

**MARINE DEPARTMENT**

**Bill of Quantity**

**Annual Rate Contract for Renewal of steel plates, painting and other works of various crafts/Tugs of Deendayal Port Authority for 03 years**

Sr.	Description	Qty.	Unit	Rate	Amount
1	Ultrasonic thickness gauging of steel plates and submission of report (two copies)	10000	Points		
2	Renewal of steel plates (old plates to be cropped & renewed) (Plate thickness 6mm to 12mm)	40,000	Kgs		
3	To crop and renew half round steel fender with inside stiffner at 1 mtr distance				
a	Fender Pipe size - 200mm, Thickness as per schedule 40, Make-TATA/JINDAL/ASIAN- For Tugs	15	per meter		
b	Fender Pipe size - 150mm, Thickness as per schedule 40, Make-TATA/JINDAL/ASIAN - For Crafts	50	per meter		
4	Replacement of PVC flooring, 1.5 to 2mm thick	50	m2		
5	Replacement of Glaze tiles flooring	15	m2		
6	Fixing of New key hole Type rubber fender after Removal of old rubber fender, outer 300mm X 300 mm. Steel used shall be paid extra as per <b>item 2. Rubber Fender shall be supplied by Contractor. The make of fender shall be Lion Rubber industries, Trelleborg marine, IRM Offshore, Rane Elastomer, the test certificate also be submitted.</b>	15	per meter		
7	Fixing of New DD Type rubber fender after Removal of old rubber fender, outer 150mm X 100 mm Inner, Hollow-25mm x 25mm. Steel used shall be paid extra as per <b>item 2 Rubber Fender shall be supplied by contractor. The make of fender shall be Lion Rubber industries, Trelleborg marine, IRM Offshore, Rane Elastomer the test certificate also be submitted.</b>	150	per meter		
8	Overhauling of Underwater Main Sea Chest/Main Fi-Fi Pump Valve, Size 6 inch to 10 inch, including cleaning of strainer and removal & refitting of sea chest grating.	12	Nos.		
9	Overhauling of others Underwater Valves & above water valve, Size 2 inch to 3 inch.	70	Nos.		
10	Laying the anchor chain on the floor of the dry dock, freeing D-shackles, anchor chain swivel and Fluke. Painting of anchor, Anchor chain & chain Locker	4	Nos.		
11	Fixing up Zinc Anodes after removing the old/ wasted Anodes. <b>Zinc Anodes shall be supplied by Contractor. The weight of each anode as follow:-</b>				
a	Weight 3 Kgs	60			
b	Weight 5 Kgs	150			
c	Weight 9 Kgs	20			
12	Sandblasting & Painting of underwater area with 4 / 5 coats of paints as per painting scheme approved by paint manufacturer (Jotun/international/Sigma) under guarantee period of 3 years	2100	m2		
13	Sandblasting & Painting of area above water line with 3/4 coats of paints as per painting scheme approved by paint manufacturer (Jotun/international/Sigma) under guarantee period of 1 years	2000	m2		
14	Manual Chipping, hard wire brushing, machine grinding & Painting of inside & outside area of superstructure with 3 coats of paints as per painting scheme approved by paint manufacturer (Jotun/international/Sigma) under guarantee period of 1 years	6000	m2		
15	Fresh water tank, water ballast tank and Fuel Oil tank cleaning. If any chipping & painting work require then rate shall be applicable as mentioned in para 10.	500	m3		
16	All vent heads of Tugs to be overhauled, steel wire net to be renewed. Damaged and rusted parts to be renewed.	50	Nos.		
17	Plumbing job:- renewal of different types of water tap valves (Brass) used in the bath room, wash basin, galley, and toilet	100	Nos.		
18	Renewal of seals of hydraulic cylinder of windlass if required of tug Jyeshta & Krittika.	2	Nos.		
19	Renewal of break liner of windlass if required of tug Jyeshta & Krittika.	2	2 Nos.		
20	Supply & repalcement of flexible hoses, Size: 1 inch dia, length 1m to 1.6 m with end fittings, as & when required. Minimum working Pressure : 250 bar	30	m		

Sr.	Description	Qty.	Unit	Rate	Amount
21	Disconnecting & removing from place, fabricating new pipe, cropping out flanges from old pipes, boring out & welding the same on new pipes. Fitting the pipes in place with new joints/ sealing ring/nuts & Bolts. Specification: - M.S. Pipes/Bends, Seamless, Schedule 40, Make- Tata, Jindal, Asian or equivalent, after fabrication 1 coat of primer and 2 coats of finish paints of DFT- 25 micron each coat, paint shall be applied. The length of the pipe / bends shall be counted as per actual fabricated for fitting in place.				
a	Nominal Bore size : 15mm to 25 mm	250	m		
b	Nominal Bore size : 32mm to 50 mm	100	m		
c	Nominal Bore size : 65mm to 100 mm	75	m		
22	Overhauling of SRP Sea water cooling pumps. The overhauling work require dismantling, cleaning, minor metal filling, machining and renewal of mechanical seals & renewal of bearings. The mechanical seal has to be supplied & fitted as per sample. Capacity of the pump- 28 m3 / hour. Make - Becon Pumps.	2	Nos.		
23	Dismounting of Propeller, Overhauling SRP Lower Gear Box Unit after dismantling. Inspection/cleaning all parts, Renewal of Shaft Liner, Radial Seals, Bearings and worn out Parts. Boxing back the SRP Lower Gear Box Unit with new sealing ring and mounting the propeller. The OEM items shall be supplied by DPA. or shall be paid as per actual if spares are not available with DPA.	2	Nos.		
24	Renewal of glass Fibre glass work 6 mm to 8 mm thickness including cost of labour & materials.	20	m2		
25	Complete Renewal of Monkey deck of Tugs Jyeshta and Krittika. Rates to be inclusive of associated work like removal and refitting of insulating materials (glass wool), removal & refitting of manholes doors, removal & refitting of wooden ply, cleaning the area, removal and refitting of all associated fittings including electrical fittings required	2	nos.		
<b>Total Amount in Figure</b>				0	0

Signature of Contractor

Dy. Conservator  
Deendayal Port Authority