

**Chittagong Dry Dock Limited(CDDL)
Bangladesh Navy**



**SCHEDULE OF BASIC REPAIR PRICES FOR
OCEAN-GOING VESSELS**

East Patenga, Chittagong, Bangladesh
www.cddl.gov.bd

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w.e.f. 10 April 2017

(Tariff was approved by BOD No. 212 dated 10 April 2017)

TARIFF OF CHITTAGONG DRY DOCK LIMITED
BANGLADESH NAVY

1. All prices/rates shown in this schedule are quoted in U.S. Dollars and exclusive of Govt. Taxes and duties which will be charged extra.
2. The rates shown are based on work carried out during normal hours at Shipyard. Sunday to Thursday 0800 - 1700 hrs. Work carried out beyond these hours or on Friday, Saturday and National holiday will be charged at overtime rates.
3. Prices in this schedule shall be applied only for usual merchant vessels. Special types of vessels such as Warship, Barge, Dredger, Tug etc. to be treated separately.
4. For any vessel of registered gross tonnage of less than 60% of DWT, charges will be made as if the gross tonnage were 60% of the Dead Weight.
5. All old materials generated from repair works shall be the shipyard's property except for heavy parts of machinery, propeller and tail shaft (Attention is drawn to shipyard standard conditions of contracts.)
6. In general prices quoted are for repair carried out at our yard premises, it may be necessary to increase prices in respect of work outside the yard.
7. None of the rates quoted allows for removal and replacement of fittings and obstructions in way of repair listed except where it is specially mentioned.
8. Unless alternative credit arrangement have been agreed upon, full payment for work done shall become due on completion of work. Interest at 1.5% per month will be charged on accounts overdue for payment. The Dry Dock reserves the right to request for payment each month the value of work done to date less previous payments on account and the balance on completion of work.
9. For vessels operating on dual tonnage system higher tonnage will apply in computing all charges.
10. Prior to commencement of repair/dry docking, a formal agreement (standard agreement as prepared by Chittagong Dry Dock Limited) is to be signed by the owner/agent of the vessel. For repair of any foreign flag vessel formal agreement shall be signed with local agent, who shall liable in full for all payments.
11. Whilst a vessel is in the yards premises on work shall be done on such vessel other than by the yards duly authorized workman.
12. We reserve the right to alter the rates shown in this schedule in accordance with any future wages fluctuations and variations in the cost of basic materials without further notice.
13. This Tariff does not include Tax. Any Tax imposed by Govt./other agency from time to time is to be added as extra.

SHIP REPAIR TARIFF

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A. GENERAL:

1. DOCKAGE:

Gross Tonnage	First 2 days	Each subsequent days or part of a day
Up to 3000 tons	\$ 1940.25	\$ 388.05
Additional rate per excess ton from 3001 to 7000 tons	@ \$ 0.3582	\$ 0.0995
4000 tons	\$ 2298.45	\$ 487.55
5000 "	\$ 2656.65	\$ 587.05
6000 "	\$ 3014.85	\$ 686.55
7000 "	\$ 3373.05	\$ 786.05
Additional rate per excess ton from 7001 to 13000 tons	@ \$ 0.4179	\$ 0.1194
8000 tons	\$ 3790.95	\$ 905.45
9000 tons	\$ 4208.85	\$ 1024.85
10000 tons	\$ 4626.75	\$ 1144.25
11000 tons	\$ 5044.65	\$ 1263.65
12000 tons	\$ 5462.55	\$ 1383.05
13000 tons	\$ 5880.45	\$ 1502.45
Additional rate per excess ton from 13001 to above	@ \$ 0.4975	\$ 0.1393
14000 tons	\$ 6377.95	\$ 1641.75
15000 tons	\$ 6875.45	\$ 1781.05
16000 tons	\$ 7372.95	\$ 1920.35
17000 tons	\$ 7870.45	\$ 2059.65
18000 tons	\$ 8367.95	\$ 2198.95
19000 tons	\$ 8865.45	\$ 2338.25
20000 tons	\$ 9362.95	\$ 2477.55

Note:

Under special circumstances/emergency situations charge may be up to \$ 12,470.00 per day.

- i. Warship, Barge, Dredger, Tug etc. to be treated separately and the charges to be fixed during via negotiation between CDDL and the parties.
- ii. When the vessel is allowed to Dry Dock with cargo on board, the weight of such cargo shall be added to the gross tonnage of the vessel. Also the weight of total fuel oil, fresh water and ballast water exceeding 500 tons shall be added to the GRT for calculation of Dockage.
- iii. Gross tonnage of open shelter dock vessel and vessel with exempted ballast tanks tonnage shall be increased to corresponding close shelter-deck tonnage and by disregarding the exemption respectively.
- iv. In special case or circumstances, as per the situation, schedule and time, charged per day of any vessel will be decided by CDDL with the negotiation of vessel owner.
- v. First 2(two) days (Calendar days) charges are minimum and fraction of each subsequent days shall be counted as 1(one) full day.
- vi. Docking-undocking charge \$ 2585.01 (for both events inclusive of berth preparation) Tug and Pilotage for docking-undocking will be at owner's cost (to be arranged by owner/agent from Chittagong Port Authority (CPA)). If asked by owner/agent, CDDL may arrange Tug and Pilotage from CPA at owner's/agent's cost adding 30% extra on the bill/charge of CPA.
- vii. No vessel will be docked without formal submission of Pre-docking conditions of the vessel duly signed by the Master of the vessel in the prescribed forms of CDDL (at least one day prior to docking).
- viii. Under special circumstances/emergency situations/Special Type of vessel CDDL may fix the dock rent maximum up to \$ 12,500.00 per day per vessel.

2. MORAGE:

Gross Tonnage	Price per movement (Mooring-Unmooring)
Up to 3,000 tons	\$ 310.44
3,001 - 5,000 "	\$ 336.31
5,001 - 6,000 "	\$ 362.18
6,001 - 7,000 "	\$ 362.18
7,001 - 8,000 "	\$ 362.18
8,001 - 9,000 "	\$ 362.18
9,001 - 10,000 "	\$ 362.18
10,001 - 11,000 "	\$ 439.79
11,001 - 12,000 "	\$ 439.79
12,001 - 13,000 "	\$ 439.79
13,001 - 14,000 "	\$ 439.79
14,001 - 15,000 "	\$ 439.79
15,001 - 16,000 "	\$ 439.79
16,001 - 17,000 "	\$ 439.79
17,001 - 18,000 "	\$ 439.79
18,001 - 19,000 "	\$ 439.79
19,001 - 20,000 "	\$ 439.79

Note:

- i. Charge to be made if provided line handlers on shore to assist vessel under own power on arrival shifting, sailing, docking-undocking.
- ii. Tug hire charges to be at owner's cost.
- iii. Operation/handling of dead ships shall be dealt separately and charged extra.

3. WHARFAGE: (per day or part of a day) Direct berthing to jetty

Gross Tonnage	(A) For vessels under repair by CDDL	(B) For vessel coming for idle berthing, General services for cargo handling.
Up to 3000 tons	\$ 310.44	\$ 388.05
Additional rate per excess ton from 3001 to above tons	\$ 0.0597	\$ 0.0597
4000 tons	\$ 370.14	\$ 447.75
5000 "	\$ 429.84	\$ 507.45
6000 "	\$ 489.54	\$ 567.15
7000 "	\$ 549.24	\$ 626.85
8000 "	\$ 608.94	\$ 686.55
9000 "	\$ 668.64	\$ 746.25
10000 "	\$ 728.34	\$ 805.95
11000 "	\$ 788.04	\$ 865.65
12000 "	\$ 847.74	\$ 925.35
13000 "	\$ 907.44	\$ 985.05
14000 "	\$ 967.14	\$ 1044.75
15000 "	\$ 1026.84	\$ 1104.45
16000 "	\$ 1086.54	\$ 1164.15
17000 "	\$ 1146.24	\$ 1223.85
18000 "	\$ 1205.94	\$ 1283.55
19000 "	\$ 1265.64	\$ 1343.25
20000 "	\$ 1325.34	\$ 1402.95

Note:

- i. Cargo handling (loading/unloading) and carrying out repair by owner/agent at CDDL Jetty is not generally allowed. However, if the jetty is allowed for cargo handling then CPA Tariff Rate will be applicable.
- ii. For berthing alongside already directly moored/berthed vessel charges will be at 50% of the rates shown above.
- iii. Vessel staying more than 3(three) days after completion of repair, Jetty charges for extra days will be charged at rates "B" above (as if for idle berthing/general services/cargo handling).

4. GENERAL SERVICES :

1) Fire precaution (Mandatory at owner's cost)

a) Fire watchman (per man per day)	\$	38.80
b) Fire main line (per line per day)	\$	61.69
c) Connection-disconnection (per line per time)	\$	90.34
d) Gas free inspection by Govt. Chemist (as and when required to ascertain safety and conduct any works) (per tank/time)	\$	25.87
		Minimum
2) Security watchman per day per man (mandatory at owner's cost)	\$	38.80

Note:

1(one) fire watchman, 1(one) fire line & 1(one) security watchman shall be provided mandatorily and charged. In addition for hot works in hazardous area extra fire watchman shall be provided and charged at cost. No. of fire/safety watch shall be decided by Safety Section of Dry dock.

3) Electrical :

a) Shore power supply per unit	\$	0.38 for A.C
	\$	0.42 for D.C
Connection-disconnection per line per time	\$	258.70
b) Temporary lighting on board and in the dock (Mandatory) per day		
Up to 5000 tons GRT	\$	85.57
Above 5000 tons GRT	\$	103.48
c) Electrical heating lamp for motor per lamp per day	\$	10.34
d) Shore telephone (for local calls within Chittagong only) per unit per day (Mandatory) through PABX/Exchange	\$	20.69
Connection-disconnection	\$	90.54
4) Compressed air supply for diesel air compressor per hour or part of hour	\$	15.52
Connection-disconnection	\$	90.54

5) Space rent:

a) On and alongside Jetty within the range of Jetty & Dockside cranes (for repair/inspection/survey/storage etc.)	\$	0.51
		(per sq.ft per month or part of a month) (Occupation period)
b) Any other area (for repair/inspection/survey/storage etc.)	\$	0.39
		(per sq.ft per month or part of a month) (Occupation period)

Note:

As per situation CDDL can increase the space rent charge on tariff rate.

6) Electrical blower services per no. per day

Connection-disconnection	\$	20.69
	\$	25.87

7) Water supply:

a) Fresh water supply per ton	\$	2.06
Connection-disconnection per tank per time	\$	90.44
b) Sea water supply per ton	\$	0.39
Connection-disconnection per tank/time	\$	51.74
c) Cooling water for refrigeration and air conditioning per line/day	\$	103.48
Connection-disconnection per line/time	\$	90.44

8) Garbage disposal per day

	\$	51.74
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9) Cranage:

a) Dock Crane (15 ton/40ton):		
Up to 7 ton (per unit basis)	\$	129.35

For individual weight above 7 ton charge shall be per lift basis as... \$129.35 + @ 41.79 per excess ton or fraction of a ton above 7 ton.

b) Jetty Crane (15 ton/50 ton):		
Up to 7 ton (per unit basis)	\$	129.35

For individual weight above 7 ton charge shall be per lift basis as... \$129.35 + @ 41.79 per excess ton or fraction of a ton above 7 ton.

c) Fork Lifter/Grove Crane (per unit basis)	\$	47.76
d) Side Lifter (per unit basis)	\$	39.80

CPA tariff will be applicable for loading/unloading commercial cargo.

Note:

- i. Per unit means half an hour or part thereof and per lift means weight per individual lift.
- ii. All crane charges shown above are for vessel under repair by CDDL. In case of vessels not under repair by CDDL but taking general services only charges shall be 20% higher.
- iii. As per situation CDDL can increase the crane service charge on tariff rate.

B. CLEANING & PAINTING WORKS :**1. EXTERIOR HULL PAINTING :**

Gross Tonnage	BOTTOM		BOOTTOP		TOP SIDE	
	1 st coat	each extra coat	1 st coat	each extra coat	1 st coat	each extra coat
Upto 2000 tons	\$ 827.84	\$ 662.67	\$ 362.18	\$ 206.96	\$ 543.27	\$ 284.57
2001 - 3000 "	\$ 931.32	\$ 746.25	\$ 388.05	\$ 232.83	\$ 595.01	\$ 336.31
3001 - 5000 "	\$ 1112.41	\$ 889.53	\$ 491.53	\$ 336.31	\$ 698.49	\$ 388.05
5001 - 7000 "	\$ 1394.99	\$ 1116.39	\$ 569.14	\$ 439.79	\$ 853.71	\$ 439.79
7001 - 9000 "	\$ 1705.43	\$ 1365.14	\$ 698.49	\$ 569.14	\$ 1034.8	\$ 517.40
9001 - 12000 "	\$ 2067.61	\$ 1653.69	\$ 827.84	\$ 646.75	\$ 1293.5	\$ 620.88
12001 - 15000 "	\$ 2481.53	\$ 1986.02	\$ 957.19	\$ 827.84	\$ 1550.21	\$ 750.23
15001 - 20000 "	\$ 3102.41	\$ 2397.95	\$ 1343.5	\$ 1190.02	\$ 1808.91	\$ 1034.80

Note:

- i. Includes staging.
- ii. Based on spray application, for roller application 20% extra.
- iii. Paints to be supplied by owner.
- iv. Protectionary measures against paint spillage on Zn-slab, propeller, echo-sounder etc. \$ 155.22 per vessel.
- v. Painting of exposed exterior hull @ \$ 0.61per m²/per coat.
- vi. Fitting and removal of scupper plug @ \$ 10.34per no.

2. MARKS PAINTING :

Gross Tonnage	PRICE PER VESSEL			
	Draft & Plimsoll Marks	Ship & Port Name	Bow Marks	Tank Marks
Up to 2000 tons	\$ 258.70	\$ 103.48	\$ 103.48	\$ 103.48
2001 - 5000 tons	\$ 284.57	\$ 129.35	\$ 117.41	\$ 117.41
5001 - 7000 tons	\$ 310.44	\$ 143.28	\$ 129.35	\$ 129.35
7001 - 9000 tons	\$ 324.37	\$ 155.22	\$ 143.28	\$ 143.28
9001- 12000tons	\$ 336.31	\$ 169.15	\$ 155.22	\$ 155.22
12001 to above	\$ 362.18	\$ 206.96	\$ 169.15	\$ 169.15

Note:

- i. Includes staging.
- ii. Paints to be supplied by owner.
- iii. LTD LINE repainting -- -- \$ 29.85 per letter
- iv. Fabrication and embossing (includes staging) \$ 12.93 per letter
- v. Tug marks (Painting) -- -- \$ 155.22 per vessel
- vi. Tank marks (") -- -- \$ 155.22 per vessel
- vii. Bow marks (") -- -- \$ 155.22 per vessel
- viii. Painting demarking line -- -- \$ 0.99 per running metre
- ix. Other marks painting such as Funnel etc. to be quoted separately.

3. EXTERIOR HULL CLEANING/SURFACE PREPARATION WORKS :

Item	Price per sq. m
Hull cleaning by H.P.W. Jet (above 150 kg)	\$ 2.28
Light scrapping per m ²	\$ 2.58
Hard scrapping/spot chipping	\$ 6.46
Sand blasting	\$ 19.90

Touch-up with owner's paint (per coat)	\$	1.65
Grit blasting	\$	39.80
Hosing down with F.W.	\$	0.77
Washing down normal oil stains with owner's chemicals		
■ Bottom/Boottop	\$	1.55
■ Top side	\$	2.06

Note:

- i. Includes necessary staging.
- ii. Paints to be supplied by owner.
- iii. Sand blasting minimum charge for 100 sq. m to be applied.

C. DRY DOCK WORKS :

1. SEA CHEST & STRAINERS :

Remove gratings, clean sea chest from mud and strainer apply 1(one) coat owner's paint and refit.

Maximum Diametric Size of chest		Price per piece
Upto 150 mm	\$	99.50
151 - 300 "	\$	113.43
301 - 600 "	\$	127.36
601 to above	\$	131.34

Note:

- i. Includes necessary staging.
- ii. Paints to be supplied by owner.
- iii. Repair or renewal not included.
- iv. Renewal of studs, bolt not included.
- v. Renewal of Zinc anodes not included.

2. ANCHOR & ANCHOR CHAIN WORKS :

Gross Tonnage	Range, mark & restore per vessel (P & S)	Opening of joining shackle per no.	Manual cleaning & painting of anchor cable per shot/length
Upto 3000 tons	\$ 620.88	\$ 19.90	\$ 61.69
3001 -5000 "	\$ 724.36	\$ 23.88	\$ 69.65
5001 -7000 "	\$ 827.84	\$ 27.86	\$ 77.61
7001 -9000 "	\$ 931.32	\$ 31.84	\$ 85.57
9001 to above	\$ 1034.80	\$ 35.82	\$ 93.53

Note:

- i. Paints to be supplied by owner.
- ii. Based on port and stbd. side (2) anchors. In case of extra aft anchor and anchor chain, charge will be 50% higher.
- iii. Charges for disconnection and connection at bitter end within chain locker are 20% of range, mark and restore per vessel.
- iv. Charge to exchange ends is 25% of the charge for range, mark and restore per vessel (P & S).
- v. Calibration and submission of inspection report \$ 258.70 per vessel (P & S).
- vi. Cleaning of anchor chain by H.P.W. Jet \$ 25.87 per shot.

3. CHAIN LOCKER WORKS :

Gross Tonnage	Price per vessel (P & S)	
	Manual cleaning	Painting per coat
Upto 3000 tons	\$ 646.75	\$ 322.38
3001 – 5000"	\$ 807.94	\$ 370.14
5001 -7000 "	\$ 969.13	\$ 419.89
7001 -9000 "	\$ 1050.72	\$ 451.73
9001 to above	\$ 1132.31	\$ 483.57

Note:

- i. Removal and refitting of grating to be extra -----\$ 77.61 per locker.

- ii. Removal of mud and muddy water to be extra at -----\$ 64.67 per ton.
- iii. Paints to be supplied by owner.
- iv. Cleaning of mud box to be extra-----\$ 25.87 per locker.
- v. Overhauling of semi rotary hand pump with owner's spares to be-----\$ 39.80 per pump.
- vi. Charges above are for 2 lockers (P&S). For extra chain locker, charges shall be made proportionately.

4. CATHODIC PROTECTION WORKS (OWNER'S SUPPLY)

Approx. weight	Hull anode renewal by welding/bolting	Tank anode renewal by welding
Upto - 5 kg	\$ 20.89	\$ 23.88
Upto - 10 kg	\$ 23.88	\$ 25.87
Upto - 15 kg	\$ 25.87	\$ 27.86
Upto - 20 kg	\$ 28.85	\$ 31.84
Upto - 25 kg	\$ 31.84	\$ 33.83
Upto - 30 kg	\$ 35.82	\$ 36.81

Note:

- i. Includes staging.
- ii. For intermediate size next higher size to be taken.
- iii. Charges above are same for both welded type and bolted-type anodes. However extra charges shall be made for drilling or supply of bolts if required.

D. RUDDER WORKS:

Gross Tonnage	Measurement of pintle clearance per pintle	Repacking rudder stock gland with owners packing	Unshipping of rudder(refit, swing test includes)	Renewal of lignum vitae rate/ pintle.
Up to 3000 tons	\$ 155.22	\$ 155.22	\$ 3363.10	\$ 1711.40
3001 - 5000 "	\$ 181.09	\$ 168.15	\$ 3751.15	\$ 1890.50
5001 - 7000 "	\$ 206.96	\$ 181.09	\$ 4139.20	\$ 2069.60
7001 - 9000 "	\$ 232.83	\$ 206.96	\$ 5174.00	\$ 2378.05
9001 to above	\$ 258.70	\$ 232.83	\$ 6208.80	\$ 2686.50

Note:

- i. Removal of pintle not included. To be charged extra if only removed for inspection of pintle.
- ii. Staging to be \$ 258.7 extra.
- iii. Simplex rudder/hanging/special type of rudder shall be charged 20% extra.
- iv. Removal of access plate not included, removal of access plates charge will be 50% that of measurement of clearance/pintle
- v. Rudder pressure test \$308.45(inclusive of oil coating done simultaneously).
- vi. Dis-connection steering gear jacking of rudder for checking clearance and closing up, 50% of unshipping charge.
- vii. Repairing of pintle to be extra at cost.

E. TANK WORK:

1(a). WATER TANK CLEANING (NORMAL CLEANING) FOR SURVEY:

Item	Price per cubic metre capacity (minimum charge of 50 m3 to be applied).	
	Fresh Water Tank	Ballast Water Tank
Normal ----- Cleaning DBT	\$ 3.88	\$ 4.13
Normal ----- Wing tank, DEEP/peak tank	\$ 3.88	\$ 4.13
Cement washing ----- 1 st coat	\$ 2.06	\$ 2.06
Cement washing ----- 2 nd coat	\$ 1.55	\$ 1.55
Chlorination with fresh water	\$ 2.06	\$ 2.06

Note:

- i. Removal of mud scale remaining water etc. \$ 64.67 per m³ or part thereof to be charged extra.
- ii. Ventilation charges will be extra.
- iii. If the above tanks contain oil/contaminated by oil or oil is transferred to these tanks, in such cases cleaning will be charged as done for oil tank (D.B).

- iv. (a) Normal cleaning for survey includes rough scrapping less than 10% of tank area.
 (b) For tank cleaning after survey, if desired by the owner, for painting/cement washing, extra charges for cleaning shall be made @ 50% of the charge of hard scrapping per sq.m of exterior hull.

1(b). TANK CLEANING (OIL TANK) - Normal cleaning for survey.

Item	Price per m3 capacity			
	Heavy Oil	Lub. Oil	Diesel	Light
	D.B.Tank	Deep	D.B.Tank	Deep
Cleaning	\$ 12.93	\$ 12.93	\$ 10.34	\$ 10.34

Note:

- i. Wiping down with owner's supply chemical to be extra @ \$ 6.47 per ton.
- ii. Normal cleaning for survey includes rough scrapping less than 10% of tank area.
- iii. For tank cleaning after survey if desired by the owner, for painting will be charged extra @ 50% of hard scrapping rate of exterior hull cleaning (rate per m2).
- iv. Bailing, out/removal of remainder oil/sludge/oily sludge, oily water to be extra @ \$129.35 per m3 or part thereof as extra.
- v. For tank cleaning minimum charges of 50 m3 capacity to be applied.

1(c). ENGINE ROOM CLEANING:

- 1) Cleaning of engine room tank top/machinery space (other hand bilge) to be treated separately at cost.
- 2) Cleaning of engine room bilge @ \$ 25.87 per frame space.

1(d). MAN HOLE COVER:

Item	Price
Open and close per piece	\$ 10.34
Renewal of packing per piece	\$ 15.52

Note:

Renewal of M.S. studs to be extra @ \$ 1.29 per stud.

2.TANK TEST:

Item	Price per m ³ capacity.
Tank Hydrostatic test with fresh water	\$ 2.18
Tank Hydraulic test with sea water	\$ 0.39

Note:

Minimum charges of hydrostatic test with fresh water \$ 181.09 and with sea water \$ 129.35 per tank.

3. CARGO HOLDS: Cleaning & painting:

Item	Price
a) Cleaning and painting two coats with owner's paint of holds shell plates and frames excluding removing and refitting of cargo battens and excluding staging, per sq.m	\$ 3.04
b) Ditto including chipping per sq.m	\$ 8.27
c) Cleaning of bilge in holds per frame space	\$ 20.69
d) Chipping of bilge per sq.m	\$ 7.76
e) Charges for removal and refitting of battens in holds are extra.	
f) Charges for staging for cleaning and painting in holds are extra.	

4.BOTTOM PLUG/DRAIN PLUGS :

Item	price per piece
Remove and refit	\$ 12.93
Cementing	\$ 3.58

F. VALVE WORKS:

1. SEA VALVES :Open-up, clean and check for survey in place, grind in seats & lids, paint with owner's paint and close up with new packing and joints of normal type.

Diameter	Price per valve	
	Globe	Gate
Up to 50 mm	\$ 51.74	\$ 61.69
75 mm	\$ 67.26	\$ 85.57
100 "	\$ 93.03	\$ 111.44
125 "	\$ 108.55	\$ 130.34
150 "	\$ 129.25	\$ 155.22
175 "	\$ 149.94	\$ 179.10
200 "	\$ 172.13	\$ 206.96
250 "	\$ 214.92	\$ 258.70
300 "	\$ 258.70	\$ 282.58
350 "	\$ 301.48	\$ 362.18
400 "	\$ 344.27	\$ 413.92
450 "	\$ 386.06	\$ 464.66
500 "	\$ 429.84	\$ 517.40

Note:

- i. Overhauling in shop rate to be 50% extra.
- ii. Overhauling in shop and testing rate to be 100% extra.
- iii. Repair/renewal not included (to be charged at cost).
- iv. Access to work not included.
- v. For intermediate size next higher dia to be applied.
- vi. Testing in place rate to be 50% extra.
- vii. Hydraulic operated valve will be treated on different basis.
- viii. Valve inside pump room, peak tank, cofferdam, cargo holds rate to be 30% extra.
- ix. Renewal with owner's supply valve 80% of overhauling cost.

2.STORM VALVE: Open up, check in place for survey and refit with new lining and joints.

Dia (mm)	Price per valve	
Up to 50 mm	\$	51.74
75 mm	\$	59.70
100 "	\$	69.65
125 "	\$	79.60
150 "	\$	89.55
200 "	\$	103.48

Note:

- i. In case of removal rate to be 200%.
- ii. Repair not included.
- iii. Renewal with owner's supply valve 80% of above overhauling cost.
- iv. For intermediate size, next higher slab is applicable.

3.CARGO VALVE (on deck): Open up, clean grind in place check for survey and refit with new packing joint of normal type.

Dia (mm)	Price per valve	
	Globe	Gate
Upto 50 mm	\$ 55.32	\$ 69.27
75 mm	\$ 71.85	\$ 91.50
100 "	\$ 99.75	\$ 116.31
125"	\$ 116.29	\$ 143.69
150 "	\$ 138.26	\$ 171.61
175 "	\$ 160.23	\$ 190.74
200 "	\$ 184.01	\$ 221.22
250 "	\$ 230.02	\$ 270.34
300 "	\$ 276.53	\$ 324.35

350 "	\$	322.28	\$	378.35
400 "	\$	373.72	\$	434.19
450 "	\$	413.52	\$	485.87
500 "	\$	460.02	\$	506.55

Note:

- i. Testing in place----- 50% extra.
- ii. Overhauling in shop and testing rate to be ----- 100% extra.
- iii. Overhauling in shop----- 50% extra to be charged
- iv. For intermediate size, next higher slab is applicable.
- v. Valve in:
 - Engine room----- 20% extra.
 - Pump room and tank----- 30% extra.
 - Double bottom tank, duct keel --35% extra.
- vi. High pressure valve to be charged:
 - 17 - 40 kg/cm²----- 25% extra.
 - 41 - 60 kg/cm²----- 30% extra.
 - Above 60 kg/cm² -----40% extra.
- vii. Renewal with owners supply valve, 80% of overhauling cost.

4.BUTTERFLY VALVES:

Dia (mm)	Open up, check, clean, repack and reinstall in place	
Upto 100 mm	\$	113.43
150 mm	\$	150.24
200 "	\$	186.06
250 "	\$	224.87
300 "	\$	278.60
350 "	\$	336.31
400 "	\$	392.03
450 "	\$	449.74

Note:

- i. For valves in engine room rate to be 20% extra.
- ii. For valves in tanks, pump room rate to be 30% extra.
- iii. Overhauling in shop rate to be 100% extra (including testing).
- iv. Renewal of seal ring (owner's supply) to be at cost.
- v. Renewal with owner's supply valve 80% of overhauling of cost.

5.NON RETURN VALVES:

Open up, check, clean and close in place

Dia(mm)	Price per valve	
Upto 100 mm	\$	49.75
125 mm	\$	67.66
150 "	\$	80.59
200 "	\$	92.53

Note:

Renewal with owner's supply valve 80% of overhauling cost

G. PLATE WORKS:

1. SHELL DECK PLATE RENEWAL (Flat construction):

Weight/Hull		Basic rate per ton
Less than 1 ton	\$	8358.00
1 - 4.9 tons	\$	7641.60
5 - 9.9 "	\$	7164.00
10 - 19.9 "	\$	6925.20
20 - 49.9 "	\$	6686.40
50 - 99.9 "	\$	6447.60
100 to above	\$	5970.00

Note:

- i. (a) For internal plate renewal works, weight of individual plates will be calculated separately and the increment on Basic Rate will be as follows :
 - (b) The prices given above are valid for quantities above 500 Kg in one continuous strake/plate. For quantities less than 500 Kg in one continuous strake/plate, the increments on Basis Rate will be as follows :
 - Less than 500 kg by 35%
 - Less than 300 kg by 50%
 - Less than 100 kg by 100%
 - Less than 50 kg by 150%
- If plate thickness is less than 12 mm for each mm the price will be increased by 2%.
- ii. Extra Charge:
 - (a) Single curvature plate -----10%
 - (b) Shell plate with double curvature and corrugated plate ---- 20%
 - (c) Coffin plate -----60%
 - (d) Keel plate ----- 20%
 - (e) Internal in hold ----- 10%
 - (f) Internal in tank -----25%
 - (g) Internal in E/R-----20%
 - (h) Internal in peak tank/DBT -----30%
 - (i) Internal in pump room -----25%
 - (j) Bulbous bow and soft nose/stem plating -----70%
 - (k) Corrugated bulkhead ----- 30%
 - (l) Plating in chain locker -----50%
 - (m) Plating in poop/forecastle/tank top/bulkhead -----20%
 - (n) Crop and renewal of bilge keel ----- 30%
 - (o) Crop, fair and refit bilge keel ----- 10%
 - (p) Rudder leading edge ----- 60%
- iii. Striker plate @ \$ 103.381 per spot.
- iv. Fairing in place 50% of renewal price.
- v. Remove for fairing & refit, 80% of renewal price.
- vi. Staging included.
- vii. Weight to be calculated from measurement plus 5% rolling margin.
- viii. Theoretical weight to be calculated considering max. breadth and max. length of each piece involved using specific weight of 7.86.
- ix. Measurement to be taken at greatest length and breadth for tapered and sketch plates.
- x. Removal for access, cleaning, special shoring, non- destructive testing, tank testing, gas free certificate and ventilation are not included.
- xi. Surface treatment and painting of new/disturbed steel not included.
- xii. Special grade steel to be charged extra.
- xiii.
 - a) Doubler plate ----- \$ 5.17 per kg
 - b) Seam re-welding ----- \$ 41.29 per metre
 - c) Gouging for seam welding ----- \$ 15.52 per metre
 - d) Removal of replacement of keel block for plating ----- \$ 129.35 per no.
 - e) Erection and removal of bilge block/extra block for plating - \$ 155.22 per no.

2. GAUGING WORKS IN THE DOCK:

Price per spot \$ 5.97

Note:

- i. Gauging at DDJ 50% extra.
- ii. Gauging outside Dry dock to be treated separately on offer basis.
- iii. Minimum charge to be applied for 50 spots.
- iv. Gauging cost at any internal part will be 50% extra.

H. SHAFTING WORKS:

1. WEAR DOWN MEASUREMENT:

Type	Price per shaft
Conventional	\$ 51.74
Simplex	\$ 77.61

2. GUARD RING REMOVAL AND REFITTING:

Shaft dia (mm) on sleeve	Price per shaft
Upto 250 mm	\$ 155.08
Additional rate per excess mm dia (from 251mm to 600mm)	\$ 0.2587
350 mm	\$ 180.95
450 "	\$ 206.82
600"	\$ 245.62

3. REPACK STERN GLAND OWNERS PACKING:

Shaft dia (mm) on sleeve	Price per shaft
Upto 250 mm	\$ 155.08
Additional rate per excess mm dia (from 251mm to 600mm)	\$ 0.2587
350 mm	\$ 180.95
450"	\$ 206.82
600 "	\$ 245.62

4. TAIL SHAFT WITHDRAWAL (CONVENTIONAL TYPE):

Removal of rope guard, propeller, draw tail shaft for inspection, reinstall tailshaft, propeller andrepacking stern gland with owner's packing.

Shaft dia (mm) on sleeve	Price per shaft
Upto 250 mm	\$ 3876.64
Additional rate per excess mm dia (from 251mm to 600 mm)	\$ 18.6065 per mm
300 mm	\$ 4806.96
400 "	\$ 6667.61
500 mm	\$ 8528.26
600 "	\$ 10388.90

Note:

- i. Repair of guard ring extra.
- ii. New making of rope guard to be charged as steel plate renewal rates.
- iii. Magnaflux and Dye-penetration test not included.
- iv. Oil lubricating type to be charged 20% extra (for shaft withdrawal only).
- v. Skimming of tail shaft at cost.
- vi. Alignment check and rectification at cost.
- vii. CPP shaft type to be charged 50% extra (for shaft withdrawal only).
- viii. Outside staging to be @ \$ 258.70 per shaft.
- ix. Rudder removal not included.
- x. Unshipping and refitting of propeller 25% of shaft withdrawal (conventional type).
- xi. Filling up of tallow extra.
- xii. Cleaning and calibration \$ 258.70 per shaft.
- xiii. Removal of each intermediate shaft 35% of shaft withdrawal and refitting charge.
- xiv. Any supply items to be extra.

5. RENEW STERN TUBE LIGNUM VITAE BUSH (per shaft):

Shaft dia (mm) on sleeve	AFT Bottom	AFT Top & Bottom	AFT & FRD Complete
Upto 250 mm	\$ 2686.50	\$ 4029.75	\$ 5970.00
Additional rate per excess mm dia (from 251 mm to 600 mm)	\$ 19.90	\$ 19.90	\$ 19.90
300 mm	\$ 3681.50	\$ 5024.75	\$ 6965.00
400 "	\$ 5671.50	\$ 7014.75	\$ 8955.00
500 "	\$ 7661.50	\$ 9004.75	\$ 10945.00
600 "	\$ 9651.50	\$ 10994.80	\$ 12935.00

Note:

- i. Access works extra.
- ii. Alignment check and rectification charges extra.
- iii. Renewal of simplex seal \$ 2587.00 per vessel with owner's spares considering single screw.
- iv. In case of only FWD. Bush charges will be 50% of AFT bush rate.

6. OPENING OF INTERMEDIATE SHAFT BEARING FOR SURVEY (upper half only):

Shaft dia (mm)	Price per bearing
Up to 250 mm	\$ 129.35
" 350 "	\$ 179.10
" 450 "	\$ 244.77
" 550 "	\$ 282.58

Note:

Clearance measurement by lead wire to be extra.

7. PROPELLER BLADE POLISHING:

Gross Tonnage	Price per Shaft	
	In Place	In Shop
Upto - 5000	\$ 258.70	\$ 232.83
" - 10000	\$ 308.45	\$ 258.70
10001 to above	\$ 360.19	\$ 309.44

Note:

Staging not included.

8. NON-DESTRUCTIVE TEST:

Description	Price per propeller	Price per shaft
Magnaflux Test:		
i) On board	\$ 283.57	\$ 308.45
ii) At Shop	\$ 258.70	\$ 258.70
Dye-Penetration Test:		
i) On board	\$ 283.57	\$ 308.45
ii) At shop	\$ 258.70	\$ 258.70

Note:

Dye penetration/magnaflux test other than propeller/tail shaft will be treated separately.

9. PIPE WORKS: Straight Steel Pipes:

Dia (mm)	Renewal per meter/part of a meter (with owner's supply materials)
0.5" dia - 12.00 mm	\$ 24.87
1" " - 25.40 "	\$ 29.85
1.5" " - 40.00 "	\$ 34.82
2" " - 50.00 "	\$ 41.79
2.5" " - 65.00 "	\$ 48.75
3" " - 75.00 "	\$ 68.65

4" - 100.00 "	\$	75.62
5" - 125.00 "	\$	86.56
6" " - 150.00 "	\$	91.54
8" " - 200.00"	\$	99.50
10" " - 250.00 "	\$	Cost Plus
12" " - 300.00 "	\$	-do-
14" " - 350.00 "	\$	-do-
16" " - 400.00 "	\$	-do-

Note:

- i. Remove and reinstallation charges to be -----50% extra.
- ii. For pipe in tank and pump room, duck keel and DBT rate to be ----- 130% extra.
- iii. For pipe in E/R to be ----- 120%extra.
- iv. For pipe in accommodation room rate to be ----- 105%extra.
- v. Staging not included.
- vi. Exclude renewal of flanges.
- vii. Bolt, nut, metallic gasket to be extra.
- viii. For bend 50% of renewal price to be added.
- ix. Clamp testing, painting, insulation, removals for access, staging excluded.
- x. Repair/fairing to be extra.

10. TURBO CHARGER BBC: Turbochargers to open up for inspection, clean and take measurements, cleaning of filters and renewal of ball bearing (owner's supply).

VTR - 400	\$	1033.76
VTR - 500	\$	1292.20
VTR - 630	\$	1550.64
VTR - 750	\$	1809.08

Note:

For MAN& Napier 20% additional.
