

## NEW MANGALORE PORT TRUST

## **Mechanical Engineering Department**

Panambur, Mangalore – 575 010. Phone: 0824- 2887730/701.

#### No. 20/114/2023-24/EE(M)III-TS (OTM)/Valves

Date: 11/05/2023

To,

The Intended Bidders,

Sir,

**Sub**: Mech. Div. III - OTM - Supply of Various sizes of Butterfly Valves, Motorized Operated Valves (Butterfly and Ball Valves), Non Return Valves - Budgetary Quotation requested - Reg.

Budgetary Quotations are invited for "Supply of Various sizes of Butterfly Valves, Motorized Operated Valves (Butterfly and Ball Valves) and Non Return Valves" as per BOQ, Terms & conditions and Technical Data Sheets (Annexure A to E) as detailed below.

**BILL OF QUANTITIES:** 

SI.	Description of item	Qty. in	Rate in	Amount in
No.		Nos.	Rs.	Rs.
1.	Cast Carbon Steel Butterfly Valve as per the			
	Technical Data Sheet enclosed (Annexure -A)			
a	350 NB	8		
b	250 NB	3		
С	200 NB	8		
2.	Motorized Cast Carbon Steel Butterfly Valve as per			
	the Technical Data Sheet enclosed (Annexure-B)			
a.	250 NB	2		
b.	200 NB	6		
c.	150 NB	6	_	
d.	100 NB	6		•
3.	Motorized Cast Stainless Steel (Three Piece) of 65	6		
	NB Ball Valve Reduced bore as per the Technical			
	Data Sheet enclosed (Annexure -C)			
4.	SS 316 swing Check Valve as per the Technical Data			
	Sheet enclosed (Annexure-D)			
a.	100 NB	3		
b.	80 NB	3		
c.	65 NB	4		
5.	Cast Carbon Steel 350NB Swing type Non Return	8		
	Valve as per the Technical Data Sheet enclosed			
	(Annexure-E)			
	Sub Total			
	GST @ %			
	Grand Total			

Note: The above Valves and NRVs are for sea water applications.



#### Terms and conditions:

- The rate quoted for the Supply of above various sizes of Butterfly Valves, Motorized Operated Valves (Butterfly and Ball Valves) and Non Return Valves are for delivery F.O.R at NMPT Store, Panambur, Mangalore - 575010.
- 2. Supply shall be made within 60 days from the date of supply order.
- 3. The rate quoted shall be firm and valid for 60 days
- 4. The rate quoted shall be inclusive of all taxes, levies and duties etc, as applicable exclusive of GST. GST if any shall be quoted separately.
- 5. Applicable statutory taxes if any will be deducted at source while making the payment.
- 6. The Valves and NRV's shall be manufactured and tested as per the specification in Technical Data Sheets and certified by any one of the Third Party Inspection (TPI) Agency viz. IR Class System and Solutions Pvt. Ltd., ABS Industrial Verification (Pvt.) Ltd., DNV, Bureau Veritas (I) Pvt. Ltd. and Lloyds Inspection Agency Pvt. Ltd. The TPI certificate and manufacturers' Test Certificate shall be enclosed along with the dispatch document.
- The offered product should be with ISI / CE Mark, product should be as per BIS or International Standard and shall have a guarantee of 12 months from the date of supply. The Guarantee Certificate shall accompany with the supplies.
- 8. No Insurance charges will be borne by this Department. The material should be dispatched at contractor's risk.
- 9. The Budgetary offer enclosed in a sealed cover super scribed as "Supply of Various sizes of Butterfly Valves, Motorized Operated Valves (Butterfly and Ball Valves) and Non Return Valves" should reach to the under signed on or before 25/05/2023 at 15:00 Hrs. addressed to the Executive Engineer(M), Mechanical Div-III, Room No.234, 2<sup>nd</sup> Floor, Administrative Office Building, New Mangalore Port Authority, Panambur, Mangalore 575010 or by e-mail (e-Mail ID: krishnamurthy.ds@nmpt.gov.in)

Encl: Technical Data Sheets (Annexure -A to E)

Address for Communication:

Executive Engineer (M)III, Administrative Office Building, 2<sup>nd</sup> Floor, Room No.234, New Mangalore Port Authority, Panambur, Mangalore - 575010.

Mob: 9449700435, Ph: 0824 - 2887730 Email: krishnamurthy.ds@nmpt.gov.in

(Krishnamurthy D S)

कार्यपालक अभियंता, (एम) III
Executive Engineer, (M) III
नव मंगलूर पत्तन प्राधिकरण
New Mangalore Port Authority
पणंबूर, मंगलूर – ५७५०२●
Panambur, Mangalore - 575 010

#### Annexure -A

TECHNICAL DATA SHEET FOR CAST CARBON STEEL BUTTERFLY VALVE

A	Valve Type & size	Butterfly Valve		
		Size 200 NB $\rightarrow$ 8 Nos., 250 NB $\rightarrow$ 3 Nos. and		
		350 NB →8 Nos.		
В	Type & End Connection	Wafer type suitable for Class 150# Flanges as per ASME B 16.5 RF		
C	Manufacturing/Design Std.	BS: 5155		
D	Pressure Rating	PN 16		
E	Test Std.	API 598		
F	Hydraulic Test Pressure	1) Body 24 Kg/Cm <sup>2</sup>		
		2) Seat 17.6 Kg/Cm <sup>2</sup>		
G	Seat Leakage	Tight Shut off (Class VI)		
Н	Mode of Operation	Manual Gear Operated		
I	Media of flow	Sea Water		
J	Material of Construction			
Sr.	Description	Materials		
No.				
01	Body	ASTM A216 Gr. WCB + EPOXY		
02	Disc	ASTM A351 Gr. CF8M		
03	Shaft	SS 316		
04	Bonded Seat	Nitrile		
05	Top Bushing	Polyacetal		
06	Bearing	SS 316 + PTFE		
07	O Ring Shaft	Nitrile		
08	O Ring Plug	Nitrile		
09	Taper Pin	SS 316		
10	Plug	C 15		
11	Bolt & Nut	SS 316		
12	Gear Box	As suitable		
K	Third Party Inspection by any one of the TPI agency listed here:	IR Class System and Solutions Pvt. Ltd., ABS Industrial verification (Pvt.) Ltd., DNV, Bureau Veritas (I) Pvt. Ltd. and Lloyds		
		Inspection Agency Pvt. Ltd.		

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# Annexure -B TECHNICAL DATA SHEET FOR MOTORIZED CAST CARBON STEEL BUTTERFI V VALVE

	DUI	TERFLY VALVE	
A	Valve Type & size	Motorized Butterfly Valve	
		Size 100 NB→6 Nos., 150 NB→6 Nos., 200NB	
		$\rightarrow$ 6 Nos. and 250 NB $\rightarrow$ 2 Nos.	
В	Type & End Connection	Wafer type suitable for Class 150# Flanges as per ASME B 16.5 RF	
С	Manufacturing/Design Std.		
D	Pressure Rating	PN 16	
E	Test Std.	API 598	
F	Hydraulic Test Pressure	<ol> <li>Body 24 Kg/Cm<sup>2</sup></li> <li>Seat 17.6 Kg/Cm<sup>2</sup></li> </ol>	
G	Seat Leakage	Tight Shut off (Class VI)	
Н	Flow direction	Bidirectional	
I	Media of flow	Sea Water	
ī	Material of Construction		
Sr. No.	Description	Materials	
01	Body	ASTM A216 Gr. WCB + EPOXY (Internally	
	25th	coated with epoxy powder and externally	
		with epoxy paint of fire red colour)	
02	Disc	ASTM A351 Gr. CF8M	
03	Shaft	SS 316	
04	Bonded Seat	Nitrile	
05	Top Bushing	Polyacetal	
	Bearing	SS 316 + PTFE	
	O Ring Shaft	Nitrile	
	O Ring Plug	Nitrile	
	Taper Pin	SS 316	
	Plug	C 15	
	Bolt & Nut	SS 316	
12	Gear Box	As suitable	
13	Operation	i) Motorized	
		ii) Provision shall also be provided for manual	
		gear operation through hand wheel.	
14		"415V, 3 Phase, 50Hz, Explosion Proof Watertight to IP 68 and Flameproof to IS 2148 for Gas Group II A and II B, Temperature Class T3 as per IEC, Motor Insulation Class -F.	
		The complete actuator with electrical accessories shall be suitable for EExd Gas Group II A and II B Temperature Class T3 as per IEC".	
K	Third Party Inspection by any one of the TPI agency listed here:	IR Class System and Solutions Pvt. Ltd., ABS Industrial verification (Pvt.) Ltd., DNV, Bureau Veritas (I) Pvt. Ltd. and Lloyds Inspection Agency Pvt. Ltd.	





## Annexure -C TECHNICAL DATA SHEET FOR MOTORIZED CAST STAINLESS STEEL THREE PIECE BALL VALVE REDUCED BORE

	THREE PIECE BALL VALVE REDUCED BORE			
A	Valve Type		Cast Stainless Steel Three Valve Reduced Bore	
В	ASME pressure class	150#		
С	End connection	Flanged end - ANSI B 16.5, Class 150# Raised Face		
D	Manufacturing/Design Std.	BS 5351		
E	Size	65 NB		
F	Quantity	06 Nos.		
G	Testing Std.	BS:6755 Part	t -1	
Н	Media of flow	Sea Water		
I	Material of Construction	***		
Sl.No	Description	Materials		
01	Body	ASTM A 351	I Gr. CF8M	
02	Side Piece	ASTM A 351	Gr. CF8M	
03	Ball	SS AISI - 316		
04	Body Seat	PTFE Teflon		
05	Gasket	PTFE Teflon		
06	Spindle	SS AISI 316		
07	Gland Nut	SS AISI 316		
08	Gland Packing	PTFE Teflon		
09	Body/Bonnet/Cover Stud	SS 316		
10	Body/ Bonnet/Cover nut	SS 316		
11	Seat Ring	PTFE Teflon		
12	Body Pressure	30 Kg/Cm <sup>2</sup>		
13	Seat Pressure	24 Kg / Cm <sup>2</sup>		
14		Current Ration Enclosure: IP ii. Drive Motor 10%, 50Hz iii. Actuator - Miv. Watertight to for Gas Grou	suitable for 3 phase AC, 415V ± ± 5%.  lax. Valve Torque (Nm) – 300  to IP 68 and Flameproof to IS 2148  to II A & II B  c Class T3 as per IEC Motor	
J	Third Party Inspection by any one of the TPI agency listed here:	Industrial ve	as (I) Pvt. Ltd. and Lloyds	





### Annexure -D

## TECHNICAL DATA SHEET FOR 100 NB, 80 NB & 65 NB SS 316 SWING

	CHECK VALVE			
A	Valve Type	SWING CHECK VALVE / NRV		
В	Class	CLASS 150#		
С	End connection	FLANGED TO ANSI B16.5, RF, CLASS 150#		
D	Manufacturing / Design Std.	BS 1868		
E	Size	100 NB	80 NB	65 NB
F	Quantity	03 Nos.	03 Nos.	04 Nos.
G	Media of flow	Sea Water		
Н	Materials of Construction			
1	Body	S.S ASTM A351 CF8M		
2	Cover	S.S ASTM A351 CF8M		
3	Disc	SS. AISI 316		
4	Hinge Bracket	SS ASTM A351 CF8M		
5	Body Seat Facing	SS 316		
6	Disc Seat Facing	SS 316		
7	Hinge Pin	SS AISI 316		
8	Both Side Plug	SS AISI 316		
9	Washer	SS AISI 304		
10	Lock Nut	SS AISI 316		
11	Gasket	Spiral Wound SS 316 with CAF		
12	Stud & Nuts	SS AISI 316		
I	Hyd. Test Pressure	1) Body - 24 Kg / Cm <sup>2</sup> 2) Seat - 16 Kg / Cm <sup>2</sup>		
J	Third Party Inspection by any one of the TPI agency listed here:	IR Class System and Solutions Pvt. Ltd., ABS Industrial verification (Pvt.) Ltd., DNV, Bureau Veritas (I) Pvt. Ltd. and Lloyds Inspection Agency Pvt. Ltd.		

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## Annexure -E

## TECHNICAL DATA SHEET FOR CAST CARBON STEEL 350 NB SWING TYPE NON RETURN VALVE

	NON RETURN VALVE			
Α	Valve Type	SWING CHECK VALVE / NRV		
В	Class	CLASS 150#		
С	End connection	FLANGED TO ANSI B16.5. RF, CLASS		
		150#		
D	Manufacturing / Design Std.	BS 1868		
E	Size	350 NB		
F	Quantity	08 Nos.		
G	Media of flow	Sea Water		
H	Material of Construction			
Sl.	Description	Materials		
No.	2			
01	Body	CS ASTM A216 Gr. WCB (Internally		
		coated with epoxy powder and		
		externally with epoxy paint of fire red colour).		
02	Cover	CS ASTM A 216 GR. WCB		
	Seat Ring	CARBON STEEL with 13% CR.		
	Disc, Wedge, Trim	S.S. 316		
05	Hinge	ASTM A 216 GR. WCB		
06	Hinge Pin	AISI SS 316		
07	Gasket	SPW SS316 + CAF		
08	Bolts & Nuts,	S.S. 316		
09	Washer	S.S. 316		
10	Both side Plug	S.S. 316		
11	Lock Nut	S.S. 316		
I	TEST PRESSURE			
i.	Body Hydro Test Pressure	30 Kg/Cm <sup>2</sup> A		
ii.	Seat Hydro Test Pressure	24 Kg/Cm <sup>2</sup> A		
J	Testing Std.	API 598		
K	Third Party Inspection by any	111 011100 0   0110111 1111111 0 0 1 1 1 1		
	one of the TPI agency listed here:	ABS Industrial verification (Pvt.) Ltd.,		
		DNV, Bureau Veritas (I) Pvt. Ltd. and		
		Lloyds Inspection Agency Pvt. Ltd.		



