Policies or orders shall be deemed to include all amendments to such instruments, from time to time, till date.
- (k) Fall Clause shall be expressly applicable in the case of Rate Contract.

2. LANGUAGE OF CONTRACT

Unless otherwise stipulated in TEF, the contract shall be written in the Official Language or English. All correspondence and other contract documents, which the parties exchange, shall also be written/ translated accordingly in that language. For purposes of interpretation of the contract, the English documents/ translation shall prevail.

3. GOVERNING LAWS AND JURISDICTION

3.1 Governing Laws and Jurisdiction

- (a) This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Laws of India for the time being in force.
- (b) Irrespective of the place of delivery, or the place of performance or the place of payments under the contract, the contract shall be deemed to have been made at the place from which the Purchase Order/Contract/Letter of Intent has been issued. The courts of such a place shall alone have jurisdiction to decide any dispute arising out or in respect of the contract.

3.2 Changes in Laws and Regulations

Unless otherwise stipulated in the contract, if after the last deadline for the bid submission (Technocommercial), any law, regulation, ordinance, order or bye-law having the force of law is enacted, promulgated, abrogated, or changed in India (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/ or the contract Price, then such Delivery Date and/ or Contract Price shall be correspondingly increased or decreased, to the extent that the contractor has thereby been affected in the performance of any of its obligations under the contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable.

4. CONFIDENTIALITY, SECRECY AND IPR RIGHTS

(a) IPR Rights

All deliverables, outputs, plans, drawings, specifications, designs, reports, and other documents and software submitted by the contractor under this Contract shall become and remain the property of MDL and subject to laws of copyright and must not be shared with third parties or reproduced, whether in whole or part, without MDL's prior written consent. The contractor shall, not later than upon termination or expiration of this Contract, deliver all such documents and software to MDL, together with a detailed inventory thereof. The contractor may retain a copy of such documents and software but shall not use it for any commercial purpose.

(b) **Confidentiality**

All documents, drawings, samples, data, associated correspondence or other information furnished by or on behalf of MDL to the contractor, in connection with the contract, whether such information has been furnished before, during or following completion or termination of the contract, are confidential and shall remain the property of MDL and shall not, without the prior written consent of MDL neither be divulged by the contractor to any third party, nor be used by him for any purpose other than the design, procurement, or other services and work required for the performance of this Contract. If advised by MDL, all copies of all such information in original shall be returned on completion of the contractor's performance and obligations under this contract.

(c) Secrecy

If the Contract declares the subject matter of this Contract as coming under the Official Secrets Act, 1923 or if the contract is marked as "Secret", the contractor shall take all reasonable steps necessary to ensure that all persons employed in any connection with the contract, have acknowledged their responsibilities and penalties for violations under the Official Secrets Act and any regulations framed thereunder.

(d) Obligations of the contractor

- (i) Without MDL's prior written consent, the contractor shall not use the information mentioned above except for the sole purpose of performing this contract.
- (ii) The contractor shall treat and mark all information as confidential (or Secret as the case may) and shall not, without the written consent of MDL, divulge to any person other than the person(s) employed by the contractor in the performance of the contract. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for such performance for this contract.
- (iii) Notwithstanding the above, the contractor may furnish to its holding company or its Subcontractor(s) such documents, data, and other information it receives from MDL to the extent required for performing the contract. In this event, the contractor shall obtain from such holding company/ Subcontractor(s) an undertaking of confidentiality (or secrecy as the case may be) similar to that imposed on the contractor under the above clauses.
- (iv) The obligation of the contractor under sub-clauses above, however, shall not apply to information that:
- (aa) The contractor needs to share with the institution(s) participating in the financing of the contract;
- (ab) now or hereafter is or enters the public domain through no fault of Contractor;
- (ac) can be proven to have been possessed by the contractor at the time of disclosure and which was not previously obtained, directly or indirectly, from MDL; or
- (ad) otherwise lawfully becomes available to the contractor from a third party that has no obligation of confidentiality.
- (v) The above provisions shall not in any way modify any undertaking of confidentiality (or Secrecy as the case may be) given by the contractor before the date of the contract in respect of the contract/ the Tender Document or any part thereof.

(vi) The provisions of this clause shall survive completion or termination for whatever reason of the contract.

5. PERMITS, APPROVALS AND LICENSES

Whenever the supply of Goods and incidental Services requires that the contractor obtain permits, approvals, and licenses from local public authorities, it shall be the contractor's sole responsibility to obtain these and keep these current and valid. Such requirements may include but not be restricted to export licence or environmental clearance if required. If requested by the contractor, MDL shall make its best effort to assist the contractor in complying with such requirements in a timely and expeditious manner, without any dilution of the Contractor's responsibility in this regard.

6. TRANSFER OF TITLE OF GOODS

- (a) Unless otherwise stated in the contract, notwithstanding any inspection and approval by the Inspecting Officer on the contractor's premises, or any payments made to the contractor, property in the Goods (and resultant rights and liabilities) shall not pass on to MDL until the Goods have been received, inspected, and accepted by the consignee. The Goods and every constituent part thereof, whether in the possession or control of the contractor, his agents or servants or a carrier, or the joint possession of the contractor, his agents or servants and MDL, his agents, or servants, shall remain in every respect at the risk of the contractor, until their actual delivery to a person stipulated in the contract, as the interim consignee for despatch to the consignee. The Contractor shall be responsible for all loss, destruction, damage, or deterioration of or to the Goods from any cause whatsoever while the Goods after approval by the Inspecting Officer are awaiting despatch or delivery or are in the course of transit from the contractor to the consignee or interim consignee, as the case may be. The Contractor shall alone be entitled and responsible for making claims against any carrier in respect of non-delivery, short delivery, mis-delivery, loss, destruction, damage, or deterioration of the Goods entrusted to such carrier by the contractor for transmission to the consignee or the interim consignee as the case may be.
- (b) Provided that where, under the terms of the contract, the Goods are required to be delivered to an interim consignee for despatch to the consignee, the Goods shall be at MDL's risk after their delivery to the interim consignee.

7. EXTENSION OF DELIVERY PERIOD

(a) If at any time during the currency of the contract, the contractor encounters conditions hindering timely delivery of the Goods and performance of incidental Works/ Services, he shall promptly inform MDL in writing about the same and its likely duration. He must make a request to MDL for an extension of the delivery schedule. On receiving the contractor's communication, MDL shall examine the situation and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages and with and without denial clause by issuing an amendment to the contract.

(b) Conditions for Extension of Delivery Period

When the period of delivery is extended due to unexcused delay (Note: please ensure that unexcused delay is defined. Otherwise replace "unexcused delay" with the "delays attributable") by the contractor, the amendment extending the delivery period shall, inter alia, be subject to the following conditions:

(i) Liquidated Damages

MDL shall recover from the contractor, under the provisions of this clause, liquidated damages on the Goods and incidental Works/ Services, which the contractor has failed to deliver within the delivery period stipulated in the contract.

(ii) **Denial Clause**

- (aa) No increases in price on account of any statutory increase in or fresh Imposition of GST, customs duty or on account of any other taxes/ duty/ cess/ levy), leviable in respect of the Goods and incidental Works/ Services stipulated in the said contract which takes place after the original delivery date, shall be admissible on such of the said Goods, as are delivered after the said date; and
- (ab) Notwithstanding any stipulation in the contract for an increase in price on any other ground, including price variation clause or foreign exchange rate variation, or any other variation clause, no such increase after the original delivery date shall be admissible on such goods delivered after the said date.
- (ac) Nevertheless, MDL shall be entitled to the benefit of any decrease in price on account of reduction in or remission of GST, customs duty or on account of any other Tax or duty or any other ground as

stipulated in the price variation clause or foreign exchange rate variation or any other variation clause which takes place after the expiry of the original delivery date.

(c) Liquidated damages

If the contractor fails to deliver any or all of the Goods or fails to perform the incidental Works/ Services (e.g. installation, commissioning or operator training) within the time frame(s) incorporated in the contract, MDL shall, without prejudice to other rights and remedies available to MDL under the contract, deduct from the contract price, as agreed liquidated damages, but not as a penalty, a sum equivalent to the 1 % percent (excluding taxes) of the delivered price of the delayed Goods and/ or incidental Works/ Services for each week of delay or part thereof until actual delivery or performance, subject to a maximum deduction of the 10% of the delayed Goods' or incidental Works/ Services' contract price(s). Besides liquidated damages during such a delay, the denial clause shall also apply. Any failure or delay by any subcontractor, though their employment may have been sanctioned shall not be admitted as aground for any extension of time or for exempting the contractor from liability for any such loss or damage as aforesaid.

8. DEFAULTS, BREACHES & TERMINATION OF CONTRACT

Termination due to Breach, Default, and Insolvency

(a) Defaults and Breach of Contract

In case the contractor undergoes insolvency or receivership; neglects or defaults, or expresses inability or disinclination to honour his obligations relating to the performance of the contract or ethical standards or any other obligation that substantively affects MDL's rights and benefits under the contract, it shall be treated as a breach of Contract. Such defaults shall include inter-alia:

(i) Default in Performance and Obligations

If the contractor fails to deliver any or all of the Goods or fails to perform any other contractual obligations (including Code of Integrity or obligation to maintain eligibility and Qualifications based on which contract was awarded) within the period stipulated in the contract or within any extension thereof granted by MDL.

(ii) Insolvency

If the contractor is wound up or ceases to otherwise trade or is unable to pay its debts as and when they fall due or is otherwise subject to any insolvency procedure.

(iii) If a receiver or similar official is appointed overall or any of the assets of the contractor or a petition is presented for its winding up or it entered into a composition with its creditors;

(b) Notice for Default

As soon as a breach of contract is noticed, a show-cause 'Notice of Default' shall be issued to the contractor, giving two weeks' notice, reserving the right to invoke contractual remedies. After such a show-cause notice, all payments to the contractor would be temporarily withheld to safeguard needed recoveries that may become due on invoking contractual remedies.

(c) Terminations for Default

- (i) Notice for Termination for Default: In the event of unsatisfactory resolution of 'Notice of Default' within two weeks of its issue as per sub-clause above, MDL if so decided, shall by written Notice of Termination for Default sent to the contractor, terminate the contract in whole or in part, without compensation to the contractor.
- (ii) Such termination shall not prejudice or affect the rights and remedies, including under sub-clause below, which have accrued and/ or shall accrue to MDL after that.
- (iii) Unless otherwise instructed by MDL, the contractor shall continue to perform the contract to the extent not terminated. All warranty obligations, if any, shall continue to survive despite the termination.

(d) Contractual Remedies for Breaches/Defaults or Termination for Default

If there is an unsatisfactory resolution within this period, MDL shall take one; or more of the following contractual remedies.

- (i) Temporary withhold payments due to the contractor till recoveries due to invocation of other contractual remedies are complete.
- (ii) Call back any loaned property or advances of payment, if any, with the levy of interest at the prevailing rate (MIBID Mumbai Interbank Bid Rate).
- (iii) Recover liquidated damages and invoke denial clause for delays.
- (iv) Encash and/ or Forfeit performance or other contractual securities.
- (v) Prefer claims against insurances, if any.
- (vi) Terminate contract for default, fully or partially including its right for Risk and- Cost Procurement as per following sub-clause.

(vii) Risk and Cost Procurement

In addition to termination for default, MDL shall be entitled, and it shall be lawful on his part, to procure Goods same to those terminated, with such terms and conditions and in such manner as it deems fit at the "Risk and Cost" of the contractor. Such 'Risk and Cost Procurement' must be initiated (viz. AIP/PR/Tender) within six months from the termination of Contract. The Contractor shall be liable for any loss which MDL may sustain on that account provided the procurement, or, if there is an agreement to procure, such agreement is made. The Contractor shall not be entitled to any gain on such procurement, and the manner and method of such procurement shall be in the entire discretion of MDL. (Note: deleted being contrary to law). (Note: No contractor would give security after the termination of the contract)

Note: Regarding the Goods which are not readily available in the market and where procurement difficulties are experienced, the period for making risk procurement shall be nine months instead of six months provided above.

(viii) Initiate legal proceedings in a for the recovery of the losses and damages, not addressable by the above means.

9. CLOSURE OF CONTRACT

The contract shall stand closed upon successful performance of all obligations by the firm, including completion of warrantee obligations and final payment. If no claim is received within 03 years from last supplies/services, then no claim shall be entertained thereafter.

10. COMMUNICATION AND LANGUAGE FOR DOCUMENTATION

Any letter, facsimile message, e-mail intimation or notice sent to the Bidder/Supplier/ Contractor at the last known address mentioned in the offer / order shall be deemed to be valid communication for the purpose of the order/contract. Unless stated otherwise by the purchaser, Language for communication and all documentation shall be same, which the Purchaser has used, in the tender enquiry.

11. PRESERVATION AND MAINTENANCE

Should any material require any preservation till its final installation/fitment, the detailed procedure (Long term and short term) for the same as also the time of interval after which the state of preservation needs to be reviewed is to be stated by the Bidder/Supplier/Contractor.

Further the de-preservation prior to the material/equipment being commissioned and the maintenance procedure together with its periodicity is also to be indicated by the Bidder/ Supplier / Contractor.

12. FREIGHT AND INSURANCE.

(a) For Indigenous Bidders

Bidder shall quote for 'Door Delivery to Purchaser,' all charges towards door delivery viz. transport, Insurance charges etc. shall be borne by the Bidder /Supplier / Contractor.

(b) For Foreign Bidders

For overseas bidders, bidder shall agree for supplying the goods on CIF/CIP, Incoterm basis. The Bidder / Supplier / Contractor shall immediately on despatch of the items, inform all relevant details of despatch such as Order Number, Bill of Lading/AWB Number marked as Freight Paid, Insurance policy/document, number of packages, value of consignment, invoice number etc. as per contractual terms.

13. DEMURRAGE

Storage, and Demurrage, fines etc. charges will be payable by the Bidder / Supplier / Contractor for all shipments in case of improper documentation, wrong declarations, error in weight measurements, packing list, invoice, late receipt of documents etc. i.e. for reasons which are not attributable to the purchaser.

14. CANCELLATION OF TENDER

The Purchaser reserves the right to cancel/withdraw the tender in toto or part and or award the contract / order in full or part without assigning any reason whatsoever and without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders of the grounds for MDL action.

15. PURCHASER'S PROPERTY.

All property (such as materials, drawings, documents etc.) issued by the Purchaser or any other individual or firm on behalf of the Purchaser in connection with the contract shall remain confidential, being the property of the Purchaser and the Bidder/Supplier/Contractor shall undertake to return all such property so issued and will be responsible for any or all loss thereof and damage thereto resulting from whatever causes and shall reimburse the Purchaser the full amount of loss and damage. On completion of work in any compartment / location of the purchaser's premises, the Bidder/Supplier/Contractor must ensure that the place is left in a reasonably clean state and all scrap is transferred to nearby scrap-bins.

16. REJECTION OF MATERIALS

If the Goods, or any portion thereof of the equipment found defective / rejected, the Supplier / Contractor shall collect the same from MDL's Stores, all incidental charges being borne by him (inclusive of Custom duty, if payable), within 30 days from the date of intimation to the Supplier / Contractor of such rejection. If not collected within 30 days, MDL shall recover storage charges @ 1 % per month maximum up to 5% of cost of rejected items. MDL reserves the right to dispose-off the rejected items at the end of a total period of six months in any manner to the best advantage to MDL and recover consequential damages maximum up to order value.

17. RECOVERY-ADJUSTMENT PROVISIONS

Payment made under one order shall not be assigned or adjusted to any other order except to the extent agreed upon in writing by the Purchaser. During the currency of the contract, if any sum of money is payable by the Bidder / Supplier / Contractor the same shall be deducted from any sum then due or thereafter may become due to the Bidder / Supplier / Contractor under the contract or any other contract with the Purchaser.

18. INDEMNIFICATION

The Bidder / Supplier / Contractor, his employees, licences, agents or Sub-Supplier / Sub-contractor, while on site of the Purchaser for the purpose of this contract, indemnifies the Purchaser against direct damage and/or injury to the property and/or the person of the Purchaser or that of Purchaser's employees, agents, Sub- Contractors / Suppliers occurring and to the extent caused by the negligence of the Bidder / Supplier / Contractor, his employees, licensees, agents or Sub-contractor by making good such damages to the property, or compensating personal injury and the total liability for such damages or injury shall be as mutually discussed and agreed to.

19. TRANSFER OF SUPPLIERS / CONTRACTOR'S RIGHTS

The Bidder / Supplier / Contractor shall not either wholly or partly sell, transfer, assign or otherwise dispose of the rights, liabilities and obligations under the contract between him and the Purchaser without prior consent of the Purchaser in writing.

20. SUBCONTRACT AND RIGHT OF PURCHASER

The Bidder / Supplier / Contractor under no circumstances undertake or subcontract any work / contract from or to any other Sub-contractor without prior written approval of the Competent Authority of Purchaser. In the event it is found that such practice has been indulged in, the contract is liable to be terminated without notice and the Bidder / Supplier / Contractor is debarred all from future tender enquiries / work orders. However, in no circumstances a contractor is permitted to subcontract any part of the contract to the bidders who had quoted for the concerned tender.

21. PATENT RIGHTS

The Bidder / Supplier / Contractor shall hold harmless and keep the Purchaser indemnified against all claims arising as a result of infringement of any patent / copy rights on account of manufacture, sale or use of articles covered by the order.

22. AGENTS/AGENCY COMMISSION

The seller confirms and declares to the buyer that the seller is the original manufacturer or authorized distributor/stockiest of original manufacturer of the goods referred to in this contract and has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommended to the Buyer or any of its functionaries, whether officially or unofficially, to the award of the Contract / Purchase order to the Seller; nor has any amount been paid, promised or

intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that the Seller has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this Contract / Purchase order, the Seller will be liable to refund that amount to the Buyer. The seller will also be debarred from participation in any RFQ/Tender for new projects/program with Buyer for a minimum period of five years. The buyer will also have a right to consider cancellation of the Contract either wholly or in part, without any entitlement or compensation to the Seller who shall in such event be liable to refund all payments made by the buyer in terms of the Contract along with interest at the rate of 2% per annum or 6% whichever is higher above LIBOR (London Inter Bank Offer Rate) (for foreign vendors) and base rate of SBI plus 2% (for Indian Vendors). The Buyer will also have the right to recover any such amount from any contracts concluded earlier with Buyer.

23. USE OF UNDUE INFLUENCE / CORRUPT PRACTICES

The Bidder / Supplier / Contractor undertakes that he has not used corrupt practices or used any undue influence which is not admissible as per Indian law to obtain contract/order or in doing any business with the purchaser. If found that Bidder / Supplier / Contractor is involved in such wrong practices, then Purchaser is entitled to cancel the contract/s and all or any other contracts and then to recover from the Bidder / Supplier / Contractor the amounts of any loss arising from such contracts' cancellation, including but not limited to imposition of penal damages, forfeiture of Performance security, encashment of the Bank Guarantee and refund of the amounts paid by the Purchaser.

24. IMMUNITY OF GOVERNMENT OF INDIA CLAUSE

It is expressly understood and agreed by and between M/s. (Bidder / Supplier / Contractor) and Mazagon Dock Shipbuilders Limited, Dockyard Road, Mumbai – 400 010 (MDL) is entering into this Agreement solely on its own behalf and not on the behalf of any person or entity. In particular, it is expressly understood and agreed that the Government of India is not a party to this Agreement and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that MDL is an independent legal entity with power and authority to enter into contracts solely in its own behalf under the applicable of Laws of India and general principles of Contract Law. The (Bidder / Supplier / Contractor) expressly agrees, acknowledges and understands that MDL is not an agent, representative or delegate of the Government of India. It is further understood and agreed that the Government of India is not and shall not be liable for any acts, omissions and commissions, breaches or other wrongs arising out of the contract. Accordingly, (Bidder / Supplier / Contractor) hereby expressly waives, releases and foregoes any and all actions or claims, including cross claims, impleader claims or counter claims against the Government of India arising out of this contract and covenants not to sue Government of India in any manner, claim, cause of action or thing whatsoever arising of or under this Agreement.

25. EXPORT LICENCE

The export licenses that may be required for delivery of the various items/equipment to MDL shall be arranged by the Bidder / Supplier / Contractor from the concerned authorities in their country without any time and cost implications on the Purchaser.

26. BANNED OR DE-LISTED CONTRACTORS / SUPPLIERS

The Bidder / Supplier / Contractor declares that they being Proprietors / Directors / Partners have not been any time individually or collectively blacklisted or banned or de-listed by any Government or quasi Government agencies or PSUs. If a bidder's entities as stated above have been blacklisted or banned or de-listed by any Government or quasi Government agencies or PSUs, this fact must be clearly stated and it may not necessarily be a cause for disqualifying him.

27. DUTY OF PERSONNEL OF SUPPLIER/CONTRACTOR

MDL being a Defence Public Sector Undertaking, Bidder / Supplier / Contractor undertakes that their personnel deployed in connection with the entrusted work will not indulge in any activities other than the duties assigned to them.

28. DISPUTE RESOLUTION MECHANISM AND ARBITRATION

(a) Dispute resolution mechanism(DRM)

- (i) Any dispute/differences between the parties arising out of and in connection with the contract shall be settled amicably by mutual negotiations at HoS/HoD level.
- (ii) In case of non-settlement by (i) above, if at any time, before, during or after the contract period any unsettled claim, dispute or difference arose between the parties, upon or in relation to or in connection with or in any way touching or concerning this tender/agreement/order/contract, the same shall be referred to the concerned Functional Director. The Functional Director shall then nominate an Executive of the rank of General Manager whom he thinks fit and competent or a Committee of Executives who/which shall then scrutinise the claims/disputes that have been referred to the concerned functional Director and make efforts for amicable settlements by mutual discussions/negotiations.
- (iii) In case no amicable settlement is arrived by (ii) above within a period of three months, then the contractor shall approach Public Grievance Cell and address the disputes as per the provisions made under the relevant clause of the contract.
- (iv) In case the issues/disputes do not get settled within a period of six months from the date of submission of the dispute to the Grievance Cell, then the contractor may invoke Arbitration Clause of the contract.

(b) Arbitration

Unresolved disputes/differences, if any, shall then be settled by Arbitration. The Arbitration proceedings shall be conducted at Mumbai, India, in English Language, under the Arbitration and Conciliation Act, 1996 as amended from time to time and the rules thereunder. MDL prefers to have arbitration through Institutes such as Indian Council of Arbitration (ICA)/ICA-DR, Mumbai Centre for International Arbitration, International Chamber of Commerce (ICC), Singapore International Arbitration Centre (SIAC) with the mutual consent of the parties. In case of unresolved difference/dispute between the Purchaser and Supplier, being Central Public Sector Enterprises/Central Govt. departments, the disputes shall be resolved firstly through mutual discussion or through the empowered agencies of the Govt. or through arbitration by reference by either party to the department of Public Enterprises, as per extant guidelines. If disputes/differences remain unresolved/unexecuted, the same shall be referred first to the Cabinet Secretariat and then, if necessary to the PMO. Any changes to arbitration clause must be vetted by HOD (Legal) before incorporation in contract/PO.

29. JURISDICTION OF COURTS

All contracts shall be deemed to have been wholly made in Mumbai and all claims there under are payable in Mumbai City and it is the distinct condition of the order that no suit or action for the purpose of enforcing any claim in respect of the order shall be instituted in any Court other than that situated in Mumbai City, Maharashtra State, India i.e. courts in Mumbai shall alone have jurisdiction to decide upon any dispute arising out of or in respect of the contract.

30. SAFETY

The Contractor / Bidder must observe all safety precautions in connection with the work to be performed by him, his agents or labourers. In the event of any accident happening in our yard resulting in loss of lives or otherwise damaging any part of the property, the contractor shall be required to make good the loss to the Company and shall be responsible for all consequences that follow from the loss and / or injuries to the persons involved in such accidents. The standard of safety to be observed in the Company shall be decided by the Executive-in-Charge Safety, or any Executive appointed for the purpose before the commencement of work in the yard. It will be essential for contractor to ascertain the standard precautions which contractor is required to observe in discharging his work as per the standards prevalent in MDL. The decision of MDL in matters concerning Safety shall be final and binding on the contractor. The Contractor / Bidder shall be required to provide his workmen with Boiler Suits of any suitable colour other than blue or white, with the Name of the Contractor in prominent letters on the boiler suits along with personal protection gears like safety shoes, hand gloves etc. workmen of the Contractor / Bidder must wear throughout their working while in the premises of MDL. Contractor's workmen working without safety gears are to be disallowed for work.

31. FORCE MAJEURE

If at any time during the execution of the goods / service order, the performance in whole or in part by either Purchaser or and by the Bidder(s) / Supplier(s) / Contractor(s) is / are delayed by any reason

of force majeure situations such as acts of civil war, civil commotion, sabotage, hostilities, war, fires, explosions, epidemics, natural calamities like floods, earthquakes, volcanoes, storms, acts of God and laws of respective governments or any other causes beyond the control of either parties, hereinafter referred to as "events", provided notice of the occurrence of such event/s is / are communicated by either party, to the other party within 21 days from the date of occurrence thereof, neither party shall by reason such events be entitled to terminate the contract nor shall either party have any claim for damages against the other in respect of such non-performance and or delay in performance of the contract / order. Executions on either side shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of Purchaser as to whether activities can resume or not, shall be conclusive and final. Occurrence of the events to be certified by Chamber of Commerce / Indian High Commission or Embassies / Government in that Country. The performance in whole or in part under the captioned tender / contract is prevented or delayed by reason of any such event for a period exceeding sixty days either party may at its option terminate the contract / further processing of the tender. The relative obligations of both the parties remain suspended during the actual period of force majeure. The Purchaser may extend the delivery schedule as mutually agreed, on receipt of written communication from the Bidder / Supplier / Contractor regarding occurrence of 'Force Majeure' conditions, but not exceeding six months from the scheduled delivery date. If the 'Force Majeure' conditions extend beyond this period, the Purchaser shall have the right to cancel the order without any financial implication to the Purchaser or on terms mutually agreed to.

Enclosure-4

ACCEPTANCE FORM FOR GENERAL CONDITIONS OF CONTRACT (GCC)

GCC	BIDDER'S REMARK	GCC	BIDDER'S REMARK	GCC	BIDDER'S REMARK
CLAUSE No.	ACC/DEV	CLAUSE No.	ACC./ DEV	CLAUSE No.	ACC/ DEV
1	ACC/DEV	2	ACC/DEV	3	ACC/DEV
4	ACC/DEV	5	ACC/DEV	6	ACC/DEV
7	ACC/DEV	8	ACC/DEV	9	ACC/DEV
10	ACC/DEV	11	ACC/DEV	12	ACC/DEV
13	ACC/DEV	14	ACC/DEV	15	ACC/DEV
16	ACC/DEV	17	ACC/DEV	18	ACC/DEV
19	ACC/DEV	20	ACC/DEV	21	ACC/DEV
22	ACC/DEV	23	ACC/DEV	24	ACC/DEV
25	ACC/DEV	26	ACC/DEV	27	ACC/DEV
28	ACC/DEV	29	ACC/DEV	30	ACC/DEV
31	ACC/DEV		ACC/DEV		ACC/DEV

COMPANY'S NAME & ADDRESS:	
	SIGNATURE:
	DATE:
	NAME:
	DESIGNATION:
	BIDDER'S COMPANY SEAL:

NOTES:

- 1. Bidders should carefully read the General Terms & Conditions (GCC) of the Tender Enquiry prior to filling up this acceptance format.
- 2. This format should be properly filled, signed and returned by the bidder(s) along with their technical offer for considering their Bid.
- 3. Bidder(s) should indicate "ACC" for Accepted, "DEV" for Deviation Taken for each clause number in the above table.
- 4. Bidder(s) to attach Separate Sheet indicating all relevant details such as Number & description of the Clause, Reasons for Deviation and Alternative suggested for any deviations taken by them.
- 5. Clause numbers shown in the above format also includes the sub-clauses under these clauses. For example, Clause no. '8' means Clause nos.-8.1, 8.2, 8.3.

Enclosure-5

<u>Declaration of Compliance on Restrictions under Rule 144 (xi) of the General Financial Rules</u> (GFRs), 2017

Restriction under rule 144(xi) of GFR

- I. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. Further, any bidder (including bidder from India) having specified Transfer of Technology (TOT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same competent authority.
- II. 'Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder (or entity) from a country which shares a land border with India" for the purpose of this Order means: -
 - (a) An entity incorporated, established or registered in such a country; or
 - (b) A subsidiary of an entity incorporated, established or registered in such a country; or
 - (c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - (d) An entity whose beneficial owner is situated in such a country; or
 - (e) An Indian (or other) agent of such an entity; or
 - (f) A natural person who is a citizen of such a country; or
 - (g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.
- IV. The beneficial owner for the purpose of (iii) above will be as under:
 - 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements;

- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.
- VII. The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.
- VIII. If the bidder was validly registered at the time of acceptance I placement of order, registration shall not be a relevant consideration during contract execution.

Note: Model certificate for the same is attached at the following page.

м	ada	1 0	rtif	ica	+0:
IVI	nne	31 C E	3 PT I T	ıca	TO.

DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM
"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority.
I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"
AUTHORISED SIGNATURE: DATE:
Seal / Stamp of Bidder
Model additional certificate by Bidders in the cases of specified TOT:
DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM
I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (TOT) arrangement I certify that this bidder does not have any TOT arrangement requiring registration with the competent authority.
OR
I have read the clause regarding restrictions on procurement from a bidder having Transfer of Technology (TOT) arrangement. I certify that this bidder has valid registration to participate in this procurement.
AUTHORISED SIGNATURE: DATE:
Seal / Stamp of Bidder

percent."

Enclosure-6

<u>DECLARATION CERTIFICATE FOR LOCAL CONTENT</u> (Tender value Less than Rs 10 Crores)

This declaration must form part of all tenders & it contains general information and serves as a declaration form for all bidders. (Before completing this declaration, bidders must study the General Conditions, Definitions, Govt Directives applicable in respect of Local Content & prescribed tender conditions).

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CORPORATION, PARTNERSHIP OR INDIVIDUAL)
IN RESPECT OF BID / TENDER No. ISSUED BY: (Name of Firm):
NB: The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
I, the undersigned,
(a) The facts contained herein are within my own personal knowledge.
(b) I have read and understood the requirement of local content (LC) and same is specified as percentage calculated in accordance with the definition provided at clause 2 of revised Public Procurement (preference to Make in India) Order 2017.
"Local content" as per above order means the amount of value added in India which shall be

(c) I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified bid comply with the local content requirements as specified in the tender for 'Class-I Local Supplier', 'Class-II Local Supplier', and as above.

the total value of items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in

(d) I understand that a bidder can seek benefit of either Public Procurement Policy for MSEs —Order 2012 or Public Procurement (preference to Make in India) Order 2017 and not both and once the option is declared / selected it is not permitted to be modified subsequently. Accordingly, I seek the benefit from the below declared purchase preference policy only.

1) PPP I	efits against the fol MSE Order 2012						ISE m)	
	WII 2017			(appl	licable	for C	lass I	supplie			
(Note: If not de nder PPP MII 20 nd will result in n	eclared / selected it 17 policy. However, ejection of bid)	t shall be dee , selection o	emed the	hat p	urchas	se pre	eference	e bene	efit is s ambi	ought	
\ The level on	ntent calculated us	ing the def	inition	nive	n abo	ve a	re as ı	ınder:			
Tender Item Sr No	Local content ca as above	alculated	(Locati	LOC ion sh	ation all be thom as no	OT IOC ne spec ame of	cal val	ue au name of will be o	city or consider	ed as	
				anners	1000	15-2-		-			
B: Local conte	the Procurement	Il be declar	nstituti	ion /	MDL the r	/ Noc	dal Mi	nistry ts of	has th	ne right	ht to
B: Local conterms of the tenderms of the tende	the Procurement / local content be eference to Make i mation on demand as per PPP MII O vant documents for d that the submis sed Public Procure ent Authority / Noc lause 9 of the Revis	Authority / I verified in in India) Or d. Failure o order 2017. r 7 years from	nstituti terms der 20 n my In cas om dat	ion / s of 017 of part se of te of data	MDL. the restricted to fur executa, or Wake	/ Noo required 5.09.2 rnish ract bution data in India	dal Miremen 2020 a the da being a that dia) O	nistry ts of and I s ata will award are no rder 2	has the revise hall full be the ded, I under the contract	ne right ed Puurnish reated under rifiable may re medie	ht to ublic in the id as take e as esult es as
B: Local conterms of the tenderms of the tende	the Procurement A local content be eference to Make i mation on demand as per PPP MII Ovant documents for that the submis sed Public Procure ent Authority / Not lause 9 of the Revis 9.2020	Authority / I verified in in India) Or d. Failure o order 2017. r 7 years from	nstituti terms der 20 n my In cas om dat	ion / s of 017 of part se of te of data	MDL. the restricted to fur executa, or Wake	/ Noorequir 3.09.2 mish ract b ution data in Indig any	dal Miremen 2020 a the da being a that dia) O	nistry its of and I s ata wil award are no rder 2 II of th	has the revise hall full be the determinant version of the remains a continue of the remains a continue rema	ne right ed Puurnish reated under rifiable may re medie	ht to ublic in the id as take e as esult es as

DECLARATION CERTIFICATE FOR LOCAL CONTENT (Tender value More than Rs 10 Crores)

This declaration must form part of all tenders & it contains general information and serves as a declaration form for all bidders. (Before completing this declaration, bidders must study the General Conditions, Definitions, Govt Directives applicable in respect of Local Content & prescribed tender conditions).

THE BIDDERS SHALL PROVIDE THIS CERTIFICATE FROM STATUTORY AUDITOR OR COS AUDITOR OF THE COMPANY (IN CASE OF COMPANIES) OR FROM A PRACTICING COS ACCOUNTANT OR PRACTICING CHARTED ACCOUNTANT (IN RESPECT OF SUPPLIER OTHER THAN COMPANIES) GIVING THE PERCENTAGE OF LOCAL CONTENT.	T
IN RESPECT OF BID / TENDER No. ISSUED BY: (Name of Firm):	
I, the undersigned,	er
(b) I have read and understood the requirement of local content (LC) and same is specified a percentage calculated in accordance with the definition provided at clause 2 of revised Public Procurement (preference to Make in India) Order 2017.	
"Local content" as per above order means the amount of value added in India which shall be the total value of items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in percent."	of
(c) I have satisfied myself that the goods/services/works to be delivered in terms of the above specified bid comply with the local content requirements as specified in the tender for 'Class- Local Supplier' / 'Class-II Local Supplier', and as above.	
(d) I understand that a bidder can seek benefit of either Public Procurement Policy for MSE -Order 2012 or Public Procurement (preference to Make in India) Order 2017 and not both an once the option is declared / selected it is not permitted to be modified subsequently Accordingly, I seek the benefit from the below declared purchase preference policy only.	id
i) I seek benefits against the following policy only (Select only one Option):	
1) PPP MSE Order 2012 (applicable for MSE manufacturers)	
2) PPP MII 2017 (applicable for Class I suppliers as well as MSE manufacturers)	
(Note: if not declared / selected it shall be deemed that purchase preference benefit is sought under PPP MII 2017 policy. However, selection of both the options will be treated as ambiguous and will result in rejection of bid)	

(e) The local con Tender Item Sr No	tent calculated using the def Local content calculated as above %	finition given above are as under: Location of local value addition (Location shall be the specified as name of city or district,
			etc. Location as name of country will be considered as ambiguous and such bids shall be rejected.)
			uningenee und cour cross origin or repeated,
^-	took concrete about	t duly signed if space is not sufficie	nt.
	IB: Local contenerms of the tende		red item wise or tender wise strictly as per the
P d fa	equest that the Procurement (pre locument / infornation also declaration a	local content be verified in ference to Make in India) Or nation on demand. Failure o	nstitution / MDL / Nodal Ministry has the right to terms of the requirements of revised Public der 2017 dtd 16.09.2020_and I shall furnish the my part to furnish the data will be treated as In case of contract being awarded, I undertake om date of execution.
d ir p	lescribed in revis	ed Public Procurement (prefeat ent Authority / Nodal Ministry ause 9 of the Revised Public I	orrect data, or data that are not verifiable as erence to Make in India) Order 2017, may result // MDL imposing any or all of the remedies as Procurement (preference to Make in India) Order
	SIGNATURE	S:	DATE:

ACTUAL LOCAL CONTENT CERTIFICATE (Tender value Less than Rs 10 Crores)

Note 1: This certificate shall be submitted by the successful bidder post execution of the contract.

OR OTHER LEGALLY RE OR SENIOR MEMBER PARTNERSHIP OR INDIV	ARATION (post execution of contract / SPONSIBLE PERSON NOMINATED IN R/PERSON WITH MANAGEMENT //IDUAL)	WRITING BY THE CHIEF EXECUTIVE RESPONSIBILITY (CORPORATION,
	Firm):	
NB: The obligation to compler representative, auditor or any	ete, duly sign and submit this declaration can y other third party acting on behalf of the bidde	not be transferred to an external authorized er.
I, the undersigned,		(full names),
ofthat:	y capacity as	(name of bidder entity),
(a) The facts contained	d herein are within my own personal k	nowledge.
(b) My/our company ha Tender Item Sr No	Local content calculated as above	% Location of local value addition
Tender Item Sr No	Declared minimum Local content at the time of bidding (%)	Achieved Local content of delivered items (%)
at the time of bid / tend (d) I accept that the Frequest that the loca Procurement (preferent	Procurement Authority / Institution / No I content be verified in terms of the centre to Make in India) Order 2017 date on demand. Failure on my part to further 2017. I undertake to retain	IDL / Nodal Ministry has the right to he requirements of revised Public ed 16.09.2020 and I shall furnish the rnish the data will be treated as false
in revised Public Productive	he submission of incorrect data, or da curement (preference to Make in In / Nodal Ministry / MDL imposing any ised Public Procurement (preference	dia) Order 2017, may result in the or all of the remedies as provided for
SIGNATURE:		DATE:
Stamp / Seal of t	he company	

ACTUAL LOCAL CONTENT CERTIFICATE (Tender value More than Rs 10 Crores)

Note 1: This certificate shall be submitted by the successful bidder post execution of the contract.

		-			
PROVIDE THIS CERTIFICATION CASE OF COMPANI	ARATION (post execution of contr ATE FROM STATUTORY AUDITOR OF ES) OR FROM A PRACTICING COS T (IN RESPECT OF SUPPLIER OTHE L CONTENT.	R CO	CCOUNTANT OR PRACTICING		
	RACT No./ PO No				
do hereby declare in my	r capacity as				
(a) The facts contained	herein are within my own personal k	now	ledge.		
Tender Item Sr No	Local content calculated as above	%	Location of local value addition		
the delivered item/s calcunder: Tender Item Sr No	Declared minimum Local content at the time of bidding (%)	Ach			
NR: Local content perce	entage shall strictly be declared item	wise	or tender wise as was declared		
at the time of bid / tende	er.				
(d) I accept that the Procurement Authority / Institution / MDL / Nodal Ministry has the right to request that the local content be verified in terms of the requirements of revised Public Procurement (preference to Make in India) Order 2017 dated 16.09.2020 and I shall furnish the document / information on demand. Failure on my part to furnish the data will be treated as false declaration as per PPP MII Order 2017. I undertake to retain the relevant documents for 7 years from date of execution.					
in revised Public Procu	e submission of incorrect data, or da urement (preference to Make in In Nodal Ministry / MDL imposing any sed Public Procurement (preference	αια) or al	of the remedies as provided for		
SIGNATURE: _		D	ATE:		
Stamp / Seal of th	e company				

Enclosure - 7

EXTRACT OF PROVISIONS OF THE OFFICIAL SECRETS ACT, 1923

SECTION 2(B); "PROHIBITED PLACE"

It is defined as the place of any work of Defence Dockyard and other so belonging or occupied and used for the purpose of building, repairing, making or storing any ammunitions of war.

For the purpose of the above definition, sketch includes any photograph or other mode of representing any place or thing.

SECTION 3: "PENALTIES FOR SPYING"

If any person unlawfully - approaches, inspects, passes over or is in the vicinity of any clear place; or make any sketches intended to be directly or indirectly useful to an enemy; or c) Obtains collects records or communicates to any other person any secret official code.

Shall be liable for imprisonment of 14 years in case of Defence Installation.

SECTION 4: "COMMUNICATION WITH FOREIGN AGENTS"

If any person has been in communication with or attempted to communicate with foreign agents regarding the vital information of any "PROHIBITED PLACE" would be guilty of violating the provisions of this Act.

SECTION 5: "WRONGFUL COMMUNICATION OF INFORMATION"

If any person having in his possession or control any official document;

- a) Willfully communicates to any person, other than a person, who is authorised to communicate it.
- b) Used the information in his possession for the benefit of any foreign power.
- c) Retain in his possession when he has no power to retain it
- d) Fails to take reasonable care of it.

Shall be guilty of an offence under this Act.

SECTION 6: "UNAUTHORISED USE OF UNIFORMS"

If any person for the purpose of gaining admission or of assisting any other person to gain admission to a "PROHIBITED PLACE" wears uniforms without lawful authority shall be guilty of offence under this Section.

SECTION 7: "INTERFERING WITH OFFICERS OF POLICE"

No person in the vicinity of any "PROHIBITED PLACE" shall abstract any Police Officer engaged on guard, sentry or similar duty. If any people move in the provisions of this section, shall be punishable with imprisonment, which may extend up to 3 years.

SECTION 8: "DUTY OF GIVING INFORMATION"

It shall be duty of every person to give on demand to a superintendent of Police or any other Police Officer not below the rank of Inspector, any information in his power relating to an offence under this Act. If any person fails to give such information, shall be punishable with imprisonment to 3 years or fine or with both.

SECTION 9: "INCITEMENT"

Any person who attempts to commit or debate the commission of an offence under this Act shall be punishable with the same punishment and be liable to be proceeded against in the same manner as if he had committed such offence.

SECTION 10: "PENALTY FOR HARBOURING SPIES"

If any person whom he knows or has reasonable grounds for supposing to be person who is about to commit or who has committed offence under this Act shall be guilty of offence under this Section.

SECTION 11: "SEARCH WARRANTS"

If a presidency Magistrate, Magistrate First Class or Sub-Divisional magistrate is satisfied with the information that there is reasonable ground for suspecting that an offence under this Act has been or is about to be committed, he may grant search warrant to any Police Officer to enter at any time any premises to force to search premises or the places.

We accept and comply by the above clauses of EXTRACT OF PROVISIONS OF THE OFFICIAL SECRETS ACT, 1923.

Bidder's Signature	
Bidder's Name	
Company Seal	

PROFORMA BANK GUARANTEE FOR PERFORMANCE SECURITY

(On Non-Judicial stamp paper of value Rs. 500/-. However, the value of stamp paper to be confirmed from Legal Department, MDL.)

IN CONSIDERATION OF MAZAGON DOCK SHIPBUILDERS LIMTED, a company incorporated under the Companies Act 1956 and having its registered office at Dockyard Road, Mumbai 400010 (hereinafter referred to as the "the Purchaser" which expression shall, unless it be repugnant or contrary to the subject or context thereof, be deemed to mean and include its successors and assigns) having placed an order on Messers
IN WITNESS WHEREOF the Bank has executed this document on thisday of
For Bank
(by its constituted attorney)
(Signature of a person authorised to sign on behalf of "the Bank")

INTEGRITY PACT

Mazagon Dock Shipbuilders Limited (MDL) hereinafter referred to as "The Principal/Buyer"
And
hereinafter referred to as "The Bidder/ Contractor"
<u>Preamble</u>
The Principal/Buyer intends to award, under laid down organizational procedures, contract/s for
In order to achieve these goals, the Principal/Buyer will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.
Section 1 - Commitments of the Principal/Buyer:
(1) The Principal/Buyer commits itself to take all measures necessary to prevent corruption and to observe the following principles:
a) No employee of the Principal/Buyer, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
b) The Principal/Buyer will during the tender process treat all Bidder(s) with equity and reason. The Principal/Buyer will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
c) The Principal/Buyer will exclude from the process all known prejudiced persons.
d) The Principal/Buyer undertakes to scrupulously follow the Purchase Manual containing Standard Terms & Conditions (STAC) and General Terms & Conditions (GT&C) in respect of procurement contracts for goods, services and civil works.
(1) If the Principal/Buyer obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or it there be a substantive suspicion in this regard, the Principal/Buyer will inform the Chief Vigilance Officer, MDL and in addition can initiate disciplinary actions.
Section 2 - Commitments of the Bidder(s)/Contractor(s):
(1) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
Bidder's Sign
Bidder's Stamp

- a) The Bidder(s)/Contractor(s) will not, directly or through any other persons or firm, offer promise or give to any of the Principal/Buyer's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage or any kind whatsoever during the tender process or during the execution of the contract.
- b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant Anti-Corruption Laws of India; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to other, any information or document provided by the Principal/Buyer as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly, the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. All payments made to the Indian Agent/representative have to be in Indian Rupees only. Further details as mentioned in the "Guidelines of Indian Agents of Foreign suppliers" shall be disclosed by the Bidders(s)/Contractor(s). Copy of the "Guidelines on Indian Agents of Foreign Suppliers" as annexed and marked as Annexure-A.
- e) The Bidder(s)/Contractor(s) will when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f) The Bidder (s)/Contractor(s), their agents, representatives shall not do such things so as to interfere with the procedures laid down in the Principal/Buyer's Purchase Manual containing the Standard Terms and Conditions (STAC) and General Terms and Conditions (GT&C) in respect of procurement contracts for goods, services and civil works.
- g) The Bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlines above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future contracts:

If the Bidder(s)/Contractor(s) before contract award has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility as Bidder(s) in question, the Principal/Buyer is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or to terminate the contract, if already signed for such reason, as per the procedure mentioned in the "Guidelines on Banning of business dealings" Copy of the "Guidelines on Banning of business dealings" is annexed and marked as Annexure-B.

Bidder's Sign	
Bidder's Stamp	

- 1) If the Bidder(s)/Contractor(s) has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal/Buyer is entitled also to exclude the Bidder(s)/Contractor(s) from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder(s) and the amount of the damage. The exclusion will be imposed for a minimum of six months and maximum of five years, which may be further extended at the discretion of the Principal/Buyer.
- 2) A transgression is considered to have occurred, if the Principal/Buyer after due consideration of the available evidence, concludes that no reasonable doubt is possible.
- 3) The Bidder (s) accepts and undertakes to respect and uphold the Principal/Buyer's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining legal advice.
- 4) If the Bidder(s)/Contractor(s) can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Buyer may revoke the exclusion prematurely.

<u>Section 4 – Sanctions for Violation:</u>

- (1) Any breach of the aforesaid provisions by the Bidder or any one employed by him or acting on his behalf (whether with our without the knowledge of the Bidder) or the commission of any offence by the Bidder or any one employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act 1988 or any other Act enacted for the prevention of corruption shall entitle the Principal/Buyer to take all or any one of the following actions, wherever required –
- a) To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the Bidder. However, the proceedings with the other Bidder (s) would continue.
- b) The Earnest Money Deposit/Security Deposit/Performance Bond shall stand forfeited either fully or partially, as decided by the Principal/Buyer, and the Principal/Buyer shall not be required to assign any reason there for.
- c) To immediately cancel the contract, if already signed, without giving any compensation to the Bidder.
- d) To recover all sums already paid by the Principal/Buyer, in case of an Indian Bidder with interest thereon at 2% higher than the prevailing Base Rate of SBI, and in case of a Bidder from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the Bidder from the Buyer in connection with any other contract for any other Defence stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- e) To encash the advance Bank Guarantee and Performance Bond/Warranty bond, if furnished by the Bidder, in order to recover the payments, already made by the Principal/Buyer, along with interest.
- f) To cancel all or any other contracts with the Bidder.
- g) To debar the Bidder from entering into any bid from Principal/Buyer for a minimum period of five years, which may be further extended at the discretion of the Principal/Buyer.

Bidder's Sign
Bidder's Stamp

- h) To recover all sums paid in violation of this Pact by Bidder(s) to any middleman or agent or broker with a view to securing the contract.
- i) If the Bidder or any employee of the Bidder or any person acting on behalf of the Bidder, either directly or indirectly, is closely related to any of the officers of the Buyer, or alternatively, if any close relative of an officer of the Buyer has financial interest/stake in the Bidder's firm, the same shall be disclosed by the Bidder at the time of filing of tender. Any failure to disclose the interest involved shall entitle the Buyer to rescind the contract without payment of any compensation to the Bidder.

The term 'close relative' for this purpose would mean spouse whether residing with the Principal/Buyer's employee/employees or not, but not include a spouse separated from the Principal/Buyer's employee/employees by a decree or order of a competent court; son or daughter or step son or step daughter and wholly dependent upon Principal/Buyer's employee/employees, but does not include a child or step child who is no longer in any way dependent upon the Principal/Buyer's employee/employees or of whose custody the Principal/Buyer's employee/employees has been deprived of by or under any law; any other person related, whether by blood or marriage, to the Principal/Buyer's employee/employees or to the Principal/Buyer's employee/employees wife or husband and wholly dependent upon Principal/Buyer's employee/employees.

- j) The Bidder shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Principal/Buyer, and if he does so, the Principal/Buyer shall be entitled forthwith to rescind the contract and all other contracts with the Bidder. The Bidder shall be liable to pay compensation for any loss or damage to the Principal/Buyer resulting from such rescission and the Principal/Buyer shall be entitled to deduct the amount so payable from the money(s) due to the Bidder.
- k) In cases where Irrevocable Letters of Credit have been received in respect of any contract signed by the Principal/Buyer with the Bidder, the same shall not be opened.
- (2) The decision of the Principal/Buyer to the effect that a breach of the provisions of this Integrity Pact has been committed by the Bidder shall be final and binding on the Bidder, however, the same Bidder can approach the Monitor(s) appointed for the purposes of this Pact.

Section 5 - Integrity Pact:

- 1) The provisions regarding Sanctions for violation of Integrity Pact include forfeiture of Performance Bond in case of a decision by the Principal/Buyer to forfeit the same without assigning any reason for imposing sanction for violation of Integrity Pact.
- 2) No interest shall be payable by the Principal/Buyer to the Bidder(s) on Earnest Money/Security Deposit for the period of its currency.

Section 6 - Previous Transgression:

- (1) The Bidder declares that no previous transgressions occurred in the last three years with any other company in any country conforming to the anti-corruption approach or with any other public section enterprise in India that could justify his exclusion from the tender process.
- (2) If the bidder makes incorrect statement on this subject, he can be disqualified from the tender process or further action can be taken.

Bidder's Sign
Bidder's Stamp

Section 7 - Equal treatment of all Bidders/Contractor(s)/Subcontractors:

- (1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this integrity Pact, and to submit it to the Principal before contract signing.
- 2) The Principal/Buyer will enter into agreements with identical conditions as this one with all bidders, contractors and subcontractors.
- (3) The Principal/Buyer will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 8 - Criminal charges against violation Bidder(s)/Contractor(s)/ Subcontractor(s):

(1) If the Principal/Buyer obtains knowledge of conduct of a Bidder, Contractor or subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor of subcontractor which constitutes corruption or if the Principal has substantive suspicion in this regard, the Principal/Buyer will inform the same to the Chief Vigilance Officer, MDL.

<u>Section 9 - Independent External Monitor/Monitors:</u>

- (1) The Principal/Buyer appoints competent and credible independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairman & Managing Director of the Principal/Buyer.
- (3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all project documentation of the Principal/Buyer including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/Subcontractor(s) with confidentiality.
- (4) The Principal/Buyer will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations, between the Principal/Buyer and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal/Buyer and request the Management to discontinue or take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Monitor shall give an opportunity to the Bidder(s)/Contractor(s) to present its case before making its recommendation to the Principal/Buyer.
- (6) The Monitor will submit a written report to the Chairman & Managing Director of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the Principal/Buyer and, should the occasion arise, submit proposals for correcting problematic situations.
- (7) Monitor shall be entitled to compensation on the same terms as being extended to / provided to Independent Directors on the Board of Principal/Buyer.

Bidder's Sign	
Bidder's Stamp	

- (8) If the Monitor has reported to the Chairman & Managing Director of the Principal, a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India and the Chairman & Managing Director of the Principal/Buyer has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (9) The word 'Monitor' would include both singular and plural.

Section 10 - Pact Duration:

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract and for all other Bidders 06 months after the contract has been awarded. If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above unless it is discharged / determined by Chairman & Managing Director of the Principal/Buyer.

Section 11 - Other provisions:

- (1) This agreement is subject to Indian Law, place of performance and jurisdiction is the Registered Office of the Principal/Buyer, i.e. Mumbai. The Arbitration clauses provided in the main tender document/contract shall not be applicable for any issue/dispute arising under this Integrity pact.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

Section 12 - Fall Clause:

"The Bidder undertakes that it has not supplied/is not supplying similar products/ systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found at any stage that similar product/systems or sub systems was supplied by the Bidder to any other Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance of elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the Bidder to the Principal/Buyer, if the contract has already been concluded."

For & on behalf of		
MAZAGON DOCK Shipbuilde	rs LIMITED for & on behalf of Bidder/Contractor	
(Office Seal) (Office Seal)		
Place		
Date		
Witness 1:		Witness 2:
(Name & Address)		(Name & Address)
	_	
	-	

Annexure-A

GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS

- 1.0 There shall be compulsory registration of agents for all Global (Open) Tender and Limited Tender. An agent who is not registered with MDL shall apply for registration.
- 1.1 An agent shall represent only one Foreign Supplier and not represent two suppliers or quote on their behalf in the same tender. However, either the Indian Agent on behalf of the Foreign Suppliers (also includes foreign manufacturers) or the Foreign Suppliers (also includes foreign manufacturers) directly could bid in a tender, but not both. In cases where an agent participates in a tender on behalf of one manufacturer, shall not quote on behalf of another manufacturer along with the first Manufacturer in a subsequent/parallel tender for the same item.
- 1.2 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/salary/ retainer ship being paid by the principal to the agent before the placement of order by MDL.
- 1.3 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

2.0 DISCLOSURE OF PARTICULARS OF AGENTS/ REPRESENTATIVES IN INDIA, IF ANY.

- 2.1 Tenderers of Foreign nationality shall furnish the following details in their offer:
- 2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.
- 2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agents/representatives in India.
- 2.1.3 Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/ representatives in India, may be paid by MDL in Indian Rupees only.
- 2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:
- 2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e, whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal

EY/ONGC/RK/2024/1200003228
specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.
2.2.2 The amount of commission/remuneration included in the price (s) quoted by the Tenderer for himself.
2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/remuneration, if any, reserved for the Tenderer in the quoted price (s), may be paid by MDL in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items
2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission /remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.
2.4 Failure to furnish correct and detailed information as called for in paragraph-2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by MDL. Besides this there would be a penalty of banning business dealings with MDL or damage or payment of a named sum

Annexure-B

GUIDELINES ON BANNING OF BUSINESS DEALINGS

CONTENTS

Sr.	Description	Pages
1.	Introduction	2
2.	Scope	2
3.	Definitions	2 - 3
4.	Initiation of Banning / Suspension	3
5.	Suspension of Business Dealings	3 - 4
6.	Ground on which Banning of Business Dealing can be initiated	4 - 5
7.	Banning of Business Dealings	5-6
8.	Removal from List of Approved Agencies-Suppliers/ Contractors etc.	6
9.	Procedure for issuing Show-cause Notice	6
10.	Appeal against the Decision of the Competent Authority	7
11.	Review of the Decision by the Competent Authority	7
12.	Circulation of the names of Agencies with whom Business Dealings have been banned	7

1. Introduction

- 1.1 Mazagon Dock Shipbuilders Limited (MDL), being a Public Sector Enterprise and 'State', within the meaning of Article 12 of Constitution of India, has to ensure preservation of rights enshrined in Chapter III of the Constitution. MDL as also to safeguard its commercial interests. MDL deals with Agencies, who have a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of MDL to deal with Agencies who commit deception, fraud or other misconduct in the execution of contracts awarded / orders issued to them. In order to ensure compliance with the constitutional mandate, it is incumbent on MDL to observe principles of natural justice before banning the business dealings with any Agency.
- 1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

2. Scope

- 2.1 MDL reserves its rights to remove from list of approved suppliers / contractors or to ban business dealings if any Agency has been found to have committed misconduct and also to suspend business dealings pending investigation.
- 2.2 Similarly, in case of sale of material there is a clause to deal with the Agencies / customers / buyers, who indulge in lifting of material in unauthorized manner.
- 2.3 However, absence of such a clause does not in any way restrict the right of MDL to take action / decision under these guidelines in appropriate cases.
- 2.4 The procedure of (i) Removal of Agency from the List of approved suppliers / contractors; (ii) Suspension and (iii) Banning of Business Dealing with Agencies, has been laid down in these guidelines.

- 2.5 These guidelines apply to all the Divisions/Yards of MDL.
- 2.6 It is clarified that these guidelines do not deal with the decision of the Management not to entertain any particular Agency due to its poor / inadequate performance or for any other reason.
- 2.7 The banning shall be with prospective effect, i.e., future business dealings.

3. Definitions

In these Guidelines, unless the context otherwise requires:

- i) 'Bidder / Contractor / Supplier / Purchaser / Customer' shall mean and include a public limited company or a private limited company, a firm whether registered or not, an individual, a cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. 'Bidder / Contractor / Supplier / Purchaser / Customer' in the context of these guidelines is indicated as 'Agency'.
- ii) 'Inter-connected Agency' shall mean two or more companies having any of the following features:
 - a) If one is a subsidiary of the other.
 - b) If the Director(s), Partner(s), Manager(s) or Representative(s) are common;
 - c) If management is common;
 - d) If one owns or controls the other in any manner;
- iii) 'Competent Authority' and 'Appellate Authority' shall mean the following:
 - a) Functional Director shall be the 'Competent Authority' for the purpose of these guidelines. CMD, MDL shall be the 'Appellate Authority'.
 - b) CMD, MDL shall have overall power to take suo-moto action on any information available or received by him and pass such order(s) as he may think appropriate, including modifying the order(s) passed by any authority under these guidelines. Page No. 8.56 Amdt. No: 0 Date: 01/01/2015
- iv) 'Investigating Department' shall mean any Department or Unit investigating into the conduct of the Agency and shall include the Vigilance Department, Central Bureau of Investigation, the State Police or any other department set up by the Central or State Government having powers to investigate.
- v) 'List of approved Agencies 'Bidder / Contractors / Suppliers / Purchasers / Customers shall mean and include list of approved / registered Agencies - 'Bidder / Contractors / Suppliers / Purchasers / Customers, etc

4. Initiation of Banning / Suspension

Action for banning / suspension business dealings with any Agency should be initiated by the department having business dealings with them after noticing the irregularities or misconduct on their part. Besides the concerned department, Vigilance Department may also be competent to initiate such action.

5. Suspension of Business Dealings

5.1 If the conduct of any Agency dealing with MDL is under investigation by any department, the Competent Authority may consider whether the allegations under investigation are of a serious nature and whether pending investigation, it would be advisable to continue business dealing with the Agency. If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Department, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order to this

effect may indicate a brief of the charges under investigation. If it is decided that inter-connected Agencies would also come within the ambit of the order of suspension, the same should be specifically stated in the order. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to the Investigating Department. The Investigating Department may ensure that their investigation is completed and whole process of final order is over within such period.

- 5.2 The order of suspension shall be communicated to all Commercial Departmental Heads. During the period of suspension, no business dealing may be held with the Agency.
- 5.3 As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regard to the circumstances of the case, decides otherwise.
- 5.4 If the gravity of the misconduct under investigation is very serious and it would not be in the interest of MDL, as a whole, to deal with such an Agency pending investigation, the Competent Authority may order suspension of business dealing with Agency and send his recommendation to Chief Vigilance Officer (CVO), MDL alongwith the material available, copy of which may be issued to the Agency concerned with intimation to CVO MDL. Such an order would operate for a period of six months from the date of issue.
- 5.5 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.
- 5.6 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension. However, if investigations are not complete in six months' time, the Competent Authority may extend the period of suspension by another three months, during which period the investigations must be completed.

6. Ground on which Banning of Business Dealings can be initiated

- 6.1 If the security consideration, including questions of loyalty of the Agency to the State, so warrants; Page No. 8.57 Amdt. No : 0 Date : 01/01/2015
- 6.2 If the Director / Owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises or MDL, during the last five years;
- 6.3 If there is strong justification for believing that the Directors, Proprietors, Partners, owner of the Agency have been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolations, etc;
- 6.4 If the Agency continuously refuses to return / refund the dues of MDL without showing adequate reason and this is not due to any reasonable dispute which would attract proceedings in arbitration or Court of Law;
- 6.5 If the Agency employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offence;
- 6.6 If business dealings with the Agency have been banned/blacklisted by Government Agencies/ Statutory bodies, DGQA, Defence Shipyards, DPSUs or with whom commercial transactions have been suspended for sufficient and justifiable reasons. If the Agency having same promoters/Directors /Partners as the barred/blacklisted Company as at 6.6 above for the duration for which the barring/ blacklisting of sister concern persists.

- 6.7 If the Agency has resorted to Corrupt, fraudulent practices including misrepresentation of facts; If the agency who had fraudulently dealt with the Company for pecuniary gains or had connived with dealing officers for mutual benefit.
- 6.8 If the Agency uses intimidation / threatening or brings undue outside pressure on the MDL or its official in acceptance / performances of the job under the contract;
- 6.9 If the Agency indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- 6.10 Wilful indulgence by the Agency in supplying sub-standard material irrespective of whether predespatch inspection was carried out by MDL or not;
- 6.11 Based on the findings of the investigation report of CBI / Police against the Agency for malafide / unlawful acts or improper conduct on his part in matters relating to the MDL or even otherwise;
- 6.12 Established litigant nature of the Agency to derive undue benefit;
- 6.13 Continued poor performance of the Agency in several contracts;
- 6.14 If the Agency misuses the premises or facilities of the MDL, forcefully occupies, tampers or damages the Company's properties including land, water resources, forests / trees, etc.

If the Agency who knowingly collude to defeat competition with the aim of deriving undeserved profit or gain from doing business with MDL.

(Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).

7. Banning of Business Dealings

- 7.1 Decision to ban business dealings with any Agency would apply throughout the Company.
- 7.2 There will be a Standing Committee to be appointed by the CMD which may include HOD of respective Commercial Section/Capital Works/OTS, HOD (M), rep of Legal Deptt. and OIC (SR&R) for processing the cases of "Banning of Business Dealings". The functions of the committee shall, inter-alia include:
- i) To study the report of the Investigating Agency and decide if a prima-facie case for banning exists, if not, send back the case to the Competent Authority.
- ii) To recommend for issue of show-cause notice to the Agency by the concerned department.
- iii) To examine the reply to show-cause notice and call the Agency for personal hearing, if required.
- iv) To submit final recommendation to the Competent Authority for banning or otherwise.
- 7.3 If the Competent Authority is prima-facie of view that action for banning business dealings with the Agency is called for, a show-cause notice may be issued to the Agency as per paragraph 9.1 and an enquiry held accordingly.

8 Removal from List of Approved Agencies - Suppliers / Contractors, etc.

- 8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies Suppliers / Contractors, etc.
- 8.2 The effect of such an order would be that the Agency would not be disqualified from competing in Open Tender Enquiries but LTE may not be given to the Agency concerned.

8.3 Past performance of the Agency may be taken into account while processing for approval of the Competent Authority for awarding the contract.

9. Show-cause Notice

- 9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice has to be issued to the Agency. Statement containing the imputation of misconduct or mis-behaviour may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defence.
- 9.2 If the Agency requests for inspection of any relevant document in possession of MDL, necessary facility for inspection of documents may be provided.
- 9.3 The Competent Authority may consider and pass an appropriate speaking order:
- a) For exonerating the Agency if the charges are not established;
- b) For removing the Agency from the list of approved Suppliers / Contactors, etc.
- c) For banning the business dealing with the Agency.
- 9.4 If it decides to ban business dealings, the period for which the ban would be operative may be mentioned. The order may also mention that the ban would extend to the interconnected Agencies of the Agency.

10. Appeal against the Decision of the Competent Authority

- 10.1 The Agency may file an appeal against the order of the Competent Authority banning business dealing, etc. The appeal shall lie to Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning business dealing, etc.
- 10.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

11. Review of the Decision by the Competent Authority

Any petition / application filed by the Agency concerning the review of the banning order passed originally by Competent Authority under the existing guidelines either before or after filing of appeal before the Appellate Authority or after disposal of appeal by the Appellate Authority, the review petition can be decided by the Appellate Authority upon disclosure of new facts / circumstances or subsequent development necessitating such review. The Competent Authority may refer the same petition to the separate Standing Committee which may be constituted by Appellate Authority for examination and recommendation.

12. Circulation of the names of Agencies with whom Business Dealings have been banned

- 12.1 Depending upon the gravity of misconduct established, the Competent Authority may direct HOD (Materials)/OIC (SR&R) to circulate the names of Agency with whom business dealings have been banned, to the Government Departments, other Public Sector Enterprises, etc. for such action as they deem appropriate.
- 12.2 If Government Departments or a Public Sector Enterprise request for more information about the Agency with whom business dealings have been banned, a copy of the report of Inquiring Authority together with a copy of the order of the Competent Authority / Appellate Authority may be supplied.
- 12.3 If business dealings with any Agency have been banned by the Central or State Government or any other Public Sector Enterprise, MDL may, without any further enquiry or investigation, issue an order banning business dealing with the Agency and its interconnected Agencies.

.....

FORM OF WARRANTY CERTIFICATE

In accordance with the Order N° Dated placed by MAZAGON DOCK SHIPBUILDERS LIMITED on (Name of firm)			
(Name of firm) certify that the following Items identified by the following references related to Submarine No:			
Description of Item(s)			
Manufacturer's Serial Number (OR any other such ID No) of the Equipment / Item			
Delivery Challan No. / Bill of Lading No & Date / Air Way Bill No & Date			
Covered by (Name of firm) Invoice No & Date are warranted according to the terms and conditions as specified in the order.			
The Date of issue of the certificate: DD/MM/YYYY			
The Date of the end of validity of the guarantee: DD/MM/YYYY			
For and on behalf of			
Order reference Number			
Description of Material			
Description of Material			
Corresponding to Invoice No & Date			

(to be executed on non-judicial stamp paper of requisite value as per place of execution in India)

DEED OF GUARANTEE

THIS DEED OF GUARANTEE ("Deed") made and executed at (*) on this the ______ day of ______ 20 by: (*), a (*) existing under the laws of (*) and having its registered at (*) (hereinafter referred to as "the Principal Manufacturer"/ "Original Equipment Manufacturer(OEM)", which expression shall unless it be repugnant to the subject or context thereof be deemed to include their respective heirs, executors, administrators and legal representatives) being the Party of the FIRST PART;

IN FAVOUR OF MAZAGON DOCK SHIPBUILDERS LIMITED, a company existing under the laws of India, having its registered office at Dockyard Road, Mazagon, Mumbai 400010, India (hereinafter referred to as the (MDL), which expression, unless excluded by or in contradiction to the subject or context, shall mean and include its successors and assigns) being the Party of the OTHER PART; Whereas:

A. MDL has floated a Tender Bearing Tender No. (*) dated (*) ("**Tender**"), wherein quotations were invited for supplying of (*) ("**Goods&/or Services"**) as stipulated in the Tender at locations as specified in the Tender.

B. The Principal Manufacturer /OEM has agreed to submit its bid through an authorised representative namely (*) (hereinafter referred to as "**Authorised Representative**"), for the aforesaid Tender.

C. The Principal Manufacturer/OEM has represented that it has authorised the Authorised Representative to act on its behalf herein for submitting the bid and to act as an intermediary for supplying the Goods &/or Services to MDL as per the terms of the Tender, as mentioned herein this Deed.

D. The Tender Condition No. (*) requires that the Principal Manufacturer furnishes a legally enforceable document, i.e. this Deed, for the purpose of ensuring smooth execution of the Contract if awarded to the Authorised Representative (pursuant to the Tender) and for assuring that all obligations as stated in the Contract will be fulfilled therein, including warranty and guarantee obligations contained in the Tender. It is further clarified that MDL shall award the contract and sign the relevant transaction documents ("Transaction Documents") with the Authorised Representative (in the event of its bid qualifying as per the criteria stipulated in the Tender).

E. Thus, the Principal Manufacturer/OEM has agreed to execute this Deed in favour of MDL.

NOW THIS INDENTURE WITNESSETH THAT IN CONSIDERATION OF THE ABOVE PREMISES IT IS HEREBY COVENANTED AND AGREED (THE PRINCIPAL MANUFACTURER /OEM COVENANTING AND AGREEING JOINTLY AND SEVERALLY) AS FOLLOWS:

- 1. As per Tender condition No. (*), the Principal Manufacturer /OEM hereby, absolutely, irrevocably and unconditionally guarantees to MDL, the performance by the Principal Manufacturer /OEM of all of the obligations in/under the said Tender and Transaction Documents whether executed by the Principal Manufacturer /OEM directly or the Authorised Representative or both, to the satisfaction of MDL in the event of failure of the Authorised Representative or otherwise upon the occurrence of an event of default under the said Tender and/or Transaction Documents.
- 2. Any such demand made by MDL on the Principal Manufacturer /OEM shall be final, conclusive and binding notwithstanding any contractual arrangement, difference or any dispute between Principal Manufacturer /OEM and MDL and/or MDL and the Authorised Representative or any other legal proceedings, pending before any court, tribunal, arbitrator or any other authority. The Principal Manufacturer /OEM shall be bound by the terms and conditions of the Tender and/or Transaction Documents.

- 3. The Principal Manufacturer /OEM shall indemnify and hold harmless MDL from any claim made against MDL or any third party for injury, damage, loss or expenses attributable to the breach /non-performance of responsibilities by the Authorised Representative.
- 4. In order to give effect to the Guarantee herein contained MDL shall be entitled to act as if the Principal Manufacturer /OEM was originally liable to MDL for all the obligations of the Authorised Representative as mentioned in the Tender and/or Transaction Documents.
- 5. Notwithstanding MDL's rights herein or under the Tender and/or Transaction Documents, MDL shall have fullest liberty to call upon the Principal Manufacturer /OEM to perform the obligation of the Authorised Representative under the Tender and/or Transaction Documents and pay together with interest as well as the costs (including reasonable attorney costs) charges and expenses, and/or other money for the time being due to MDL in respect of the aforesaid.
- 6. The Guarantee herein contained shall not be determined or in any way prejudiced by any absorption of or by any amalgamation thereof of MDL but shall ensure and be available for and by the absorbing or amalgamated entity.
- 7. The Guarantee shall be irrevocable and enforceable against the Principal Manufacturer /OEMs notwithstanding any dispute between the Principal Manufacturer /OEM and the Authorised Representative.
- 8. The Principal Manufacturer /OEM hereby agrees that notwithstanding any variation made in the terms of the Transaction Documents, the Principal Manufacturer /OEM shall not be released or discharged of their obligation under this Guarantee provided that in the event of such variation the liability of the Principal Manufacturer /OEM shall notwithstanding anything herein contained be deemed to have accrued and the Principal Manufacturer /OEM shall be deemed to have become liable hereunder on the date or dates on which the Authorised Representative become liable to perform its obligations which became due under the said Transaction Documents.
- 9. The Guarantee hereby given is independent and distinct from any security that the MDL have taken or may take in any manner whatsoever whether it is by way of a performance guarantee or security Deposit as per provisions of the Tender and Transaction Documents.
- 10. The Principal Manufacturer /OEM shall pay all stamp duty, other duties, Taxes, fees, penalties or other charges payable on or in connection with the execution, issue, delivery, registration of this Deed, and any document, act and registration performed pursuant hereto, if and when the same has become payable according to the Applicable Law.
- 11. The Principal Manufacturer /OEM declares that the information and data furnished by it to MDL and the Authorised Representative pursuant to the Tender is true and correct.
- 12. This Deed shall be governed by and construed in all respects with the Indian laws and the parties hereto agree that any matter or issues arising hereunder or any dispute hereunder shall be subject to the jurisdiction of the competent Courts/Tribunals of the city of Mumbai in India.
- 13. This Deed may be executed in 2 (two) counterparts, each of which so executed will be deemed to be an original and such counterpart together will constitute one and the same Deed.

IN WITNESS WHEREOF the Principal Manufacturer /OEM (abovementioned) has executed these presents the day and year first hereinabove written.

Signed, Sealed and Delivered on behalf of	
By:	
Name: (*)	Witness
Title: (*)	1_
Title: ()	

Undertaking for Conflict of Interest Among Bidders/ Agents

A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anticompetitive practices to the detriment of MDL's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- (i) they have controlling partner (s) in common; or
- (ii) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
- (iii) they have the same legal representative/agent for purposes of this bid; or
- (iv) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
- (v) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.
- (vi) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent/dealer. There can be only one bid from the following:
 - (aa) The principal manufacturer directly or through one Indian agent on his behalf; and
 - (ab) Indian/foreign agent on behalf of only one principal.
- (vii) Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
- (viii) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/common business/ management units in same/similar line of business.

DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM

	have read the above clause reganis bidder fulfils all the requirements in the	
AUTHORISED SIGNATURE: _		DATE:
Seal / Stamp of Bidder		

			TGG	NEE		AND	ATE /	TU	ODIO	• •	N EO			į	PPE	NDX	- 21
			iius	NEF			ATE A				N FU	mm					
1. Supplier's/	Vendo	rsh	łame		pLL	DSI	RA TIV	EFU	*1094	"							
							П										
2. Supplier's/	Vendo	r's h	łame	as p	er Ba	nk R	ecord	5:				_		_		_	_
														$oxed{oxed}$			
3A. Supplier's	Code	_	,					38	Sup	piller	s PA	N Nu	mber	:#	_	_	
	\perp		J					L		L				L	┸	\perp	
# Quoting PAN																	
fill- up this an name given in the																	
the difference a	nd the	corre	alation	bow	reen l	both.											
4. Supplier's/	Vendo	r's C	comp	lete l	Posta	Ado	_		_	_	_	_	_	_	_	_	_
Door No.	╀	<u> </u>	┞	┞	┞	┞	Stre		_	<u> </u>	_	_	╙	4	╀	┸	╄
Location:	_	_	<u> </u>	_	<u> </u>	_	Dist	nd:	_	_			Ц	4	_	_	_
City:							Stat	þ					PIN	4			
5. Supplier's/	Vendo	r's E	mal	IID:		_	_	_	_	_		_			_		
6. Supplier's/	Vendo	r's T	elepi	home	Num	ber 8	Mob	lle Pi	one	Num	ber:		_		_		
								M									
7. Name of the	Bank			_		_			_					_			
			\bot											L			
8. Bank (Brand	nh) Po	stal /	Addre	65:											_	_	
			<u></u>	<u></u>	<u></u>		L			L				L			
9. RTGS*/NEF	T" - C	ode (of the	Bra	nch:	_		_	_				_	_	_	_	
RTGS:		L				\bot	L							L	┸	┸	
NEFT:																	
RTGS" - "Real"	Time G	ross	Sottle	amen	r, N	FT"	- "Na	tional	Elec	tronic	Fund	Tran	ster.				
These "IFSC" C																	
Branches both to Code No. for No													VO. 10	HI	SS B	no ami	otner
10. Nature of th													bala	nce	two	10000	ints)
Saving Bank	Accou	nt:		(Cash (Credi	t Acco	unt:	Т		C	urren	t Apo	ount	:	Т	\neg
11. Bank Acco	unt Nu	ımbe	roft	he St	ıppik	r: O											
	П							П	П	П	Т	П	Т				\neg
© Fill up from the	ne 1 st o	olum	n. Fo	or the	bala	nce k	att out	blank	colu	mrs,	pleas	e me	notion	x' m	ark.		_
We hereby ded	are the	t the	parte	oulars	give	abo	ve an	соп	oct at	nd cor	nplete	a. If t	he tra	insa		s del	ayed
for reasons of in	compl					nation	n, wer	would	not								
Date:		80	pplk	rss	eal:					Auth	ortze	a sig	natu	re o	f the	supp	mer:
Certified that ti	he par	ticula	ars as	s per	Seria	l Nur	mbers	2,7	to 1	1 am	come	ct as	per	our	recor	ds.	
Date:		Ba	nk's	Stam	p			Au	thor	zed	Signa	ature	of t	he	Offic	er of	the
Bank.																	
Note: Based of design the rec	berlup	form:	s / do	cumo	ents /	tend	or on	quirie	s / re	gister	s/G	CC/	profe	oma	s to	sult to	the

<u>DEVIATION SHEET FORMAT</u> (Bidders to fill, sign & stamp this form in their bid)

To,
AGM (C-EY)
MAZAGON DOCK SHIPBUILDERS LIMITED
COMMERCIAL DEPARTMENT-EAST YARD.

Deviatio n Sr. No.	Page Sr. No. or Enclosure Referenc e of the Tender Enquiry	Clause Number for Which the Deviatio n	Brief Text Descriptio n of the Clause	Reasons for Deviatio n	Suggested Alternativ e
1.					
2.					
& so on					

COMPANY'S NAME & ADDRESS:		
	- -	SIGNATURE: DATE: NAME: DESIGNATION: BIDDER'S COMPANY SEAL:

PART REPLACEMENT PIPELINE PROJECT (PRPP)

PROCUREMENT OF CARBON STEEL FLANGES SUBSEA (SOUR SERVICE) FOR PART REPLACEMENT PIPELINES PROJECT (PRPP) FOR ONGC

PRPP-RFQ-PL-03



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



OIL AND NATURAL GAS CORPORATION LIMITED

TENDER NO. MR/ES/MM/PRPP/14/2023/ P851L23011

PART REPLACEMENT PIPELINE PROJECT (PRPP)



_	00	06 Dec 2023	IFB			
	Revision No	Issue Date	Description	Prepared By	Reviewed By	Approved By



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



Contents

1.	INTRODUCTION	3
2.	PROJECT SCOPE	3
3.	SUBSEA FLANGE DATA SHEET	5
4.	INSPECTION TEST PLAN	25
5.	LIST OF ATTACHMENTS	27
ANI	NEXURE I	
ANI	NEXURE II	
ANI	NEXURE III	



ओएनजीसी ्री ONGC

PART REPLACEMENT PIPELINE PROJECT (PRPP)

RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



1. INTRODUCTION

PROJECT BACKGROUND

Oil and Natural Gas Corporation Limited is engaged in exploration and exploitation of hydrocarbon in Western Offshore field in the Arabian Sea on the continental shelf of Western India. The field is well developed with an extensive infrastructure of well head platforms, process platforms and pipelines. With the ageing of field, condition of some of its existing pipelines has deteriorated. Company is planning for part replacement of these pipelines.

Mazagon Dock Shipbuilders Limited, Mumbai, an ISO 9001: 2015 Company is one of the leading shipbuilding yard in India. The History of Mazagon Dock dates back to 1774, when a small dry dock was constructed in Mazagon. Over the years, MDL has earned a reputation for quality work and established a tradition of skilled and resourceful service to the shipping world in general and the Indian Navy & Coast Guard. It was incorporated as a Private Limited Company in 1934.

After its takeover by the Government in 1960, Mazagon Dock grew rapidly to become the premier war-shipbuilding yard in India, producing warships for the Navy and offshore structures for the Bombay High. It has grown from a single unit, small ship repair company, into a multi-unit and multi-product company, with significant rise in production, use of modern technology and sophistication of products. The company's current portfolio of designs spans a wide range of products for both domestic and overseas clients. Since 1960, MDL has built total 801 vessels including 27 warships, from advanced destroyers to missile boats and 7 submarines. MDL had also delivered cargo ships, passenger ships, supply vessels, multipurpose support vessel, water tankers, tugs, dredgers, fishing trawlers, barges & border out posts for various customers in India as well as abroad. MDL have also fabricated and delivered jackets, main decks of wellhead platforms, process platforms, jack-up rigs etc.

SCOPE OF DOCUMENT

This RFQ defines the scope of supply for Subsea Flanges Supplier involved in the Part Replacement Pipelines Project (PRPP).

2. PROJECT SCOPE

The scope of this project is to part replacement of submarine pipe lines (some pipelines from riser bottom bend to riser bottom bend) in Mumbai High and Neelam-Heera Asset's fields. Under this Contract about 45.4 km of subsea pipelines comprising of about 19 no. of segments are required to be replaced partially.



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



PRPP PROJECT PIPELINE SCOPE SUMMARY

Sr Field Segment Servic From KP To KP						Total	Water	Free	Crossin	SPR	SPRU
No	Field	Segment	е	FIOIII KF	TORP	KP	Depth	Span	g	U	
							m	Nos	Nos	Nos	Class
1	MH North	NM-MNP	WF	0.1	2.4	2.3	80-85	2	6	2	#1500
2	MH South	IU-ICG	WF	0.2	2.2	2	80-90	2	2	2	#1500
3	MH South	SV-SHD	WF	0.9	2.9	2	70-75	2	1	2	#1500
4	MH North	N16-MNP	WF	Riser Bottom	3	3	70-75	3	8	2	#900
5	MH North	WI2-N3	WF	Riser Bottom	Riser Bottom	4	60-65	4	2	2	#900
6	MH South	SJ2-SA	WF	2.6	3.8	1.2	78-80	2	4	2	#1500
7	MH South	SQ-BHS	WF	Riser Bottom	2	2	70-80	2	5	2	#900
8	MH South	SF-BHS	WF	Riser Bottom	1	1	70-75	1	2	2	#1500
9	MH South	SB-SA	WF	2.5	3.5	1	74-80	1	4	2	#900
10	MH South	RS 8- ID	WF	Riser Bottom	Riser Bottom	4.3	<mark>74-78</mark>	4	6	2	#900
11	MH South	ZB-ICD	WF	Riser Bottom	2	2	75 <mark>-80</mark>	2	1	2	#900
12	MH South	SE-MSP	WF	0.4	1.4	1	75 <mark>-85</mark>	1	1	2	#900
13	MH North	MNW- N15	WI	Riser Bottom	Riser Bottom	6.6	<mark>64-7</mark> 2	7	35	2	#1500
14	MH North	N12-NS	WI	Riser Bottom	Riser Bottom	3	64-72	3	3	2	#1500
15	Heera	HSD-HRC	WF	0.5	2.5	2	48-52	2	2	2	#900
16	Heera	HSC-HRG	WF	0.6	2.6	2	50-60	2	1	2	#900
17	Heera	HS-HRG	WF	0.3	1.3	1	45-50	1	7	2	#1500
18	Heera	HE-HRG	WF	Riser Bottom	2	2	50-55	2	6	2	#1500
19	Heera	HRG-HX	WI	Riser Bottom	2	2	50-55	2	1	2	#1500



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



3. SUBSEA FLANGE DATA SHEET

Type:		Fixed RTJ WN Flange	Swivel Flange			
**		-				
Pipe Nominal Size	in	14	14			
Pipe Outer Diameter Pipe Wall Thickness	mm	355.6	355.6			
p	mm	15.9	15.9			
Pipe Grade		APISL X-60	API5L X-60			
Flange ID	mm	323.8	323.8			
Flange Material	Iba	ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)			
Flange Rating	Ibs	1500#	1500#			
Quantity	pcs	6 Well Fluid (Sour Service)	A			
Service Corrosion Allowance		6	Well Fluid (Sour Service) 6			
Fabrication Method	mm	ASTM A694	6			
Ends		Bevelled as Per A	DIEI			
Water Depth	m	85 Meters	FISE			
Design Codes/Specification:	111	85 IVIETEIS				
		ONCC CDEC 202	14 D			
Project Specification		ONGC SPEC 202				
Design Code		ASME / ANSI 16	5.5			
Design Life	Years	25				
Key Mechanical Tests Requirements:		Description of the last of the				
Tensile Test		ASTM 370				
Charpy Impact Test Requirements:		ASTM 370				
Test Temperature		+ 10°C				
Minimum Average Absorbed Impa <mark>ct Ene</mark> rgy Of 3 Specification (Base Metal, Weld Metal &HAZ)	J	29				
Minimum Impact Value Of Any Single Specimen	J	22				
Hardness Test		ASTM 370				
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248				
Hydrogen Induced Cracking (HIC)Test		NACE TM-02-8	34			
Crack Sensitivity Ratio (CSR)	%	0.00				
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened)				
Nuts			ASTM A 194 Grade 2HM (Hydra Tighetened)			
Coating:						
Flange		FBE	FBE			
Pipeline Design Data:			<u> </u>			
Design Pressure	kg/cm²	141	141			
Hydrotest Pressure	kg/cm²	176.25	176.25			
Design Temperature	C°	93	93			
Misalignment Capability:						
Swivel-Rotational (360 Degrees)		No	Yes			
Angular - Minimum 12.5 Deg Misalignment From			163			
Centerline		No	Vendor to specify			
Notes:						
Flange Coating Shall Be Removed in	the Field Prio	or to Installation				
		ainst Damage During Transportation/Transit				
Ţ,		pes As Per Company Specification For Line Pipe				
ŭ		nvironment Shall Be Coated With PTFE Or Shall Be	Plated With Zinc As Per ASTM B 6			
5. Stud Tension and Torque Value to be	Provided by	Vendor				
			e Qualification			
	Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Moments					





8.	Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20
9.	The Dimensional Design for the Flanges Shall Cater for the use of Hydraulic Bolt Tensioning Equipment.
10.	Gasket Material Shall be Soft Iron (NACE) , Hot Dipped Galvanized.







	J-ICG 16 INC	CH FLANGE DATASHEET				
Type:		Fixed RTJ WN Flange	Swivel Flange			
Pipe Nominal Size	in	16	16			
Pipe Outer Diameter	mm	406.4	406.4			
Pipe Wall Thickness	mm	15.9	15.9			
Pipe Grade		API5L X-60	API5L X-60			
Flange ID	mm	374.6	374.6			
Flange Material		ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)			
Flange Rating	Ibs	1500#	1500#			
Quantity	pcs	6	4			
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)			
Corrosion Allowance	mm	6	6			
abrication Method		ASTM A6	594			
Ends		Bevelled as Pe	er API 5L			
Nater Depth	m	90 Mete	ers			
Design Codes/Specification:						
Project Specification		ONGC SPEC	2024 B			
Design Code		ASME / ANS				
Design Life	Years	25				
Key Mechanical Tests Requirements:	icais	23				
· · · · · · · · · · · · · · · · · · ·		107110				
Tensile Test		ASTM 3				
Charpy Impact Test Requirements:		ASTM 370				
Test Temperature		+ 10°C				
Minimum Average Absorbed Impact <mark>Energy Of 3</mark> Specification (Base Metal, Weld Metal <mark>&HA</mark> Z)	J	29				
Minimum Impact Value Of Any Single Specimen	J	22				
Hardness Test		ASTM 3	70			
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248				
Hydrogen Induced Cracking (HIC)Test		NACE TM-0	02-84			
Crack Sensitivity Ratio (CSR)	%	0.00				
Stud Bolts		A <mark>STM A 1</mark> 93 Grade B7M	(Hydra Tightened)			
Nuts		ASTM A 194 Grade 2HM	l (Hydra Tightened)			
Coating:						
Flange		FBE	FBE			
Pipeline Design Data:						
Design Pressure	kg/cm²	148	148			
Hydrotest Pressure	kg/cm²	185	185			
Design Temperature	C°	93	93			
Misalignment Capability:						
Swivel-Rotational (360 Degrees)	+	No	Yes			
· · · · · · · · · · · · · · · · · · ·		NO	ies			
Angular - Minimum 12.5 Deg Misalignment From						
Centerline		No	Vendor to specify			
Notes:	<u> </u>					
Flange Coating Shall Be Removed in	the Field Prior to	Installation				
ŭ ü		st Damage During Transportation/Transit				
		As Per Company Specification For Line Pipe				
		onment Shall Be Coated With PTFE Or Shall				
5. Stud Tension and Torque Value to be	Provided by Ve	ndor				
			dure Qualification			
<u> </u>	Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification					
6. Test Ring Of Sufficient Length And Q		Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Momen				
 Test Ring Of Sufficient Length And Q Stress Analysis is Required to be Per 	formed by Vendo	or According to Pressure Vessel Code ASME	VIII. Axial Loads and Bending Momen			
Test Ring Of Sufficient Length And Q Stress Analysis is Required to be Per will be Provided to the Vendor When	formed by Vendo n Pipeline Stress	or According to Pressure Vessel Code ASME Analysis Performed	VIII. Axial Loads and Bending Momen			
Test Ring Of Sufficient Length And Q Stress Analysis is Required to be Per will be Provided to the Vendor Whete Ring Gasket for Ring Type Joint shall	formed by Vendo n Pipeline Stress be Octagonal an	or According to Pressure Vessel Code ASME Analysis Performed				





	3110 12.73	INCH FLANGE DATASHEET				
Туре:		Fixed RTJ WN Flange	Swivel Flange			
Pipe Nominal Size	in	12.75	12.75			
Pipe Outer Diameter	mm	323.9	323.9			
Pipe Wall Thickness	mm	14.3	14.3			
Pipe Grade		API5L X-60	API5L X-60			
Flange ID	mm	295.3	295.3			
Flange Material		ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)			
Flange Rating	Ibs	1500#	1500#			
Quantity	pcs	6	4			
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)			
Corrosion Allowance	mm	6	6			
abrication Method		ASTM A6	94			
inds		Bevelled as Pe	r API 5L			
Water Depth	m	75 Mete	rs			
Design Codes/Specification:						
Project Specification		ONGC SPEC 2	2024 B			
Design Code	+ +	ASME / ANS				
Design Life	Years	25	· ==- - -			
Key Mechanical Tests Requirements:	icars	23				
Fensile Test		ASTM 33	70			
Charpy Impact Test Requirements:		ASTM 370				
Test Temperature		+ 10°C				
Minimum Average Absorbed Impact <mark>Energy</mark> Of 3 Specification (Base Metal, Weld Metal <mark>&H</mark> AZ)	J	29				
Minimum Impact Value Of Any Single Specimen	J	22				
Hardness Test		ASTM 37	70			
Maximum Hardness (Base Metal, Wel <mark>d M</mark> etal, HAZ)	HV5	248				
Hydrogen Induced Cracking (HIC)Te <mark>st</mark>		NACE TM-0)2-84			
Crack Sensitivity Ratio (CSR)	%	0.00				
Stud Bolts		A <mark>STM A 1</mark> 93 Grade B7M	, , ,			
Nuts		ASTM A 194 Grade 2HM	(Hydra Tightened)			
Coating:						
Flange		FBE	FBE			
Pipeline Design Data:			1			
Design Pressure	kg/cm²	140	140			
Hydrotest Pressure	kg/cm²	175	175			
Design Temperature	C°	93.3	93.3			
Misalignment Capability:						
Swivel-Rotational (360 Degrees)	†	No	Yes			
Angular - Minimum 12.5 Deg Misalignment From	+					
Centerline		No	Vendor to specify			
Notes:	<u> </u>					
Flange Coating Shall Be Removed i	n the Field Prior	to Installation				
2. Ends of All Flanges Shall Be Suitabl	y Protected Agai	nst Damage During Transportation/Transit				
3. Flanges Ends To Be Matched With	Connecting Pipe	s As Per Company Specification For Line Pipe				
 All Bolting And Nuts Exposed To Th Type II SC3. 	ne Sea Water Env	vironment Shall Be Coated With PTFE Or Shall	Be Plated With Zinc As Per ASTM B 63			
5. Stud Tension and Torque Value to	oe Provided by V	'endor				
		be Supplied by the Vendor for Welding Proced	dure Qualification			
		dor According to Pressure Vessel Code ASME				
will be Provided to the Vendor Wh		•	3			
8. Ring Gasket for Ring Type Joint sha						
0 //		for the use of Hydraulic Bolt Tensioning Equip	oment.			
10. Gasket Material Shall be Soft Iron						





INTO-	IVIINF 12.7	75 INCH FLANGE DATASHEET	I			
Type:		Fixed RTJ WN Flange	Swivel Flange			
Pipe Nominal Size	in	12.75	12.75			
Pipe Outer Diameter	mm	323.9	323.9			
Pipe Wall Thickness	mm	14.3	14.3			
Pipe Grade		API5L X-60	API5L X-60			
Flange ID	mm	295.3	295.3			
Flange Material		ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)			
Flange Rating	Ibs	900#	900#			
Quantity	pcs	6	4			
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)			
Corrosion Allowance	mm	6	6			
Fabrication Method		ASTM A69				
Ends		Bevelled as Per	API 5L			
Water Depth	m	75 Meters	5			
Design Codes/Specification:						
Project Specification		ONGC SPEC 20	024 B			
Design Code		ASME / ANSI	16.5			
Design Life	Years	25				
Key Mechanical Tests Requirements:	.curs	25				
Tensile Test		ASTM 370	1			
Charpy Impact Test Requirements:		ASTM 370				
Test Temperature		+ 10°C				
Minimum Average Absorbed Impact E <mark>nergy O</mark> f 3 Specification (Base Metal, Weld Metal &HAZ)	J	29				
Minimum Impact Value Of Any Single Specimen	J	22				
Hardness Test		ASTM 370)			
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248				
Hydrogen Induced Cracking (HIC)Test		NACE TM-02	-84			
Crack Sensitivity Ratio (CSR)	%	0.00				
Stud Bolts		ASTM A 193 Grade B7M (H				
Nuts		ASTM A 194 Grade 2HM (I	Hydra Tightened)			
Coating:						
Flange		FBE	FBE			
Pipeline Design Data:			T .			
Design Pressure	kg/cm ²	93.7	93.7			
Hydrotest Pressure	kg/cm²	117.125	117.125			
Design Temperature	C°	93	93			
Misalignment Capability:						
Swivel-Rotational (360 Degrees)		No	Yes			
Angular - Minimum 12.5 Deg Misalignment From						
Centerline		No	Vendor to specify			
Notos						
Notes:	the Field P	or to Installation				
Flange Coating Shall Be Removed in Finds of All Flanges Shall Be Suitable The state of All Flanges Shal						
		gainst Damage During Transportation/Transit pes As Per Company Specification For Line Pipe				
		nvironment Shall Be Coated With PTFE Or Shall B	e Plated With Zinc As Bor ASTM P 62			
Type II SC3.			e rialeu Willi Ziill AS Pei ASTIVI B 03.			
5. Stud Tension and Torque Value to be						
		all be Supplied by the Vendor for Welding Procedu				
 Stress Analysis is Required to be Per will be Provided to the Vendor Whe 		endor According to Pressure Vessel Code ASME VI ress Analysis Performed	III. Axial Loads and Bending Moment			
8. Ring Gasket for Ring Type Joint shall		•				
		er for the use of Hydraulic Bolt Tensioning Equipn	nent.			
10. Gasket Material Shall be Soft Iron (N	NACE) . Hot D	ipped Galvanized.				





		1	Fined DTI MAI Flames				
	Туре:		Fixed RTJ WN Flange	Swivel Flange			
Pipe Nominal Size		in	12.75	12.75			
Pipe Outer Diameter		mm	323.9	323.9			
Pipe Wall Thickness		mm	14.3	14.3			
Pipe Grade			API5L X-60	API5L X-60			
lange ID		mm	295.3	295.3			
lange Material		Uh a	ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)			
lange Rating		Ibs	900#	900#			
Quantity Service		pcs	6	4			
Corrosion Allowance		mm	Well Fluid (Sour Service) 6	Well Fluid (Sour Service) 6			
abrication Method		mm	ASTM A				
inds			Bevelled as P				
Vater Depth		m	65 Met	ers			
Design Codes/Specificat	ion:						
Project Specification			ONGC SPEC	2024 B			
Design Code			ASME / AN	SI 16.5			
Design Life		Years	25				
Key Mechanical Tests Re	quirements:						
ensile Test			ASTM 3	370			
Charpy Impact Test Regu	irements:		ASTM 3				
.,	illements.		+ 10°C				
est Temperature				<u> </u>			
Minimum Average Absoi Specification (Base Meta	bed Impact Energy Of 3 I, Weld Metal &HAZ)	J	29				
Minimum Impact Value Of Any Single Sp <mark>eci</mark> men		J	22				
Hardness Test			ASTM 3				
•	e Metal, Weld Metal, HAZ)	HV5	248				
Hydrogen Induced Crack		24	NACE TM-				
Crack Sensitivity Ratio (C	SR)	%	0.00				
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened) ASTM A 194 Grade 2HM (Hydra Tightened)					
Nuts			ASTM A 194 Grade 2HN	(Hydra Tightened)			
Coating:			FDF	505			
Flange			FBE	FBE			
Pipeline Design Data:							
Design Pressure		kg/cm²	93.7	93.7			
Hydrotest Pressure		kg/c <mark>m²</mark>	117.125	117.125			
Design Temperature		C°	93	93			
Misalignment Capability	:						
Swivel-Rotational (360 D	egrees)		No	Yes			
Angular - Minimum 12.5	Deg Misalignment From						
_	5 0		N '	Mand : "f			
Centerline			No	Vendor to specify			
Notes:		·					
1. Flan	ge Coating Shall Be Removed ir	the Field Prior	to Installation				
2. End:	of All Flanges Shall Be Suitably	Protected Aga	inst Damage During Transportation/Transit				
			s As Per Company Specification For Line Pipe				
	olting And Nuts Exposed To The II SC3.	e Sea Water En	vironment Shall Be Coated With PTFE Or Shal	Be Plated With Zinc As Per ASTM B 63			
	Tension and Torque Value to b	e Provided by V	/endor				
	<u> </u>		be Supplied by the Vendor for Welding Proce	edure Qualification			
			dor According to Pressure Vessel Code ASME				
	be Provided to the Vendor Whe			The same series and series is series.			
			and Shall be as Per ASME B 16.20				
			for the use of Hydraulic Bolt Tensioning Equ	ipment.			
	ket Material Shall be Soft Iron (I		, , ,				





			Fived DTI MAN Flores		
	Туре:		Fixed RTJ WN Flange	Swivel Flange	
Pipe Nominal Size		in	12.75	12.75	
Pipe Outer Diameter		mm	323.9	323.9	
Pipe Wall Thickness		mm	14.3	14.3	
Pipe Grade			API5L X-60	API5L X-60	
lange ID		mm	295.3	295.3	
lange Material		Us a	ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)	
Flange Rating		Ibs	1500#	1500#	
Quantity Service		pcs	6	4	
Corrosion Allowance		mm	Well Fluid (Sour Service) 6	Well Fluid (Sour Service) 6	
abrication Method		- 111111			
		+	ASTM A694		
inds		+ +	Bevelled as Per API 5L		
Nater Depth		m	80 Meters		
Design Codes/Specificat	tion:				
Project Specification			ONGC SPEC 2	2024 B	
Design Code			ASME / ANS	l 16.5	
Design Life		Years	25		
Key Mechanical Tests Re	equirements:				
Tensile Test			ASTM 3	70	
Charpy Impact Test Regi	irements:		ASTM 33		
.,,	anements.		+ 10°C		
Test Temperature	ab a d lass a set Fig. 177. Of 3				
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ)		J	29	29	
Minimum Impact Value Of Any Single Specimen		J	22		
Hardness Tost		_	ASTM 33	70	
Hardness Test Maximum Hardness (Pass Metal, Wold Metal, HAZ)		HV5	248		
Maximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test		1173	NACE TM-02-84		
Crack Sensitivity Ratio (C		%	0.00		
Stud Bolts	, , ,		ASTM A 193 Grade B7M (Hydra Tightened)		
Nuts			ASTM A 194 Grade 2HM (Hydra Tightened)		
Coating:				, , , , , , , , , , , , , , , , , , , ,	
Flange			FBE	FBE	
Pipeline Design Data:				1	
Design Pressure		kg/cm ²	143.07	143.07	
Hydrotest Pressure		kg/cm²	178.84	178.84	
<u>′</u>		C°	93	93	
Design Temperature				93	
Misalignment Capability		1			
Swivel-Rotational (360 D	0 ,		No	Yes	
Angular - Minimum 12.5	Deg Misalignment From				
Centerline			No	Vendor to specify	
Notes:					
1. Flar	ige Coating Shall Be Removed ir	the Field Prio	r to Installation		
	Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit				
	Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe				
	All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B 63 Type II SC3.				
	Stud Tension and Torque Value to be Provided by Vendor				
	Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification				
		Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Moments Provided to the Vendor When Pipeline Stress Analysis Performed			
	Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20				
	The Dimensional Design for the Flanges Shall Cater for the use of Hydraulic Bolt Tensioning Equipment.				
	Gasket Material Shall be Soft Iron (NACE) , Hot Dipped Galvanized.				





SQ-	BHS 12.75	INCH FLANGE DATASHEET			
Type:		Fixed RTJ WN Flange	Swivel Flange		
Pipe Nominal Size	in	12.75	12.75		
Pipe Outer Diameter	mm	323.9	323.9		
Pipe Wall Thickness	mm	14.3	14.3		
Pipe Grade		API5L X-60	API5L X-60		
Flange ID	mm	295.3	295.3		
Flange Material		ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)		
Flange Rating	Ibs	900#	900#		
Quantity	pcs	6	4		
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)		
Corrosion Allowance	mm	6	6		
Fabrication Method		ASTM A694			
Ends		Bevelled as Per API 5L			
Water Depth	m	80 Meters			
Design Codes/Specification:					
Project Specification	+ +	ONGC SPEC 2	024 B		
Design Code		ASME / ANSI			
Design Life	Years	25	20.0		
Key Mechanical Tests Requirements:	icais	23			
Tensile Test		ASTM 27	0		
Charpy Impact Test Requirements:		ASTM 370 ASTM 370			
			0		
Test Temperature		+ 10°C			
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ)	J	29			
Minimum Impact Value Of Any Single Specimen	J	22			
Hardness Test		ASTM 370			
Maximum Hardness (Base Metal, We <mark>ld Me</mark> tal, HAZ)	HV5	248			
Hydrogen Induced Cracking (HIC)Test		NACE TM-02-84			
Crack Sensitivity Ratio (CSR)	%	0.00			
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened)			
Nuts		ASTM A 194 Grade 2HM (Hydra Tightened)		
Coating:					
Flange		FBE	FBE		
Pipeline Design Data:					
Design Pressure	kg/cm²	93.7	93.7		
Hydrotest Pressure	kg/cm²	117.125	117.125		
Design Temperature	C°	93	93		
Misalignment Capability:					
Swivel-Rotational (360 Degrees)		No	Yes		
Angular - Minimum 12.5 Deg Misalignment From					
		No	Vandar ta spasify		
Centerline		No	Vendor to specify		
Notes:					
 Flange Coating Shall Be Removed in 					
	Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit				
	Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe				
4. All Bolting And Nuts Exposed To The Type II SC3.	All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B 633 Type II SC3.				
5. Stud Tension and Torque Value to b	Stud Tension and Torque Value to be Provided by Vendor				
6. Test Ring Of Sufficient Length And C	Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification				
 Stress Analysis is Required to be Per 	Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Moments will be Provided to the Vendor When Pipeline Stress Analysis Performed				
will be Provided to the Vendor Whe	en Pipeline Stres	ss Analysis Performed			
will be Provided to the Vendor Whe 8. Ring Gasket for Ring Type Joint shal	en Pipeline Stres I be Octagonal a	ss Analysis Performed			





	SF-	BHS 12.75	INCH FLANGE DATASHEET		
	Type:		Fixed RTJ WN Flange	Swivel Flange	
Pipe Nominal Size		in	12.75	12.75	
Pipe Outer Diameter		mm	323.9	323.9	
Pipe Wall Thickne	ess	mm	14.3	14.3	
Pipe Grade			API5L X-60	API5L X-60	
Flange ID		mm	295.3	295.3	
Flange Material			ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)	
Flange Rating		Ibs	1500#	1500#	
Quantity		pcs	6	4	
Service			Well Fluid (Sour Service)	Well Fluid (Sour Service)	
Corrosion Allow	ance	mm	6	6	
Fabrication Met	hod		ASTM A694		
Ends			Bevelled as Per API 5L		
Water Depth		m	75 Meters		
Design Codes/Sp	pecification:				
Project Specificat		+	ONGC SPEC 2024 B		
Design Code		+ +	ASME / ANSI 1		
		V		.0.5	
Design Life		Years	25		
-	Tests Requirements:				
Tensile Test			ASTM 370		
Charpy Impact Te	est Requirements:		ASTM 370		
Test Temperature	e		+ 10°C		
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ)		J	29		
Minimum Impac	t Value Of Any Single Specimen	J	22		
	, , ,				
Hardness Test			ASTM 370		
Maximum Hardness (Base Metal, Weld Metal, HAZ)		HV5	248		
Hydrogen Induce	ed Cracking (HIC)Test		NACE TM-02-84		
Crack Sensitivity	Ratio (CSR)	%	0.00		
Stud Bolts			ASTM A 193 Grade B7M (Hydra Tightened)		
Nuts			ASTM A 194 Grade 2HM (F	lydra Tightened)	
Coating:					
Flange			FBE	FBE	
Pipeline Design	Data:				
Design Pressure		kg/cm²	142	142	
Hydrotest Pressu	ire	kg/cm²	177.5	177.5	
Design Temperat		C°	93.3	93.3	
Misalignment Ca		+ - +			
Swivel-Rotationa	· · ·	+ +	No	Yes	
	, ,	+ +	IVU	ies	
Angular - Minimi	um 12.5 Deg Misalignment From				
Centerline			No	Vendor to specify	
Notes:					
1.	Flange Coating Shall Re Removed in	the Field Dria	er to Installation		
2.	Flange Coating Shall Be Removed in the Field Prior to Installation Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit				
3.	Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe				
4.	All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B 633 Type II SC3.				
5.	Stud Tension and Torque Value to be Provided by Vendor				
6.	Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification				
7.			andor According to Pressure Vessel Code ASME VI		
•	will be Provided to the Vendor Whe	•	•		
8.		Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20			
9.			er for the use of Hydraulic Bolt Tensioning Equipm	ent.	
10.	Gasket Material Shall be Soft Iron (I	_			
	1 225.000acca. Shan be sole from (1		FF		





SB	SA 10.75 II	NCH FLANGE DATASHEET			
Туре:		Fixed RTJ WN Flange	Swivel Flange		
Pipe Nominal Size	in	10.75	10.75		
Pipe Outer Diameter	mm	273.1	273.1		
Pipe Wall Thickness	mm	14.3	14.3		
Pipe Grade		API5L X-60	API5L X-60		
Flange ID	mm	244.5	244.5		
Flange Material		ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)		
Flange Rating	Ibs	900#	900#		
Quantity	pcs	6	4		
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)		
Corrosion Allowance	mm	6	6		
Fabrication Method		ASTM A694			
Ends		Bevelled as Per API 5L			
Water Depth	m	80 Meters			
Design Codes/Specification:	1				
Project Specification	+ +	ONGC SPEC 20	124 B		
Design Code	+ +	ASME / ANSI			
	Vears		10.5		
Design Life	Years	25			
Key Mechanical Tests Requirements:					
Tensile Test		ASTM 370			
Charpy Impact Test Requirements:		ASTM 370			
Test Temperature		+ 10°C			
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ)	J	29			
Minimum Impact Value Of Any Single Specimen	J	22			
7. 8					
Hardness Test		ASTM 370)		
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248			
Hydrogen Induced Cracking (HIC)Test		NACE TM-02-84			
Crack Sensitivity Ratio (CSR)	%	0.00			
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened)			
Nuts		ASTM A 194 Grade 2HM (I	Hydra Tightened)		
Coating:					
Flange		FBE	FBE		
Pipeline Design Data:					
Design Pressure	kg/cm²	95.6	95.6		
Hydrotest Pressure	kg/cm²	119.5	119.5		
Design Temperature	C°	93	93		
Misalignment Capability:	+ - +		33		
Swivel-Rotational (360 Degrees)	+	No	Yes		
, , ,		INU	ies		
Angular - Minimum 12.5 Deg Misalignment From					
Centerline		No	Vendor to specify		
Notes:			1		
	the Field Prior	to Installation			
	Flange Coating Shall Be Removed in the Field Prior to Installation Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit				
,	Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe				
ŭ	All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B 633				
	Stud Tension and Torque Value to be Provided by Vendor				
5. I Stud Jension and Intalle Value to hi	Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification				
		he Supplied by the Vendor for Welding Procedu	re Qualification		
6. Test Ring Of Sufficient Length And C	uantities Shall				
 Test Ring Of Sufficient Length And C Stress Analysis is Required to be Per 	uantities Shall formed by Ven	ndor According to Pressure Vessel Code ASME V			
Test Ring Of Sufficient Length And C Stress Analysis is Required to be Perwill be Provided to the Vendor Whe	uantities Shall formed by Ven n Pipeline Stre	dor According to Pressure Vessel Code ASME Viss Analysis Performed			
Test Ring Of Sufficient Length And C Stress Analysis is Required to be Perwill be Provided to the Vendor Whe Ring Gasket for Ring Type Joint shal	uantities Shall formed by Ven n Pipeline Stre be Octagonal	dor According to Pressure Vessel Code ASME Viss Analysis Performed	II. Axial Loads and Bending Moments		





RSS	8-ID 10.75 II	NCH FLANGE DATASHEET		
Туре:		Fixed RTJ WN Flange	Swivel Flange	
Pipe Nominal Size	in	10.75	10.75	
Pipe Outer Diameter	mm	273.1	273.1	
Pipe Wall Thickness	mm	14.3	14.3	
Pipe Grade		API5L X-60	API5L X-60	
Flange ID	mm	244.5	244.5	
Flange Material		ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)	
Flange Rating	Ibs	900#	900#	
Quantity	pcs	6	4	
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)	
Corrosion Allowance	mm	6	6	
Fabrication Method		ASTM A694		
Ends		Bevelled as Per API 5L		
Water Depth	m	78 Meters		
Design Codes/Specification:				
Project Specification	+ +	ONGC SPEC 2	2024 B	
Design Code	+ +	ASME / ANS		
Design Code Design Life	Years	25	. 10.5	
Key Mechanical Tests Requirements:	Tears	25		
· ·		ACTA A CT	70	
Tensile Test		ASTM 370		
Charpy Impact Test Requirements:		ASTM 370		
Test Temperature		+ 10°C		
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal & HAZ)	J	29		
Minimum Impact Value Of Any Single Specimen	J	22		
Hardness Test		ASTM 370		
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248		
Hydrogen Induced Cracking (HIC)Test		NACE TM-02-84		
Crack Sensitivity Ratio (CSR)	%	0.00		
Stud Bolts		A <mark>STM A</mark> 193 Grade B7M (Hydra Tightened)		
Nuts		ASTM A 194 Grade 2HM	(Hydra Tightened)	
Coating:				
Flange		FBE	FBE	
Pipeline Design Data:				
Design Pressure	kg/cm²	93.7	93.7	
Hydrotest Pressure	kg/c <mark>m²</mark>	117.125	117.125	
Design Temperature	C°	93	93	
Misalignment Capability:				
Swivel-Rotational (360 Degrees)		No	Yes	
Angular - Minimum 12.5 Deg Misalignment From	 			
		Ne	Vandarita areasti.	
Centerline		No	Vendor to specify	
Notes:				
Flange Coating Shall Be Removed in	the Field Prior t	o Installation		
	Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit			
Ÿ	Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe			
4. All Bolting And Nuts Exposed To The Type II SC3.	All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B 633 Type II SC3.			
5. Stud Tension and Torque Value to b	Stud Tension and Torque Value to be Provided by Vendor			
6. Test Ring Of Sufficient Length And C	Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification			
, , ,	Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Moments will be Provided to the Vendor When Pipeline Stress Analysis Performed			
	Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20			
o. I fille dever for this type form share	The Dimensional Design for the Flanges Shall Cater for the use of Hydraulic Bolt Tensioning Equipment.			
9 71			oment.	





Zt	2-ICD TO I	INCH FLANGE DATASHEET	<u>, </u>		
Type:		Fixed RTJ WN Flange	Swivel Flange		
Pipe Nominal Size	in	16	16		
Pipe Outer Diameter	mm	406.4	406.4		
Pipe Wall Thickness	mm	15.9	15.9		
Pipe Grade		API5L X-60	API5L X-60		
Flange ID	mm	374.6	374.6		
Flange Material		ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)		
Flange Rating	Ibs	900#	900#		
Quantity	pcs	6	4		
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)		
Corrosion Allowance	mm	6	6		
Fabrication Method		ASTM A694			
Ends		Bevelled as Per API 5L			
Water Depth	m	80 Meters	5		
Design Codes/Specification:					
Project Specification		ONGC SPEC 20	024 B		
Design Code		ASME / ANSI			
Design Life	Years	25			
Key Mechanical Tests Requirements:	icais				
Tensile Test		ASTM 370			
		ASTM 370			
Charpy Impact Test Requirements:)		
Test Temperature		+ 10°C			
Minimum Average Absorbed Impact E <mark>nergy O</mark> f 3 Specification (Base Metal, Weld Metal &HAZ)	J	29			
Minimum Impact Value Of Any Single Specimen	J	22			
Hardness Test		ASTM 370)		
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248			
Hydrogen Induced Cracking (HIC)Test		NACE TM-02	-84		
Crack Sensitivity Ratio (CSR)	%	0.00			
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened)			
Nuts		ASTM A 194 Grade 2HM (I	Hydra Tightened)		
Coating:					
Flange		No	No		
Pipeline Design Data:			T		
Design Pressure	kg/cm ²	93.7	93.7		
Hydrotest Pressure	kg/cm²	117.125	117.125		
Design Temperature	C°	93	93		
Misalignment Capability:					
Swivel-Rotational (360 Degrees)		No	Yes		
Angular - Minimum 12.5 Deg Misalignment From					
Centerline		No	Vendor to specify		
			1227 60 5000,		
Notes:					
Flange Coating Shall Be Removed in					
		gainst Damage During Transportation/Transit			
		ipes As Per Company Specification For Line Pipe	- District Average Average Con-		
Type II SC3.		Environment Shall Be Coated With PTFE Or Shall B	e Pialed With Zinc As Per ASTM B 63:		
5. Stud Tension and Torque Value to be		,			
		all be Supplied by the Vendor for Welding Procedu			
7. Stress Analysis is Required to be Per will be Provided to the Vendor Whe		endor According to Pressure Vessel Code ASME Vicress Analysis Performed	III. Axial Loads and Bending Moment		
8. Ring Gasket for Ring Type Joint shall		•			
		ter for the use of Hydraulic Bolt Tensioning Equipn	nent.		
10. Gasket Material Shall be Soft Iron (N	NACE) . Hot D	Dipped Galvanized.			





	SE-I	MSP 12.75	INCH FLANGE DATASHEET			
	Туре:		Fixed RTJ WN Flange	Swivel Flange		
Pipe Nominal Size		in	12.75	12.75		
Pipe Outer Diamet	er	mm	323.9	323.9		
Pipe Wall Thicknes	S	mm	14.3	14.3		
Pipe Grade			API5L X-60	API5L X-60		
Flange ID		mm	295.3	295.3		
Flange Material			ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)		
Flange Rating		Ibs	900#	900#		
Quantity		pcs	6	4		
Service			Well Fluid (Sour Service)	Well Fluid (Sour Service)		
Corrosion Allowan	ice	mm	6	6		
Fabrication Method ASTM A694				1		
Ends Bevelled as Per API 5L				API 5L		
Water Depth		m	85 Meters			
Design Codes/Spe	cification:					
Project Specification			ONGC SPEC 20	24 B		
Design Code	···		ASME / ANSI 1			
Design Life		Years	25	10.5		
Key Mechanical Te	ests Paguiroments:	iedis	25			
	ests Requirements:					
Tensile Test			ASTM 370			
Charpy Impact Test	t Requirements:		ASTM 370			
Test Temperature			+ 10°C			
	Absorbed Impact Energy Of 3 Metal, Weld Metal & HAZ)	J	29			
Minimum Impact Value Of Any Single Specimen		J	22			
Hardness Test			ASTM 370			
Maximum Hardnes	ss (Base Metal, Weld <mark>Me</mark> tal, HAZ)	HV5	248			
Hydrogen Induced	Cracking (HIC)Test		NACE TM-02-	84		
Crack Sensitivity Ra	atio (CSR)	%	0.00			
Stud Bolts			A <mark>STM A</mark> 193 Grade B7M (Hydra Tightened)			
Nuts			ASTM A 194 Grade 2HM (F	lydra Tightened)		
Coating:			Direction of the second			
Flange			No	No		
Pipeline Design Da	nta:					
Design Pressure		kg/cm²	93.7	93.7		
Hydrotest Pressure	2	kg/cm²	117.125	117.125		
Design Temperatur	re	C°	93	93		
Misalignment Cap						
Swivel-Rotational (· · · · · · · · · · · · · · · · · · ·		No	Yes		
,	n 12.5 Deg Misalignment From	+ +				
	11 12.5 Deg Wilsangilinent From					
Centerline			No	Vendor to specify		
Notes:		<u> </u>				
1.	Flange Coating Shall Be Removed in	the Field Prio	r to Installation			
2.	· ·		ainst Damage During Transportation/Transit			
3.			es As Per Company Specification For Line Pipe			
4.	,		nvironment Shall Be Coated With PTFE Or Shall Be	e Plated With Zinc As Per ASTM B 633		
5.	Stud Tension and Torque Value to b	e Provided by	Vendor			
6.			Il be Supplied by the Vendor for Welding Procedu	re Qualification		
7.		rformed by Ve	ndor According to Pressure Vessel Code ASME VI			
8.	Ring Gasket for Ring Type Joint shal		,			
9.			er for the use of Hydraulic Bolt Tensioning Equipm	nent .		
10.		_		iene.		
10.	Gasket Material Shall be Soft Iron (NACE) , Hot Dipped Galvanized.					





IVIIIVV	-1415 12.73	5 INCH FLANGE DATASHEET	T			
Type:		Fixed RTJ WN Flange	Swivel Flange			
Pipe Nominal Size	in	12.75	12.75			
Pipe Outer Diameter	mm	323.9	323.9			
Pipe Wall Thickness	mm	17.5	17.5			
Pipe Grade		API5L X-52	API5L X-52			
Flange ID	mm	288.9	288.9			
Flange Material		ASTM 594 CS	ASTM 594 CS			
Flange Rating	Ibs	1500#	1500#			
Quantity	pcs	6	4			
Service		Water Injection	Water Injection			
Corrosion Allowance	mm	6	6			
Fabrication Method		ASTM 594				
Ends		Bevelled as Per	API 5L			
Water Depth	m	72 Meters	5			
Design Codes/Specification:						
Project Specification		ONGC SPEC 20	024 A			
Design Code		ASME / ANSI	16.5			
Design Life	Years	25				
Key Mechanical Tests Requirements:						
Tensile Test		ASTM 370				
Charpy Impact Test Requirements:		ASTM 370				
Test Temperature		+ 10°C				
Minimum Average Absorbed Impact En <mark>ergy O</mark> f 3 Specification (Base Metal, Weld Metal & <mark>HAZ</mark>)	J	29				
Minimum Impact Value Of Any Single Sp <mark>eci</mark> men	J	22				
Hardness Test		ASTM 370)			
Maximum Hardness (Base Metal, We <mark>ld Me</mark> tal, HAZ)	HV5	248				
Hydrogen Induced Cracking (HIC)Test		NACE TM-02	-84			
Crack Sensitivity Ratio (CSR)	%	0.00				
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened)				
Nuts		ASTM A 194 Grade 2HM (Hydra Tightened)				
Coating:			T			
Flange		Liquid Epoxy	Liquid Epoxy			
Pipeline Design Data:			T			
Design Pressure	kg/cm²	151.6	151.6			
Hydrotest Pressure	kg/cm²	189.5	189.5			
Design Temperature	C°	55	55			
Misalignment Capability:						
Swivel-Rotational (360 Degrees)		No	Yes			
Angular - Minimum 12.5 Deg Misalignment From		-				
Centerline		No	Vendor to specify			
Notes:			•			
Flange Coating Shall Be Removed in	the Field Prior	to Installation				
		inst Damage During Transportation/Transit				
		s As Per Company Specification For Line Pipe				
		vironment Shall Be Coated With PTFE Or Shall B	e Plated With Zinc As Per ASTM B 63.			
5. Stud Tension and Torque Value to be	Provided by V	endor/				
		be Supplied by the Vendor for Welding Procedu	ure Qualification			
	formed by Ven	dor According to Pressure Vessel Code ASME V				
		•				
	Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20					
0 71	The Dimensional Design for the Flanges Shall Cater for the use of Hydraulic Bolt Tensioning Equipment.					





INIZ	-INS 0.025	INCH FLANGE DATASHEET	I				
Type:		Fixed RTJ WN Flange	Swivel Flange				
Pipe Nominal Size	in	8.625	8.625				
Pipe Outer Diameter	mm	219.1	219.1				
Pipe Wall Thickness	mm	14.3	14.3				
Pipe Grade		API5L X-52	API5L X-52				
Flange ID	mm	190.5	190.5				
Flange Material		ASTM 594 CS	ASTM 594 CS				
Flange Rating	Ibs	1500#	1500#				
Quantity	pcs	6	4				
Service		Water Injection	Water Injection				
Corrosion Allowance	mm	6	6				
Fabrication Method		ASTM 594					
Ends		Bevelled as Per	API 5L				
Water Depth	m	72 Meter	s				
Design Codes/Specification:							
Project Specification		ONGC SPEC 20	024 A				
Design Code		ASME / ANSI	16.5				
Design Life	Years	25					
Key Mechanical Tests Requirements:							
Tensile Test		ASTM 370)				
Charpy Impact Test Requirements:		ASTM 370					
Test Temperature		+ 10°C					
Minimum Average Absorbed Impact Energy Of 3		29					
Specification (Base Metal, Weld Metal &HAZ)	J	29					
Minimum Impact Value Of Any Single Specimen	J	22					
Hardness Test		ASTM 370	1				
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248					
Hydrogen Induced Cracking (HIC)Test		NACE TM-02	2-84				
Crack Sensitivity Ratio (CSR)	%	0.00					
Stud Bolts		ASTM A 193 Grade B7M (I	Hydra Tightened)				
Nuts		ASTM A 194 Grade 2HM (Hydra Tightened)					
Coating:			,				
Flange		Liquid Epoxy	Liquid Epoxy				
Pipeline Design Data:							
Design Pressure	kg/cm²	151.6	151.6				
Hydrotest Pressure	kg/cm²	189.5	189.5				
Design Temperature	C°	55	55				
		33)))				
Misalignment Capability:		N-	U				
Swivel-Rotational (360 Degrees)		No	Yes				
Angular - Minimum 12.5 Deg Misalignment From							
Centerline		No	Vendor to specify				
Notes:	ı		l				
1. Flange Coating Shall Be Removed in	the Field Drian	to Installation					
		inst Damage During Transportation/Transit					
		s As Per Company Specification For Line Pipe					
4. All Bolting And Nuts Exposed To The		vironment Shall Be Coated With PTFE Or Shall B	e Plated With Zinc As Per ASTM B 63:				
Type II SC3. 5. Stud Tension and Torque Value to be	Provided by V	/endor					
			ro Qualification				
		be Supplied by the Vendor for Welding Procedu dor According to Pressure Vessel Code ASME V					
will be Provided to the Vendor When			iii. Axidi Lodus dilu Benuing ivioment				
		•					
O Ding Cacket for Ding Tune Inint shall	Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20						
		The Dimensional Design for the Flanges Shall Cater for the use of Hydraulic Bolt Tensioning Equipment.					





Flange Rating		HS	D-HRC 16 I	INCH FLANGE DATASHEET			
Pipe Outer Diameter	Тур	e:		Fixed RTJ WN Flange	Swivel Flange		
Pipe Outer Diameter	Pipe Nominal Size		in	16	16		
Pipe Grade			+ +				
Flange Material	Pipe Wall Thickness		mm	15.9	15.9		
Flange Material	Pipe Grade			API5L X-60	API5L X-60		
Flange Rating	Flange ID		mm	374.6	374.6		
Design Code	Flange Material			ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)		
Well Fluid (Sour Service) Well Fluid (Sour Service) Well Fluid (Sour Service)	Flange Rating		Ibs	900#	900#		
Corrosion Allowance mm	Quantity		pcs	6	4		
Ends Bevelled as Per API 5L Water Depth m 52 Meters Design Codes/Specification: Project Specification: Project Specificat	Service			Well Fluid (Sour Service)	Well Fluid (Sour Service)		
Ends Bevelled as Per API 5L Water Depth m 52 Meters Design Code/Specification: Project Specification Design Code	Corrosion Allowance		mm	6	6		
Design Codes / Design Codes / Specification: ONGC SPEC 2024 B	Fabrication Method			ASTM A69	4		
Project Specification: Project Specification Project Specification Design Code ASME / ANSI 16.5 Design Life Years 25 Key Mechanical Tests Requirements: Familie Test ASTM 370 Charpy Impact Test Requirements: Charpy Impact Test Requirements: ASTM 370 Charpy Impact Test Requirements: ASTM 370 Test Temperature 100 ASTM 4370 Charpy Impact Test Requirements: ASTM 370 Test Temperature 110°C Minimum Avarage Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ) Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 22 Minimum Impact Value Of Any Single Specimen J 248 Hydrogen Induced Cracking (HIC)Test NACE TM-02-84 Crack Specimen Value Of Any Single Specimen ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Pleage	Ends Bevelled as Per API 5L				API 5L		
Project Specification	Water Depth		m	52 Meters	5		
Project Specification ONGC SPEC 2024 B Design Code ASME / ANSI 16.5 Rey Mechanical Tests Requirements: Tensile Test ASTM 370 Test Temperature ASTM 370 Test Temperature 10°C Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ) Minimum Impact Value Of Any Single Specimen J 22 Hardness Test ASTM 370 Maximum Hardness (Base Metal, Weld Metal &HAZ) Hydrogen Induced Cracking (HIC)Test ASTM 370 Maximum Hardness (Base Metal, Weld Metal, HAZ) HVS 248 Hydrogen Induced Cracking (HIC)Test ASTM 370 Nation of Cracking (HIC)T	Design Codes/Specification:						
Design Code Design Life Years Sey Mechanical Tests Requirements: Tensile Test ASTM 370 Tensile Test ASTM 370 Tensile Test ASTM 370 Tensile Test ASTM 370 Test Temperature Test Test Test Test Test Test Test Test				ONGC SPEC 20	124 B		
Design Life Key Mechanical Tests Requirements: Charpy Impact Test Requirements: ASTM 370 Test Temperature Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ) Minimum Impact Value Of Any Single Specimen J 22 Hardness Test ASTM 370 ASTM 370 Maximum Hardness (Base Metal, Weld Metal &HAZ) Hys 248 Hydrogen Induced Cracking (HIC)Test Crack Sensitivity Ratio (CSR) Stud Bolts ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Pipeline Design Data: Design Pressure Ref/cm² By4.9 Hydrotest Pressure Ref/cm² 118.625 Design Temperature C' 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) Anisolation Angular - Minimum 12.5 Deg Misalignment From Centerline No Yes On Yes All Bolting And Nuts Exposed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe A. All Bolting And Nuts Exposed To Fee Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor T. Est Ring of Swiftler Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	<u> </u>						
Rey Mechanical Tests Requirements: Tensile Test			Vaare		10.5		
Tensile Test Charpy Impact Test Requirements: Set Temperature Ho"C Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ) Minimum Impact Value Of Any Single Specimen J 22 Hardness Test ASTM 370 Maximum Hardness (Base Metal, Weld Metal &HAZ) Hydrogen Induced Cracking (HIC)Test Crack Sensitivity Ratio (CSR) Waximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test NACE TM-02-84 Crack Sensitivity Ratio (CSR) Waximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test NASTM A193 Grade B7M (Hydra Tightened) Nuts ASTM A193 Grade B7M (Hydra Tightened) Coating: Filange FBE FBE FBE FBE FBE Pipeline Design Data: Design Pressure kg/cm² 118.625 118.625 Design Temperature C* 94.9 Misalignment Capability: Misalignment Capability: No No Yes Angular-Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe A All Botting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Test Ring Gasket for King Type Joint shall be Octagonal and Shall be a Per ASKIB B 16.20			years	25			
Charpy Impact Test Requirements: Test Temperature Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ) Minimum Impact Value Of Any Single Specimen J 29 Hardness Test Hardness Test Maximum Hardness (Base Metal, Weld Metal, HAZ) HV5 ASTM 370 Maximum Hardness (Base Metal, Weld Metal, HAZ) HV5 ASTM A 194 HV6 Crack Sensitivity Ratio (CSR) KNACE TM-02-84 Crack Sensitivity Ratio (CSR) KNACE TM-02-84 Crack Sensitivity Ratio (CSR) KNACE TM-04-084 ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Coating: FIange FBE FBE FBE FBE FBE FBE FBE Pipeline Design Data: Design Pressure kg/cm² 94.9 94.9 94.9 94.9 118.625 118.625 Design Temperature C' 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) No Yes Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Stud Tension and Torque Value to be Provided by Vendor Fest Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Transition and Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	<u> </u>	rements:					
Test Temperature	Tensile Test						
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ) Minimum Impact Value Of Any Single Specimen Hardness Test ASTM 370 Maximum Hardness (Base Metal, Weld Metal, HAZ) HV5 248 Hydrogen Induced Cracking (HIC)Test NACE TM-02-84 Crack Sensitivity Ratio (CSR) % ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Pilange FBE FBE FBE Pipeline Design Data: Design Pressure kg/cm² 118.625 118.625 118.625 Posign Temperature C° 93 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) No Yes Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes AS Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Charpy Impact Test Requiren	nents:		ASTM 370			
Specification (Base Metal, Weld Metal &HAZ) Minimum Impact Value Of Any Single Specimen Hardness Test Maximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test Crack Sensitivity Ratio (CSR) **Stud Bolts Nuts ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Nuts STM A 194 Grade 2HM (Hydra Tightened) Nuts FBE FBE FBE FBE Pipeline Design Data: Flange FBE FBE FBE Pipeline Design Data: C* 93.9 Hydrotest Pressure kg/cm² 118.625 118.625 Design Temperature C* 93 Misalignment Capability: Swivel-Rotational (360 Degrees) Angular - Minimum 12.5 Deg Misalignment From Centerline Swivel-Rotational (360 Degrees) A Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flange Flands To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed R. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Test Temperature			+ 10°C			
Minimum Impact Value Of Any Single Specimen Hardness Test ASTM 370 Maximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test Crack Sensitivity Ratio (CSR) Maximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test Crack Sensitivity Ratio (CSR) Maximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test NACE TM-02-84 Crack Sensitivity Ratio (CSR) Maximum Hardness (Base Metal, Weld Metal, HAZ) Must ASTM A 193 Grade 87M (Hydra Tightened) ASTM A 194 Grade 2HM (Hydra Tightened) Coating: FBE FBE FBE FBE FBE FBE Pipeline Design Pressure kg/cm² 94.9 94.9 94.9 94.9 94.9 Hydrotest Pressure kg/cm² 118.625 Design Temperature C° 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) No Yes Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II Sc3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20			J	29			
Hardness Test Maximum Hardness (Base Metal, Weld Metal, HAZ) HV5 248 Hydrogen Induced Cracking (HIC)Test Crack Sensitivity Ratio (CSR) MSC ETM-02-84 Crack Sensitivity Ratio (CSR) MSC MACE TM-02-84 Crack Sensitivity Ratio (CSR) MSC MSC MACE TM-02-84 Crack Sensitivity Ratio (CSR) MSC	Minimum Impact Value Of Any Single Specimen		J	22			
Maximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test Crack Sensitivity Ratio (CSR) % ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Nuts FBE FIBE FBE FBE FBE Pipeline Design Data: Design Pressure kg/cm² 94.9 Hydrotest Pressure kg/cm² 118.625 118.625 Design Temperature C° 93 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	The state of the s						
Maximum Hardness (Base Metal, Weld Metal, HAZ) Hydrogen Induced Cracking (HIC)Test Crack Sensitivity Ratio (CSR) % ASTM A 193 Grade B7M (Hydra Tightened) Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Nuts Coating: FBE FBE FBE FBE Pipeline Design Data: Design Pressure kg/cm² 94.9 Hydrotest Pressure kg/cm² 118.625 Design Temperature C° Misalignment Capability: Swivel-Rotational (360 Degrees) Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Hardness Test			ASTM 370)		
Hydrogen Induced Cracking (HIC)Test 0.00 Stud Bolts 0.00 Stud Bolts 0.00 Stud Bolts 0.00 Stud Bolts 0.00 ASTM A 193 Grade B7M (Hydra Tightened) Nuts 0.03 RASTM A 194 Grade 2HM (Hydra Tightened) Coating: Flange FBE FBE FBE Pipeline Design Data: Design Pressure	Maximum Hardness (Base M	etal, Weld Metal, HAZ)	HV5	248			
Stud Bolts	Hydrogen Induced Cracking ((HIC)Test		NACE TM-02	-84		
Nuts ASTM A 194 Grade 2HM (Hydra Tightened) Coating: Flange FBE FBE Pipeline Design Data: Design Pressure kg/cm² 94.9 94.9 Hydrotest Pressure kg/cm² 118.625 118.625 Design Temperature C° 93 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) No Yes Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Crack Sensitivity Ratio (CSR)		%	0.00			
Coating: Flange Fibe Fibe Fibe Fibe Fibe Fibe Fibe Fib	Stud Bolts			ASTM A 193 Grade B7M (Hydra Tightened)			
Flange Pipeline Design Data: Design Pressure kg/cm² 94.9 Hydrotest Pressure kg/cm² 118.625 118.625 118.625 Design Temperature C° 93 Misalignment Capbility: Swivel-Rotational (360 Degrees) Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor Wend Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Nuts			ASTM A 194 Grade 2HM (H	Hydra Tightened)		
Pipeline Design Data: Design Pressure kg/cm² 94.9 94.9 94.9 Hydrotest Pressure kg/cm² 118.625 118.625 Design Temperature C° 93 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) No Yes Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Coating:			Marine Ma			
Design Pressure kg/cm² 94.9 94.9 94.9 Hydrotest Pressure kg/cm² 118.625 118.625 Design Temperature C° 93 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) No Yes Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Flange			FBE	FBE		
Hydrotest Pressure kg/cm² 118.625 118.625 Design Temperature C° 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) No Yes Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Pipeline Design Data:						
Design Temperature C° 93 93 Misalignment Capability: Swivel-Rotational (360 Degrees) No Yes Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Momwill be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Design Pressure		kg/cm²	94.9	94.9		
Design Temperature C° 93 93			O.	118.625	118.625		
Misalignment Capability: Swivel-Rotational (360 Degrees) Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20							
Swivel-Rotational (360 Degrees) Angular - Minimum 12.5 Deg Misalignment From Centerline No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20			-				
Angular - Minimum 12.5 Deg Misalignment From Centerline No No Vendor to specify Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20		2001		Ne	Voc		
Notes: No Vendor to specify 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	, ,			INO	res		
Notes: 1. Flange Coating Shall Be Removed in the Field Prior to Installation 2. Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit 3. Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe 4. All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. 5. Stud Tension and Torque Value to be Provided by Vendor 6. Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification 7. Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20	Angular - Minimum 12.5 Deg	; Misalignment From					
 Flange Coating Shall Be Removed in the Field Prior to Installation Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Stud Tension and Torque Value to be Provided by Vendor Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20 	Centerline			No	Vendor to specify		
 Flange Coating Shall Be Removed in the Field Prior to Installation Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Stud Tension and Torque Value to be Provided by Vendor Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20 	Notes:						
 Ends of All Flanges Shall Be Suitably Protected Against Damage During Transportation/Transit Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Stud Tension and Torque Value to be Provided by Vendor Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20 		oating Shall Re Removed in	the Field Drice	r to Installation			
 Flanges Ends To Be Matched With Connecting Pipes As Per Company Specification For Line Pipe All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Stud Tension and Torque Value to be Provided by Vendor Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20 							
 All Bolting And Nuts Exposed To The Sea Water Environment Shall Be Coated With PTFE Or Shall Be Plated With Zinc As Per ASTM B Type II SC3. Stud Tension and Torque Value to be Provided by Vendor Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20 							
 Stud Tension and Torque Value to be Provided by Vendor Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20 	4. All Boltin	ng And Nuts Exposed To The		. , ,	e Plated With Zinc As Per ASTM B 633		
 Test Ring Of Sufficient Length And Quantities Shall be Supplied by the Vendor for Welding Procedure Qualification Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20 			e Provided by V	Vendor			
 Stress Analysis is Required to be Performed by Vendor According to Pressure Vessel Code ASME VIII. Axial Loads and Bending Mom will be Provided to the Vendor When Pipeline Stress Analysis Performed Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20 		·			re Qualification		
will be Provided to the Vendor When Pipeline Stress Analysis Performed 8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20							
8. Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20			,	•	And Loads and Bending Montelles		
			<u> </u>	,			
a. I THE DIMENSIONAL DESIGN OF THE FIGURES SHAN CALEFOR THE USE OF DVOICABILL DOM: TENSIONINE FOUNDMENT.					nent.		
10. Gasket Material Shall be Soft Iron (NACE), Hot Dipped Galvanized.			_				





	J 11110 10 111	ICH FLANGE DATASHEET				
Туре:		Fixed RTJ WN Flange	Swivel Flange			
Pipe Nominal Size	in	16	16			
Pipe Outer Diameter	mm	406.4	406.4			
Pipe Wall Thickness	mm	15.9	15.9			
Pipe Grade		API5L X-60	API5L X-60			
Flange ID	mm	374.6	374.6			
Flange Material	L	ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)			
Flange Rating	Ibs	900#	900#			
Quantity	pcs	6	4			
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)			
Corrosion Allowance	mm	6	6			
Fabrication Method		ASTM A				
Ends		Bevelled as Po	er API 5L			
Water Depth	m	60 Met	ers			
Design Codes/Specification:						
Project Specification		ONGC SPEC	2024 B			
Design Code		ASME / AN	SI 16.5			
Design Life	Years	25				
Key Mechanical Tests Requirements:						
Tensile Test		ASTM 3	270			
Charpy Impact Test Requirements:		ASTM 370				
Test Temperature		+ 10°C				
Minimum Average Absorbed Impact E <mark>nergy O</mark> f 3 Specification (Base Metal, Weld Metal & <mark>HAZ</mark>)	J	29				
Minimum Impact Value Of Any Single Specimen	J	22				
Hardness Test		ASTM 3	70			
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248				
Hydrogen Induced Cracking (HIC)Test		NACE TM-	02-84			
Crack Sensitivity Ratio (CSR)	%	0.00				
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened)				
Nuts		ASTM A 194 Grade 2HM	1 (Hydra Tightened)			
Coating:						
Flange		FBE	FBE			
Pipeline Design Data:						
Design Pressure	kg/cm²	93.8	93.8			
Hydrotest Pressure	kg/cm²	117.25	117.25			
Design Temperature	C°	83	83			
Misalignment Capability:						
Swivel-Rotational (360 Degrees)	+ +	No	Yes			
Angular - Minimum 12.5 Deg Misalignment From	+ +	110	163			
Centerline		No	Vendor to specify			
Notes:	I					
Flange Coating Shall Be Removed in	the Field Prior t	o Installation				
		nst Damage During Transportation/Transit				
		As Per Company Specification For Line Pipe				
		ronment Shall Be Coated With PTFE Or Shall				
5. Stud Tension and Torque Value to be	Provided by Ve	endor				
		e Supplied by the Vendor for Welding Proce	dure Qualification			
		lor According to Pressure Vessel Code ASME				
			viii. Axiai Luaus aliu Beriuing Momer			
wiii be Flovided to the vehidor Whel	will be Provided to the Vendor When Pipeline Stress Analysis Performed					
Q Ding Cacket for Ding Type Inint shall	Ring Gasket for Ring Type Joint shall be Octagonal and Shall be as Per ASME B 16.20					
		nd Shall be as Per ASME B 16.20 for the use of Hydraulic Bolt Tensioning Equi	nment			





HS-	HRG 12.75	INCH FLANGE DATASHEET			
Туре:		Fixed RTJ WN Flange	Swivel Flange		
Pipe Nominal Size	in	12.75	12.75		
Pipe Outer Diameter	mm	323.9	323.9		
Pipe Wall Thickness	mm	14.3	14.3		
Pipe Grade		API5L X-60	API5L X-60		
Flange ID	mm	295.3	295.3		
Flange Material		ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)		
Flange Rating	Ibs	1500#	1500#		
Quantity	pcs	6	4		
Service		Well Fluid (Sour Service)	Well Fluid (Sour Service)		
Corrosion Allowance	mm	6	6		
Fabrication Method		ASTM A694			
Ends		Bevelled as Per A	API 5L		
Water Depth	m	50 Meters			
Design Codes/Specification:					
Project Specification	† †	ONGC SPEC 20	24 B		
Design Code		ASME / ANSI 1			
Design Life	Years	25			
Key Mechanical Tests Requirements:					
Tensile Test		ASTM 370			
Charpy Impact Test Requirements:		ASTM 370			
Test Temperature	_	+ 10°C			
•		+ 10 C			
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ)	J				
Minimum Impact Value Of Any Single Specimen	J	22			
Hardness Test		ASTM 370			
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248			
Hydrogen Induced Cracking (HIC)Test		NACE TM-02-	84		
Crack Sensitivity Ratio (CSR)	%	0.00			
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened)			
Nuts	-	ASTM A 194 Grade 2HM (Hydra Tightened)			
Coating:	-	FBE	FBE		
Flange Pipeline Design Data:		FBE	FBE		
	1/2	02.7	02.7		
Design Pressure	kg/cm²	93.7	93.7		
Hydrotest Pressure	kg/cm²	117.125	117.125		
Design Temperature	C°	93	93		
Misalignment Capability:					
Swivel-Rotational (360 Degrees)		No	Yes		
Angular - Minimum 12.5 Deg Misalignment From					
Centerline		No	Vendor to specify		
Notes:	<u>, </u>				
Flange Coating Shall Be Removed in	the Field Prio	r to Installation			
		ainst Damage During Transportation/Transit			
3. Flanges Ends To Be Matched With (Connecting Pip	es As Per Company Specification For Line Pipe			
All Bolting And Nuts Exposed To The Type II SC3.	e Sea Water Er	nvironment Shall Be Coated With PTFE Or Shall Be	Plated With Zinc As Per ASTM B 63.		
5. Stud Tension and Torque Value to b	e Provided by	Vendor			
·		I be Supplied by the Vendor for Welding Procedu	re Qualification		
	rformed by Ve	ndor According to Pressure Vessel Code ASME VII			
8. Ring Gasket for Ring Type Joint shal					
		er for the use of Hydraulic Bolt Tensioning Equipm	ent.		
10. Gasket Material Shall be Soft Iron (I		, , , , , , , , , , , , , , , , , , , ,			





	112 11110 2 1 111	CH FLANGE DATASHEET			
Туре:		Fixed RTJ WN Flange	Swivel Flange		
Pipe Nominal Size	in	14	14		
Pipe Outer Diameter	mm	355.6	355.6		
ipe Wall Thickness	mm	15.9	15.9		
Pipe Grade		API5L X-60	API5L X-60		
lange ID	mm	323.8	323.8		
Flange Material	II	ASTM A694, F-60 (NACE)	ASTM A694, F-60 (NACE)		
Flange Rating	Ibs	1500#	1500#		
Quantity Service	pcs	6	4		
Corrosion Allowance	mm	Well Fluid (Sour Service) 6	Well Fluid (Sour Service) 6		
Fabrication Method	111111	ASTM A			
Ends		Bevelled as P			
Nater Depth	m	55 Met	ers		
Design Codes/Specification:					
Project Specification		ONGC SPEC	2024 B		
Design Code		ASME / AN	SI 16.5		
Design Life	Years	25			
Key Mechanical Tests Requirements:					
Fensile Test	ASTM 370				
Charpy Impact Test Requirements:		ASTM 3			
		+ 10°C			
Test Temperature					
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ)	J	29			
Minimum Impact Value Of Any Single Specimen	J	22			
Hardness Test		ASTM 3	870		
Maximum Hardness (Base Metal, Weld Metal, HAZ) HV5	248			
Hydrogen Induced Cracking (HIC)Test	, 1103	NACE TM-			
Crack Sensitivity Ratio (CSR)	%	0.00			
Stud Bolts		ASTM A 193 Grade B7M (Hydra Tightened)			
Nuts		ASTM A 194 Grade 2HN	1 (Hydra Tightened)		
Coating:					
Flange		FBE	FBE		
Pipeline Design Data:			•		
Design Pressure	kg/cm ²	93.7	93.7		
Hydrotest Pressure	kg/cm²	117.125	117.125		
Design Temperature	C°	93	93		
Misalignment Capability:			33		
		NI-	V		
Swivel-Rotational (360 Degrees)		No	Yes		
Angular - Minimum 12.5 Deg Misalignment From					
Centerline		No	Vendor to specify		
Notes:					
Flange Coating Shall Be Remov	ed in the Field Prior t	to Installation			
		nst Damage During Transportation/Transit			
		s As Per Company Specification For Line Pipe			
4. All Bolting And Nuts Exposed T		ironment Shall Be Coated With PTFE Or Shal			
Type II SC3.	to be Provided by M	andar			
5. Stud Tension and Torque Value			odura Qualification		
		pe Supplied by the Vendor for Welding Proce dor According to Pressure Vessel Code ASME			
will be Provided to the Vendor			. viii. Axiai Luaus aliu Bellullig Momer		
9 71		and Shall be as Per ASME B 16.20 for the use of Hydraulic Bolt Tensioning Equi	inmont		
The Dimensional Design for the					





HRG	6-HX 6.625	INCH FLANGE DATASHEET				
Туре:		Fixed RTJ WN Flange	Swivel Flange			
Pipe Nominal Size	in	6.625	6.625			
Pipe Outer Diameter	mm	168.3	168.3			
Pipe Wall Thickness	mm	12.7	12.7			
Pipe Grade		API5L X-52	API5L X-52			
Flange ID	mm	142.9	142.9			
Flange Material		ASTM 594 CS	ASTM 594 CS			
Flange Rating	Ibs	1500#	1500#			
Quantity	pcs	6	4			
Service		Water Injection	Water Injection			
Corrosion Allowance	mm	6	6			
Fabrication Method		ASTM 594				
Ends		Bevelled as Per A	API 5L			
Water Depth	m	55 Meters				
Design Codes/Specification:						
Project Specification		ONGC SPEC 20	24 B			
Design Code		ASME / ANSI 1				
Design Life	Years	25				
	icais	25				
Key Mechanical Tests Requirements:						
Tensile Test		ASTM 370				
Charpy Impact Test Requirements:		ASTM 370				
Test Temperature		+ 10°C				
Minimum Average Absorbed Impact Energy Of 3 Specification (Base Metal, Weld Metal &HAZ)	J	29				
Minimum Impact Value Of Any Single Specimen	J	22				
		ACTA 270				
Hardness Test	HV5	ASTM 370				
Maximum Hardness (Base Metal, Weld Metal, HAZ)	HV5	248 NACE TM-02-	0.4			
Hydrogen Induced Cracking (HIC)Test	0/	0.00	*84			
Crack Sensitivity Ratio (CSR) Stud Bolts	%	ASTM A 193 Grade B7M (Hydra Tightened)				
Nuts		ASTM A 193 Grade B7M (H	, ,			
Coating:		ASTINIA 194 Grade Zirini (i	iyura rigiiterieu)			
Flange		Liquid Epoxy	Liquid Epoxy			
Pipeline Design Data:		Liquid Epoxy	Liquid Epoxy			
	leg /ppo2	151.6	151.C			
Design Pressure	kg/cm²		151.6			
Hydrotest Pressure	kg/cm²	189.5	189.5			
Design Temperature	C°	55	55			
Misalignment Capability:						
Swivel-Rotational (360 Degrees)		No	Yes			
Angular - Minimum 12.5 Deg Misalignment From						
Centerline		No	Vendor to specify			
Notes:						
Flange Coating Shall Be Removed in	the Field Prio	or to Installation				
		ainst Damage During Transportation/Transit				
		es As Per Company Specification For Line Pipe				
ÿ		nvironment Shall Be Coated With PTFE Or Shall Be	e Plated With Zinc As Per ASTM B 633			
5. Stud Tension and Torque Value to b	e Provided by	Vendor				
		Il be Supplied by the Vendor for Welding Procedu	re Qualification			
	rformed by Ve	endor According to Pressure Vessel Code ASME VI				
8. Ring Gasket for Ring Type Joint shal						
0 11			nent.			
	The Dimensional Design for the Flanges Shall Cater for the use of Hydraulic Bolt Tensioning Equipment.					



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



4. INSPECTION TEST PLAN

REQN.F	OR : SU	BSEA FLAI	NGES			DOC NO: PRPP-RFQ-PL-03				
PROJEC	CT : PA	RT REPLA	CEMEN	IT PIP	ELINE PROJECT (PRPP)					
SPECS	: ONGC S	PEC 2024								
ITEM	: FL/	ANGES ANI	D FITTI	NGS						
Inspection Category: "B"										
1. Inspection by Company / Certification Agency										
2. Inspection by TPI										
Activity	3. Inspection by Vendor									
				4. Ce	rtificates/Data to be submitte	ed by Vendor				
				Stages of Inspection Involved						
1	Α	А	Н	X	QUALITY PLAN					
2	R	R	Н	X	MATERIAL TEST CERTIFICATE					
3	R	R	Н	Х	MANUFACTURING PROCEDURE					
4	RW	W	Н	X	MECH TESTINGS AND CHEM	IICAL TESTING AS PER ONGC SPEC 2024				
5	RW	W	Н	Х	TESTING FOR SOUR SERVICE	S AS PER ONGC SPEC 2024				
6	R	RW	Н	X	WPS, PQR & WPQ (IF APPLI WITNESS BY TPI	CABLE) FOR NEWLY QUALIFIED PROCEDURES				
7	R	R	Н	X	HEAT TREATMENT AS APPLIC	CABLE				
8	RW	W	Н	Х	NDT AS PER ONGC SPEC 202	4				
9	RW	W	Н	Х	ANYOTHER TEST MENTIONE	D IN ONGC SPEC 2024				
10	RW	W	Н	Х	INSPECTION OF MARKING A	ND TAGGING				
11	R	RW	Н	Х	CHECKING FOR SURFACE PRI	EPERATION AND PROTECTIVE COATING				
12	W	W	Н	Х	FINAL VISUAL & DIMENSIONAL CHECK					
13	Н	Н	Н	Х	FINAL DOCUMENTATION RE	VIEW AND ISSUE OF IRN				
14	R	R	Н	Х	CHECK PREPARATION FOR SE	HIPMENT				
1										

Legend:

H- Hold W- Witness R- Review

A- Approval I- Information X- Submission of Supporting Documents

Rw- Random witness TPI- Third Party Inspection Agency Appointed by Company

CA- Certification Agency



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



Note 1: Cat A - Stage wise final inspection shall be carried out by CA for the items categorized under this category.

In addition, TPI will also carry out intermediate and final stages of inspection as indicated in QCP

Note 2: Detail QAP should be submitted by vendor which will be approved by purchaser TPI and CA.





RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



5. LIST OF ATTACHMENTS

ANNEXURE 1: VENDOR EVALUATION FORM

ANNEXURE 2: SPEC NO 2024 A FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR

SUBMARINE PIPELINES

ANNEXURE 3: SPEC NO 2024 B FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR

SUBMARINE PIPELINES (SOUR SERVICE)











RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



TECHNICAL QUESTIONARE - FORM A

	TECHNICAL QUESTIONARE TORWIA			
quer	questionnaire shall be completely filled in and submitted along with vend ries for proper evaluation of bid. If this is not complied with, vendor's bid dor shall sign/date and affix his seal to the form.			
A)	SCOPE OF SUPPLY	Indicate appropr	oy √ in the	
shall Form and i shall place	I. Is the vendor in total agreement with his scope of supply as defined in the Material Requisition? II. If NOT in total agreement, indicate in which of the following deviation is required: a Data Sheets b Specification c Vendor Data Requirement Schedule (VDRS) d QA/QC requirements (Inspection & Testing requirements) e answer is 'YES' for any of the above in A(II), exact deviation required be described in detail indicating the appropriate clause (s) in attached in B. If no deviation are indicated, then vendor to specify NIL in Form-B, it will be assumed that all the requirement of the subject requisition be complied with no deviation whatsoever shall be accepted after the ements of order. Vendor shall submit filled in Form-B, duty signed & apped.	□ YES □ YES □ YES □ YES □ YES	NO	□ NA □ NA □ NA □ NA
1	Whether total system supply is in vendor's scope, are there any items vendor wishes to add to achieve total system completion in all respects? (If 'Yes' details to be given)	□ YES	□ NO	□ NA
2	Does bid include a. Commissioning spares b. Maintenance / operational spares (2 years period) c. Special tool & tackles d. Construction spares & consumables	□ YES □ YES □ YES	□ NO □ NO □ NO	□ NA □ NA □ NA □ NA
3	Others: a. Are mounting accessories, if any, included in bid? b. Are special installation procedures, if any, included in bid?	□ YES	□ NO	□ NA
	c. Is Supervision of installation in Vendor scope?d. In installation in Vendor scope?	□ YES	□ NO	□ NA





	e. Is Supervision of commissioning scope?	□ YES	□ NO	□ NA		
	f. Is Commissioning in Vendor sco	□ YES	□ NO	□ NA		
4	Does the bid include:					
	a. Power requirements			□ YES	□ NO	□ NA
	b. Special Cable requirements			□ YES	□ NO	□ NA
	c. Special Calibration equipment			□ YES	□ NO	□ NA
	(Extra charges, if any, for the above to	o be indicated	d in the bid)			
В)	INSPECTION/CERTIFICATE					
1	Has vendor indicated in bid detailed carried out by him?	inspection pro	ocedure being	□ YES	□ NO	□ NA
2	Have extra charge, if any for any spec specified in Requisition) indicated in	•	to carried out (as	□ YES	□ NO	□ NA
3	Can vendor furnish certificate from c indicated below after order placeme		chorities as	□ YES	□ NO	□ NA
SL.	CERTIFICATION FOR	CODE	NAME OF CERT.			
NO.		NO.	AUTHORITY			
a)	Explosion proof housing.			□ YES	□ NO	□ NA
b)	Intrinsic. Safe			□ YES	□ NO	□ NA
c)	Weather proof housing	1151		□ YES	□ NO	□ NA
d)	IBR approval			□ YES	□ NO	□ NA
e)	Fire safe Valves			□ YES	□ NO	□ NA
f)	Flames Retardant Cables			□ YES	□ NO	□ NA
g)	Fire Resistant Cables		0.00	□ YES	□ NO	□ NA
h)	Others (please specify)		711	□ YES	□ NO	□ NA
Refer	CUMENTATION (VENDOR OFFER) ring to Vendor Document Requiremer stage:	<mark>/DRS)</mark> , does offer inc	lude the fo	ollowing d	ocuments	
numb	ver sheet of the offer indicating Materi er, revision number, equipment/packa reference number with date & vendor	□ YES	□ NO	□ NA		
2. Scc	pe of supply sheet with sub-vendor lis	□ YES	□ NO	□ NA		
3. List	of documents attached with offer	□ YES	□ NO	□ NA		
4. Ver	ndor reference list for previous such in:	□ YES	□ NO	□ NA		
5. Ma	nufacturing/Delivery schedule			□ YES	□ NO	□ NA
6. Fill	ed in Form-A "Technical Questionnaire or.	", duly signed	& stamped by	□ YES	□ NO	□ NA
	ed in Form-B "Deviation List", duly sign	ned & stampe	d by vendor.	□ YES	□ NO	□NA
	atalogue/Leaflets/Technical literature f			□ YES	□ NO	□ NA
	led in data sheet as per section -3	·		□ YES	□ NO	□ NA



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



DEVATION FORM-B

ARIFICATION / DEVIATION LIST					
lo	REFERENCE CLAUSE	QUERY / DEVIATION / CLARIFICATION			
	(2.1				
	7/2				
	9 1	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COL			
	4				
	AV				
	-				
	- 4				



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



TRACK RECORD FORM - C

TRACK RECORD / PAST PROJECT EXPERIENCE							
Sr No	Project Name	Client	Year	Documents including scope and completion certificates			
		1000					
		1					
			970				
		- 41					



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



SPEC NO 2024 A FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES



FUNCTIONAL SPECIFICATION
FOR
FITTINGS AND FLANGES FOR
SUBMARINE PIPELINES

Spec No.	2024A		
Rev.	0		
Discipline	PIPELINE		
Page No. 1 of 9			

FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

OIL AND NATURAL GAS CORPORATION LTD. INDIA

K.P.V			RE-PRODUCED FROM REV.0 AND RE- ISSUED FOR BID	9	12.1.05	0
A.N.			RE-PRODUCED FROM REV.0 AND RE- ISSUED FOR BID	9	24.5.04	0
A.K.M.			RE-PRODUCED FROM REV.0	9	23.7.03	0
A.K.S.		V.K.K.	ISSUED FOR BID	11	15.7.96	0
PREPARED BY	REVIEWED BY	APPROVED BY	REMARKS	NO. OF PAGES	DATE	REV NO.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

Spec No.	2024A		
Rev.	0		
Discipline	PIPELINE		
Page No. 2 of 9			

CONTENTS

SECTION	<u>TITLE</u>
1.0	SCOPE
2.0	REFERENCE DOCUMENTS
3.0	MATERIALS
4.0	DESIGN AND CONSTRUCTION
5.0	INSPECTION AND TESTS
6.0	TEST CERTIFICATES
7.0	PAINTING, MARKING AND SHIPMENT
8.0	DOCUMENTATION
9.0	MANUFACTURERS' QUALIFICATIONS

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

Spec No.	2024A		
Rev.	0		
Discipline	PIPELINE		
Page No. 3 of 9			

1.0 **SCOPE**

This specification covers the minimum requirements for manufacture and supply of carbon steel flanges and fittings to be installed in submarine pipeline systems transporting sweet hydrocarbons in liquid or gaseous phase and injection water.

2.0 REFERENCE DOCUMENTS

Reference has been made in this specification to the latest edition of the following codes, standards and specifications:

a.	ANSI B 31.8	:	Gas	Transmission	and	Distribution	Piping
u.	7 II (DI D 51.0	•	Gus	1 I wildilliadioi	ullu	Dibuloution	1 10111

Systems

b. ANSI B 31.4 : Liquid Petroleum Transportation Piping System.

c. ANSI B 16.5 : Steel Pipe Flanges and Flanged Fittings

d. ANSI B 16.9 : Factory-Made Wrought Steel Butt Welding

Fittings.

e. API 1104 : Specification for Welding Pipeline and Related

Facilities

f. ASME Sec. VIII : Boiler and Pressure Vessel Code Rules for the

Construction of Pressure Vessels.

g. ASME Sec. IX : Boiler and Pressure Vessel Code Welding and

Brazing qualifications.

h. ASTM A 370 : Mechanical Testing of Steel Products.

i. MSS-SP-44 : Steel Pipeline Flanges

j. MSS-SP-75 : Specification for High Test Wrought Welding

Fittings.

k. DNV-1981 : Det Norske Veritas Rules for Submarine

Pipelines.

FORMAT No. Ref. PROCEDURE No.		ISSUE No.	REV. No.	REV. DATE:	
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003	



FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

Spec No.	2024A		
Rev.	0		
Discipline	PIPELINE		
Page No. 4 of 9			

1. API 6H : End closures, connectors and swivels

m. MSS-SP-25 : Standard Marking System for valves, fittings, flanges and unions.

In case of conflict between the requirements of this specification and the requirement of above referred documents, the requirement of this specification shall govern.

3.0 MATERIALS

- 3.1 Materials used in manufacture of flanges and fittings shall be as indicated in the Purchase Requisition or as per the Piping Spec. 2004.
- Fully killed carbon steel shall be used in the manufacturer of flanges and fittings.
- Each heat of steel used for the manufacturer of flanges and fittings shall have carbon equivalent not exceeding 0.40, based on check analysis, calculated as per the following formula:

$$CE = C + \frac{Mn}{6} \frac{Cr + Mo + V}{5} \frac{Ni + Cu}{15}$$

3.4 Charpy V-notch test shall be conducted at 10°C for each heat of steel used in manufacture of flanges and fittings. Test procedure shall conform to ASTM A370 for flanges and MSS-SP-75 for all fittings.

The average absorbed impact energy value of three specimens of base metal, weld metal and HAZ shall be 29 joules. Minimum impact value of any one specimen of the three specimens analysed as above shall not be less than 22 joules.

In addition, the average shear area shall comply the requirements of MSS-SP-75.

Transverse guided weld bend test shall be performed for each lot of welded fittings produced from same heat in accordance with the provisions of MSS-SP-75. The dimension "A" in guided bend test shall not exceed 4.0 times the nominal wall thickness and dimension "B" shall be equal to A + 2t + 3.2 mm. Where t is nominal thickness.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

Spec No.	2024A	
Rev. 0		
Discipline PIPELINE		
Page No. 5 of 9		

3.6 One transverse weld tensile test shall be conducted on each heat/lot of welded fittings in accordance with the requirements of MSS-SP-75.

4.0 **DESIGN AND CONSTRUCTION**

- 4.1 Flanges such as welding neck flanges and blind flanges shall conform to the requirements of ANSI B 16.5 for sizes ≤ 24" NB (excluding 22" NB) and MSS-SP-44 for 22" NB and 26" NB and above.
- 4.2 Fittings such as tees, elbows and reducers shall be seamless type for sizes ≤ 16" NB and shall be either welded or seamless type for sizes ≥ 18" NB. Fittings shall conform to MSS-SP-75.
- 4.3 Fittings not covered in MSS-SP-75, like weldolets, sockolets, nippolets, etc. shall be manufactured in accordance with manufacturer's standard.
- Type, face and face finish of flanges shall be as specified in Purchase Requisition.
- 4.5 Stub-in or pipe to pipe connection shall not be used in the manufacture of tees. Tees shall be manufactured by forging or extrusion methods. The longitudinal weld seam shall be kept at 90° from the extrusion. Fittings shall not have any circumferential joints.
- 4.6 All butt weld ends shall be beveled as per ANSI B 16.5/MSS-SP-44 as applicable for flanges and MSS-SP-75 for fittings.
- 4.7 The reinforcement of inside weld seam shall be removed for a distance of 100 mm from each end of the welded fittings.
- 4.8 All welds shall be made by welders and welding procedures qualified in accordance with the provisions of ASME Sec. IX. The procedure qualification shall include impact test for weld/heat affected zone, guided bend tees and shall meet the requirements of clause 3.4, 3.5 of this specification respectively.
- Repair by welding on flanges and parent metal of the fittings is not allowed. Repair of weld seam by welding shall be carried out by the welders and welding procedures duly qualified as per ASME Section IX and records for each repair shall be maintained. Repair welding procedure qualification shall include all tests which are applicable for regular production welding procedure qualification.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

Spec No.	2024A	
Rev.	0	
Discipline PIPELINE		
Page No. 6 of 9		

5.0 INSPECTION AND TESTS

- 5.1 The manufacturer shall perform all inspection and tests as per the requirements of this specification and the relevant codes, prior to shipment at is works. Such inspection and tests shall be, but not limited to, the following.
- 5.1.1 All flanges and fittings shall be visually inspected.
- 5.1.2 Dimensional check shall be carried out on finished products as per ANSI B 16.5/MSS-SP-44 as applicable for flanges and ANSI B 16.9/MSS-SP-75 as applicable for fittings and as per this specification. Fittings not covered in MSS-SP-75 shall be checked as per Manufacturer's Standard.
- 5.1.3 Chemical composition, mechanical properties shall be checked as per relevant material standards and this specification, for each heat of steel used.
- 5.1.4 The non-destructive inspection shall be carried out as given below:
 - a. All butt and repair welds for welded fittings shall be examined 100% by radiography. Acceptance limits shall be as per API 1104.
 - b. When elbows of size ≥ 18" NB are manufactured, the first elbow of each radius, diameter and wall thickness shall be ultrasonically checked for sufficient wall thickness in areas where a minimum wall thickness is to be expected. This shall be followed by random inspection of one out of every three elbows of the same radius, diameter and wall thickness.
 - c. All finished wrought weld ends shall be 100% ultrasonically inspected for lamination type defects for a distance of 50 mm from the end. Laminations shall not be acceptable.
 - d. Magnetic particle or liquid penetrant examination shall be performed on cold formed butt welding tees with extruded outlets, that are subjected to an extreme fiber elongation of greater than 5%. This test shall be carried out as per the Supplementary Requirement SR 3 of MSS-SP-75.
 - e. Welds which cannot be inspected by radiographic methods shall be checked by ultrasonic or magnetic particle methods. Acceptance criteria shall be as per ASME Section VIII Appendix 12 and Appendix 6 respectively.
- 5.2 Company's Inspector reserves the right to perform stagewise inspection and witness tests, as indicated in Clause 5.1 of this specification at Manufacturer's Work prior to shipment. Manufacture shall give reasonable notice of time and

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

Spec No.	2024A	
Rev.	0	
Discipline PIPELINE		
Page No. 7 of 9		

shall provide without charge reasonable notice of time and shall provide without charge reasonable access and facilities required for inspection, to the Company's Inspector.

Inspection and tests performed/witnessed by Company's Inspector shall in no way relieve the Manufacturer's obligation to perform the required inspection and tests.

6.0 TEST CERTIFICATES

Manufacturer shall furnish the following certificates:

- a. Test certificates relevant to the chemical and mechanical properties of the materials used for manufacture of flanges and fittings and per relevant standards and this specification.
- b. Test Reports on radiography, ultrasonic inspection and magnetic particle examination.
- c. Test reports of heat treatment carried out as per this specification.
- d. Welding procedures and welders qualification reports.
- e. Test certificates for each fitting stating that it is capable of withstanding without leakage a test pressure which results in a hoop stress equivalent to 100% of the specified minimum yield strength for the pipe with which the fittings is to be attached without impairment of serviceability.

7.0 **PAINTING, MARKING AND SHIPMENT**

- 7.1 After all inspection and tests required have been carried out, all external surfaces shall be thoroughly cleaned to remove grease, dust and rust and shall be applied with standard mill coating for protection against corrosion during transit and storage. The coating shall be easily removable in the field. Manufacturer shall furnish the details of paint to be used at the time of bidding.
- 7.2 Ends of all fittings and weld neck flanges shall be suitably protected to avoid any damage during transit. Metallic or high impact plastic bevel protectors shall be provided for fittings and flanges. Flange face shall be suitably protected to avoid any damage during transit.
- 7.3 All fittings and flanges shall be marked as per MSS-SP-25.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

Spec No.	2024A	
Rev.	0	
Discipline PIPELINE		
Page No. 8 of 9		

- 7.4 Package shall be marked legibly with suitable marking ink to indicate the following:
 - a. Manufacturer's Name
 - b. Type of flange(s) and fitting(s)
 - c. Nominal diameter and thickness
 - d. Material

8.0 **DOCUMENTATION**

- 8.1 Manufacturer shall furnish at the time of bidding, the following documents :
 - a. Reference list of similar supplies including, all relevant details viz. Project, Year, Client, Location, Size and Service in the last five years.
 - b. Record of successful proof test of fittings in compliance with the requirement of Clause 9.0 of this specification.
 - c. Brief description of the manufacturing, heat treatment and quality control facilities of the Manufacturer's Works.
 - d. Clause wise list of deviations from this specification, if any.
- 8.2 Within three weeks of placement of order, Manufacturer shall submit four copies of method of manufacture, testing and quality control procedure for raw material and finished product for Company's approval.

Once the approval has been given by Purchaser, any changes in design, material and method of manufacture shall be notified to the Purchaser, whose approval in writing of all changes shall be obtained before the flanges and fittings are manufactured.

- Within four weeks from the approval date, Manufacturer shall submit six copies of all documents as listed in clause 8.2 of this specification.
- Prior to shipment, the Manufacturer shall submit six copies of the test certificates as listed in Clause 6.0 of this specification.
- 8.5 All documents shall be in English Language only.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION
FOR
FITTINGS AND FLANGES FOR
SUBMARINE PIPELINES

Spec No.	2024A	
Rev.	0	
Discipline	PIPELINE	
Page No. 9 of 9		

9.0 MANUFACTURERS' QUALIFICATION

Manufacturers who intend bidding for fittings must possess the records of a successful proof test, in accordance with the provisions of ANSI B 16.9/MSS-SP-75 as applicable. These records shall be submitted at the time of bidding, qualifying the entire range of fittings offered. Failure to submit such records shall cause rejection of the offer.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



RFQ FOR SUBSEA FLANGES PRPP-RFQ-PL-03



ANNEXURE - III

SPEC NO 2024 B FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES (SOUR SERVICE)



FUNCTIONAL SPECIFICATION FOR FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

(SOUR SERVICE)

SPEC. No.	2024 B	
Rev. No.	0	
Discipline: PIPELINE		
Page No : 1 of 10		

FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES (SOUR SERVICE)

OIL AND NATURAL GAS CORPORATION LTD. INDIA

K.P.V		REPRODUCED & RE- ISSUED FOR BID	10	12.1.05	0
B.P.M		REPRODUCED & RE- ISSUED FOR BID	10	10.5.04	0
		ISSUED FOR BID	10		0
BY	APPROV ED	REMARKS	NO. OF PAGES	DATE	REV.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

SPEC. No.	2024 B	
Rev. No.	0	
Discipline:	PIPELINE	
Page No: 2 of 10		

(SOUR SERVICE)

CONTENTS

SECTION	TITLE
1.0	SCOPE
2.0	REFERENCE DOCUMENTS
3.0	MATERIALS
4.0	DESIGN AND CONSTRUCTION
5.0	INSPECTION AND TESTS
6.0	TEST CERTIFICATES
7.0	PAINTING, MARKING AND SHIPMENT
8.0	DOCUMENTATION
9.0	MANUFACTURERS' QUALIFICATIONS

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES (SOUR SERVICE)

SPEC. No.	2024 B	
Rev. No.	0	
Discipline:	PIPELINE	
Page No: 3 of 10		

1.0 **SCOPE**

1.1 This specification covers the minimum requirements for manufacture and supply of carbon steel flanges and fittings to be installed in submarine pipeline systems transporting sour hydrocarbons in liquid or gaseous phase, in compliance to the requirements of NACE Standard MR-01-75 and Spec.2004 A of Piping Material of relevant class.

2.0 **REFERENCE DOCUMENTS**

Reference has been made in this specification to the latest edition of the following codes, standards and specifications:

a. ANSI B 31.8 : Gas Transmission and Distribution Piping

Systems

b. ANSI B 31.4 : Liquid Petroleum Transportation Piping

System.

c. ANSI B 16.5 : Steel Pipe Flanges and Flanged Fittings

d. ANSI B 16.9 : Factory-Made Wrought Steel Butt Welding

Fittings.

e. API 1104 : Specification for Welding Pipeline and Related

Facilities

f. ASME Sec. VIII : Boiler and Pressure Vessel Code Rules for the

Construction of Pressure Vessels.

g. ASME Sec. IX : Boiler and Pressure Vessel Code Welding and

Brazing qualifications.

h. ASTM A 370 : Mechanical Testing of Steel Products.

i. MSS-SP-44 : Steel Pipeline Flanges

j. MSS-SP-75 : Specification for High Test Wrought Welding

Fittings.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

(SOUR	SERVICE)

SPEC. No.	2024 B	
Rev. No.	0	
Discipline:	PIPELINE	
Page No : 4 of 10		

k. DNV-1981 : Det Norske Veritas Rules for Submarine

Pipelines.

1. API 6H : End closures, connectors and swivels

m. NACE TM-02-84 : Test Method Evaluation of Pipeline Steels for

Resistance to Stepwise Cracking.

n. NACE MR-01-75 : Material Requirements : Sulphide Stress

Cracking Resistant Metallic Materials for Oil

Field Equipments.

o. MSS-SP-25 : Standard Marking System for valves, fittings,

flanges and unions.

In case of conflict between the requirements of this specification and the requirement of above referred documents, the requirement of this specification shall govern.

3.0 **MATERIALS**

- 3.1 Materials used in manufacture of flanges and fittings shall be as indicated in the Purchase Requisition or as per the Piping Spec. and Annex-I of Spec.2004.
- Fully killed carbon steel shall be used in the manufacturer of flanges and fittings.
- 3.3(a) Chemical composition of each heat of carbon steel used, on check analysis shall be in accordance with the following requirements:

Element	Product Analysis (%)
Carbon	0.25 Max.
Manganese	As per relevant material code, subject to max. 1.40
Sulphur	0.01 Max.
Phosphorous	0.02 Max.
Nickel	0.20 Max.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES (SOUR SERVICE)

SPEC. No.	2024 B	
Rev. No.	0	
Discipline:	PIPELINE	
Page No: 5 of 10		

3.3(b) Each heat of steel used for the manufacturer of flanges and fittings shall have carbon equivalent not exceeding 0.40, based on check analysis, calculated as per the following formula:

3.4 Charpy V-notch test shall be conducted at 10°C for each heat of steel used in manufacture of flanges and fittings. Test procedure shall conform to ASTM A370 for flanges and MSS-SP-75 for all fittings.

The average absorbed impact energy value of three specimens of base metal, weld metal and HAZ shall be 29 joules. Minimum impact value of any one specimen of the three specimens analysed as above shall not be less than 22 joules.

In addition, the average shear area shall comply the requirements of MSS-SP-75.

- 3.5 Transverse guided weld bend test shall be performed for each lot of welded fittings produced from same heat in accordance with the provisions of MSS-SP-75. The dimension "A" in guided bend test shall not exceed 4.0 times the nominal wall thickness and dimension "B" shall be equal to A + 2t + 3.2 mm. Where t is nominal thickness.
- One transverse weld tensile test shall be conducted on each heat/lot of welded fittings in accordance with the requirements of MSS-SP-75.
- 3.7 The maximum hardness of the base material, weld metal and heat affected zone (HAZ) shall be 248 HV5. Hardness test shall be carried out for each heat of steel used.
- 3.8 Heat treatment shall be carried out on all materials exposed to sour environment as per the requirements of NACE Standard MR-01-75.
- 3.9 Hydrogen Induced Cracking (HIC) test shall be carried out on each heat of carbon steel used. HIC test shall be performed as per NACE Standard TM-02-84. The acceptance criteria for Crack Sensitivity Ratio (CSR) shall be 0.00%.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES

(SOUR SERVICE)

SPEC. No.	2024 B	
Rev. No.	0	
Discipline:	PIPELINE	
Page No : 6 of 10		

4.0 **DESIGN AND CONSTRUCTION**

- 4.1 Flanges such as welding neck flanges and blind flanges shall conform to the requirements of ANSI B 16.5 for sizes ≤ 24" NB (excluding 22" NB) and MSS-SP-44 for 22" NB and 26" NB and above.
- 4.2 Fittings such as tees, elbows and reducers shall be seamless type for sizes \leq 16" NB and shall be either welded or seamless type for sizes \geq 18" NB. Fittings shall conform to MSS-SP-75.
- 4.3 Fittings not covered in MSS-SP-75, like weldolets, sockolets, nippolets, etc. shall be manufactured in accordance with manufacturer's standard.
- Type, face and face finish of flanges shall be as specified in Purchase Requisition.
- 4.5 Stub-in or pipe to pipe connection shall not be used in the manufacture of tees. Tees shall be manufactured by forging or extrusion methods. The longitudinal weld seam shall be kept at 90° from the extrusion. Fittings shall not have any circumferential joints.
- 4.6 All butt weld ends shall be beveled as per ANSI B 16.5/MSS-SP-44 as applicable for flanges and MSS-SP-75 for fittings.
- 4.7 The reinforcement of inside weld seam shall be removed for a distance of 100 mm from each end of the welded fittings.
- 4.8 All welds shall be made by welders and welding procedures qualified in accordance with the provisions of ASME Sec. IX. The procedure qualification shall include impact test for weld/heat affected zone, guided bend test, hardness test and HIC test and shall meet the requirements of clause 3.4, 3.5,3.7 and 3.9 of this specification, respectively.
- 4.9 Repair by welding on flanges and parent metal of the fittings is not allowed. Repair of weld seam by welding shall be carried out by the welders and welding procedures duly qualified as per ASME Section IX and records for each repair shall be maintained. Repair welding procedure qualification shall include all tests which are applicable for regular production welding procedure qualification.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES (SOUR SERVICE)

SPEC. No.	2024 B	
Rev. No.	0	
Discipline:	PIPELINE	
Page No: 7 of 10		

5.0 **INSPECTION AND TESTS**

- 5.1 The manufacturer shall perform all inspection and tests as per the requirements of this specification and the relevant codes, prior to shipment at is works. Such inspection and tests shall be, but not limited to, the following.
- 5.1.1 All flanges and fittings shall be visually inspected.
- 5.1.2 Dimensional check shall be carried out on finished products as per ANSI B 16.5/MSS-SP-44 as applicable for flanges and ANSI B 16.9/ MSS-SP-75 as applicable for fittings and as per this specification. Fittings not covered in MSS-SP-75 shall be checked as per Manufacturer's Standard.
- 5.1.3 Chemical composition, mechanical properties shall be checked as per relevant material standards and this specification, for each heat of steel used.
- 5.1.4 The non-destructive inspection shall be carried out as given below:
 - a. All butt and repair welds for welded fittings shall be examined 100% by radiography. Acceptance limits shall be as per API 1104.
 - b. When elbows of size ≥ 18" NB are manufactured, the first elbow of each radius, diameter and wall thickness shall be ultrasonically checked for sufficient wall thickness in areas where a minimum wall thickness is to be expected. This shall be followed by random inspection of one out of every three elbows of the same radius, diameter and wall thickness.
 - c. All finished wrought weld ends shall be 100% ultrasonically inspected for lamination type defects for a distance of 50 mm from the end. Laminations shall not be acceptable.
 - d. Magnetic particle or liquid penetrant examination shall be performed on cold formed butt welding tees with extruded outlets, that are subjected to an extreme fiber elongation of greater than 5%. This test shall be carried out as per the Supplementary Requirement SR 3 of MSS-SP-75.
 - e. Welds which cannot be inspected by radiographic methods shall be checked by ultrasonic or magnetic particle methods. Acceptance criteria shall be as per ASME Section VIII Appendix 12 and Appendix 6 respectively.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR EITTINGS AND ELANCES FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES (SOUR SERVICE)

SPEC. No.	2024 B	
Rev. No.	0	
Discipline:	PIPELINE	
Page No : 8 of 10		

5.2 Company's Inspector reserves the right to perform stagewise inspection and witness tests, as indicated in Clause 5.1 of this specification at Manufacturer's Work prior to shipment. Manufacturer shall give reasonable notice of time and shall provide without charge reasonable access and facilities required for inspection, to the Company's Inspector.

Inspection and tests performed/witnessed by Company's Inspector shall in no way relieve the Manufacturer's obligation to perform the required inspection and tests.

6.0 TEST CERTIFICATES

Manufacturer shall furnish the following certificates:

- a. Test certificates relevant to the chemical composition and mechanical properties including hardness and HIC test of the materials used for manufacture of flanges and fittings and per relevant standards and this specification.
- b. Test Reports on radiography, ultrasonic inspection and magnetic particle examination.
- c. Test reports of heat treatment carried out as per this specification.
- d. Welding procedures and welders qualification reports.
- e. Test certificates for each fitting stating that it is capable of withstanding without leakage a test pressure which results in a hoop stress equivalent to 100% of the specified minimum yield strength for the pipe with which the fittings is to be attached without impairment of serviceability.

7.0 **PAINTING, MARKING AND SHIPMENT**

7.1 After all inspection and tests required have been carried out, all external surfaces shall be thoroughly cleaned to remove grease, dust and rust and shall be applied with standard mill coating for protection against corrosion during transit and storage. The coating shall be easily removable in the field. Manufacturer shall furnish the details of paint to be used at the time of bidding.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES (SOUR SERVICE)

SPEC. No.	2024 B	
Rev. No.	0	
Discipline:	PIPELINE	
Page No : 9 of 10		

- 7.2 Ends of all fittings and weld neck flanges shall be suitably protected to avoid any damage during transit. Metallic or high impact plastic bevel protectors shall be provided for fittings and flanges. Flange face shall be suitably protected to avoid any damage during transit.
- 7.3 All fittings and flanges shall be marked as per MSS-SP-25.
- 7.4 Package shall be marked legibly with suitable marking ink to indicate the following:
 - a. Manufacturer's Name
 - b. Type of flange(s) and fitting(s)
 - c. Nominal diameter and thickness
 - d. Material

8.0 **DOCUMENTATION**

- 8.1 Manufacturer shall furnish at the time of bidding, the following documents :
 - a. Reference list of similar supplies including, all relevant details viz. Project, Year, Client, Location, Size and Service in the last five years.
 - b. Record of successful proof test of fittings in compliance with the requirement of Clause 9.2 of this specification.
 - c. Brief description of the manufacturing, heat treatment and quality control facilities of the Manufacturer's Works.
 - d. Clausewise list of deviations from this specification, if any.
- 8.2 Within three weeks of placement of order, Manufacturer shall submit four copies of method of manufacture, testing and quality control procedure for raw material and finished product for Company's approval.

Once the approval has been given by Purchaser, any changes in design, material and method of manufacture shall be notified to the Purchaser, whose approval in writing of all changes shall be obtained before the flanges and fittings are manufactured.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003



FUNCTIONAL SPECIFICATION FOR

FITTINGS AND FLANGES FOR SUBMARINE PIPELINES (SOUR SERVICE)

SPEC. No.	2024 B		
Rev. No.	0		
Discipline:	PIPELINE		
Page No · 10 of 10			

- 8.3 Within four weeks from the approval date, Manufacturer shall submit six copies of all documents as listed in clause 8.2 of this specification.
- Prior to shipment, the Manufacturer shall submit six copies of the test certificates as listed in Clause 6.0 of this specification.
- 8.5 All documents shall be in English Language only.

9.0 MANUFACTURERS' QUALIFICATIONS

- 9.1 Manufacturer who intend bidding for flanges and fittings must submit the previous supply record including all relevant details as mentioned in clause 8.1 (a) of this specification, to establish that the flanges and fittings suitable for Sour Service requirements have been successfully supplied in the last five years. Manufacturer who has not supplied the flanges and fittings suitable for Sour Service in the last five years are not acceptable.
- 9.2 Manufacturer who intend bidding for fittings must possess the records of a successful proof test, in accordance with the provisions of ANSI B 16.9/MSS-SP-75 as applicable. These records shall be submitted at the time of bidding, qualifying the entire range of fittings offered. Failure to submit such records shall cause rejection of the offer.

FORMAT No.	Ref. PROCEDURE No.	ISSUE No.	REV. No.	REV. DATE:
ODS/SOF/004B	ODS/SOP/008 TO 015	01	01	15/10/2003