



INDEX

<u>Subject</u>	<u>Page</u>
B. Suez Shipyard Facilities	01
C. Specific Remarks	02
D. Dock Tariff	07
E. Towage / Pilotage / Gas free Certificates	10
F Tank Cleaning	11
G. Services	12
H. Hull Treatment	14
I. Sea suction and Discharge Valves	17
J. Anchors, Chains and Chain Lockers	19
K. Hull Cathodic Protection	20
L. Rudder	21
M. Tail shaft, Stern tube and Propeller	22
N. Steel work	24
O. Pipe work	26
P. Main Diesel Engines	28
Q. Main Turbines	29
R. Main Boilers	30
S. Condensers and Heat Exchangers	31
T. Pumps	33
U. Electric Motors	34
V. General Condition for Repair	



B. SUEZ SHIPYARD FACILITIES

FLOATING DOCK

Main dimensions

Length overall	302.00 m
Length of the pontoon	270.00 m
Breadth overall	71.08 m
Breadth between the rails of the gantry crane	70.50 m
Outer breadth between the side walls on the outside	66.50 m
Inner width between the side walls on the inside	56.50 m
Clear width between the fenders	55.00 m
Height	21.31 m
Height of the pontoon on the centre line	6.00 m
Height of the blocks	2.00 m
Draught over the blocks	9.20 m
Round of beam pontoon deck	0.05 m
Freeboard pontoon deck on the centre line	0.50 m
Freeboard upper deck	4.10 m
Height between upper deck and tween deck	3.20 m
Height between safety deck and tween deck	3.50 m

GRAVING DOCK

Length	140 m
Breadth	22 m
Docking capacity	
Equipped with 2 cranes	10 / 15 tonnes

SYNCROLIFT

Lifting capacity	900 tonnes
Platform length	58 m
Platform width	16 m
Number of berths	5



C. SPECIFIC REMARKS

1. All prices are given in US Dollars.
2. The prices shown in this schedule are for guidance only. Firm price quotations for specific repairs will be submitted on request. Prices are subject to adjustment in the event of changes in the extra rate, wage fluctuations and variations in the cost of materials, without notice.
3. All rates quoted are, where not mentioned otherwise and where applicable, excluding removals for access, stagings, cleaning, rustfreeing, testing, painting, etc.
4. Prices are based on carrying out the work involved when vessel is inside the Yard's premises during normal working hours
5. The execution of the work will be subject to our: **“General Conditions for Repair, Maintenance and Reconstruction of Vessels”**.
6. Yard's working hours:

Saturdays to Thursdays:

0730 hrs. to 1200 hrs.

1230 hrs. to 1430 hrs.

Fridays off

Overtime will depend on the work load and its nature.



7. Work orders shall be submitted to the contractor directly by the Owner or through the concerned agency signed and in conformity with the items of general terms of repair, together with a cheque covering the advance payment assigned for repair must be submitted before docking.
8. If, in course of the work, the Owner requires any modification in the work orders, or there is necessity for performing additional works required by the supervisory bodies or due to other requirements, a written work order must be submitted and the Owner must pay all cost of such work and the repair period will be changed accordingly.
9. Any and all works and services for and with relation to ship repairs shall be undertaken by and performed in accordance with the General Conditions for Repair, Maintenance and Reconstruction of Vessels unless otherwise agreed in writing between the Owner and the Contractor.
10. An agreed date of docking shall be subject to adjustment due to unexpected underwater damages or defects being found on other ships laying in the docks of which immediate and continuous repair is deemed indispensable for the vessel's safety in the opinion of the Contractor and the Contractor reserves the right to give docking priority to ships in distress without claim against Contractor for any expenses or right of retention.
11. The Owner shall keep the ship safe for docking and mooring. Also he has to carry out the Yard's instructions concerning the longitudinal inclination of the ship and the handling of the mooring ropes.
12. In case the unit needs any special arrangements for docking, Owner shall pay the expenses of such arrangements as well as the rent of the dock during conducting the preparations.
13. A penalty of \$750 as minimum will be charged in case of pollution of the docks due to oil as well as sludge etc. from the ship for cleaning the docks. Additional penalties will be claimed by the Contractor in case harbour and or sea water is polluted.
14. Piloting the ship into and out of the dock shall be performed by the captain of the harbour.



Security and safety measures of the docks

1. Any ship carrying explosives, acids, oil or any dangerous cargo and inflammatory materials shall not be docked or repaired. Tankers are to be empty of gasses and must submit a gas free certificate emphasising the possibility of using flames during repair of tanks, engines, pumping room and any other contaminated parts.
2. While in dock, it is strictly prohibited to operate propellers or change the weight or do anything that may change the longitudinal and latitudinal balance of the ship (trim). In case of necessity the captain must obtain approval from the Yard, prior to adjustment and provided he returns the ship back to it's original docking condition prior to undocking.
3. Owner is bound to the shipyard's regulations in so far as the safety of the docks and ships are concerned, in case of breaking such rules, the Yard reserves the right to impose a penalty for such violation.
4. The owner is fully responsible for the insurance of the ship her crew, equipment, passengers (if any) and goods on board against all risks including fire.
5. While the ship is docked or moored, the Captain has to take necessary precautions to prevent fire and keep the fire fighting equipment proper and ready.
6. Once the ship is under repair along the berth, the Captain is responsible for it's mooring and it's fender for keeping it safe. The Yard is not responsible for any damage that arises due to improper mooring and bad weather. The Owner has to pay costs of any repair to the berth due to any damages resulting from such damages.
7. Photographing the site where the vessel is repaired/placed is prohibited without permission from the concerned authorities.
8. The ship shall be supplied with electric current, since it is not allowed to operate the ship's generators, but in case of necessity a permission must be obtained from the Yard.



9. It is prohibited to do the following:
- fumigation inside the Yard
 - bunkering
 - discharge any waste, oil or any elements contaminated with oil.
 - using drain pipes outside the ship during painting
10. The Contractor is not responsible for any loss or damage to the vessel or to the cargo on board or of any private belongings of the Owner or his crew members at any time and under any circumstances.
11. The Owner is responsible for the death or injury of employees or passengers on board the vessel in cause of work. Any claims or demands in this respect is also the responsibility of the Owner.
12. The Captain of the ship shall be bound to carry out all the Yard's administrative rules and instructions while the ship is under repair.

Computation of the work value



1. Works carried out beyond normal working hours or on Fridays and public holidays will be charged extra overtime rates accordingly.
2. All prices are given in our tariff on the basis that repairs are carried out within Yard premises, repair quay, transportation is excluded.
3. Upon completion of work, the Owner has to sign the work statements and pay the related bills before the ship leaves the Yard. The Yard reserves the right to request the Owner to pay the bill of work that has already been executed without waiting for the completion of the whole work.
5. The Yard has the right to request the customer to increase the advance payment if the volume and value of work is larger than referred to in the work order.
6. In case the Owner disapproves of the value of any bill, he has to submit a letter of guarantee to the Yard issued from one of the Egyptian banks covering the value of the bill till an agreement is reached or else the ship shall be retained.

Terms of payment

50% advance payment

50% before vessel leaves the Yard unless an agreement has been concluded between the Owner and Yard stating otherwise.

D. DOCK TARIFF

Dock dues are calculated in US dollars as follows:



Tariff for 1st and last day each or part thereof
Incl. docking / undocking
L X B X 1.00

Tariff for following days or part
thereof , per day
L X B X 0.50

Vessel with cargo :

US\$ 0.50 per ton cargo weight

\$ 0.25 per ton cargo weight

Floating Dock \$3,000

\$1,500

Graving Dock \$ 800

\$ 400

L (length overall in meters) X B (breadth extreme in meters) to be taken from the latest publication of Lloyd's Register of shipping or the Register of the classification society ,where the vessel is classed.

Conditions pertaining to the docking of ships:

1. Dock dues are charged from the time of the vessel's arrival entering the dock until the time of her leaving the dock, parts of days will be charged as whole days.
2. Fitting of special shoring, keel and/or bilge blocks, alterations in the existing bedding of keel blocks and/or other special provisions to be made will be charged additionally. Period of engaging the dock during making above described arrangements will be charged according to tariff for following days.
3. For docking and undocking on a Friday or official holidays, an additional charge of 50% for overtime will be invoiced and 30% extra for working overtime on normal days.
4. The dock dues are net and no cost for tugs, pilots, boat men and or crews are included.
5. In the event of vessels to be docked with cargo, no responsibility whatsoever can be accepted by the shipyard for damage that might be caused either to the ship or to her cargo and/or the dock resulting from or as a consequence of the vessel being loaded, either completely or partly.



6. In case the vessel needs more than 15 Laying days, deduction of 10% will be applied for the days more than 15 days.

Syncrolift

- Docking and undocking 8 US\$ / meter of L.O.A.
 - Subsequent lay day 3 US\$ / meter of L.O.A.
7. A special tariff will be charged when a vessel of a special type or with an abnormal list and trim has to be docked.
 8. Unless expressly otherwise agreed upon in writing “The general Conditions for Repair, Maintenance and Reconstruction of Vessels”, will in all cases be applicable.

Remarks

1. Any fraction of one lay day of docked ship to be counted as one fully lay day and docking period less than two days shall be charged as two days.



2. The rate prices are based on work carried out during normal hours, docking and undocking beyond these normal hours, Fridays and public holidays will accordingly be charged extra rates for overtime.
3. In case of vessel is allowed to be docked with cargo on board the cargo shall be added to vessel's gross tonnage and extra charges shall be payable.
4. In case of vessel's docking is for inspection only, 100% extra charge is applied.
5. When the vessel needs special arrangement for docking, every day of the arrangement will be charged as subsequent lay day for the ship in addition to the cost of the arrangements itself.
6. If it is required to remove any keel blocks or side blocks additional cost is:
US\$ 50 / per each block removal for vessel with gross tonnage less than 1000 ton and 75\$ per each block for vessel more than 1000 ton.
7.

Cleaning syncrolift tracks	150 US\$
Cleaning dry dock before undocking	350 US\$
Cleaning floating dock before undocking	650 US\$



E. GASFREE CERTIFICATES

Gas free certificates per one

		<u>Initial</u>	<u>Following</u>
a.	<u>Tankers</u>		
	Up to 20,000 DWT	185	100
	From 20,000 to 100,000 DWT	225	120
	From 100,000 to 200,000 DWT	265	140
	Above 200,000	300	160
b.	<u>LNG / LPG</u>		
	Up to 5,000 DWT	by Owner	110
	Above 5,000 DWT	by Owner	175

Above prices do not include transportation of the Chemist to and from Anchorage.



F. TANK CLEANING

Fresh & Salt Water tanks

	Charge per Metric ton Capacity in U.S.D	
	Salt	Fresh
Cleaning deep tank	5	3
Cleaning double bottom tank	5	3
Cleaning peak tanks	5	3
Cement wash one coat	-	2

Bunker and lubricating oil tanks

Steaming, cleaning, wiping and removing cleaning residual as follows:

Type of oil	Tank position	Price in US\$ / ton Tank capacity in metric ton
Diesel oil	Deep tank	6.00 / mt.
Diesel oil	Daily service tank	6.00 / mt.
Diesel oil	Double bottom tank	7.50 / mt.
Diesel oil	Wing tank	6.00 / mt.
Heavy fuel	Deep tank	7.50 / mt.
Heavy fuel	Daily service tank	7.50 / mt.
Heavy fuel	Double bottom tank	9.00 / mt.
Heavy fuel	Wing tank	7.50 / mt.
Lubricating oil	Double bottom tank	7.50 / mt.
	Cofferdam	9.00 / mt.

Remarks

- 1- Wiping down of tank with use of chemical or solvent additional charge of 6\$ / m ton of tank capacity.
- 2 - Minimum charge is 20 ton capacity.
- 3 - Scaffolding inside tanks 10% extra charge.
- 4 - Expenses incurred for cleaning and disposal of sludge will be charged extra.
- 5 - Ventilation for gas freeing is 25\$ / ventilator / day.
- 6 - Engine room spaces cleaning 6 US\$ / m³.
- 7 - Removal & refitting of manhole covers 85 U.S.D / Each
- 8 - Removal & refitting of bottom plugs 8 U.S.D / Each
- 9- Fuel and oil tanks emptying :
 - Pumping out 5 U.S.D / Ton
 - Pump connection & disconnection 150 U.S.D
- 10-Residual removal :
 - Fresh, salt water tanks 16 U.S.D / Ton
 - Fuel or lub. Oil tanks 40 U.S.D /Ton



G.SERVICES

			U.S.D
1.		<u>Fire precaution</u>	
	a.	Line connection & disconnection	60/time
	b.	Keeping line under pressure per day	10
	c.	Watch man assistance, per man, per day	60
2.		<u>Shore power (380V/50Hz) (440V/60Hz)</u>	
	a.	Shore connection and disconnection	60/time
	b.	Supply of electric current, per kWh	0.20
3.		<u>Hire of quay</u>	
	a.	Lay day	0.2 from subsequent day
4.		<u>Cooling water supply</u>	
	a.	Each connection and disconnection	60/time
	b.	Supply per day	35
5.		<u>Fresh water supply</u>	
	a.	Line connection and disconnection	60/time
	b.	From Yard's main, per ton	3
	C	Supply by barge	As per agreement
6.		<u>Compressed air supply</u>	
	a.	Connection and disconnection	60/time
		Supply per day	25
7.		<u>Cranes</u>	
	a.	Dock crane per hour	50
	b.	9 ton mobile crane per hour	20
	c.	25 ton mobile crane per hour	25
	d.	30 ton mobile crane per hour	40
	e.	65 ton mobile crane per hour	60
	f.	6 ton forklift per hour	35
	g.	150 ton gantry crane per hour	100
		(If not interfering with Yard's programme)	
8.		<u>Garbage removal</u>	
		Per day	35
9.		<u>Telephone</u>	
	a.	Calls	At cost



10.		<u>Bottom plugs</u>	
	a.	Removing and refitting, per each	8
	b.	Per each, covered with cement	10
11.		<u>Scrubber discharges</u>	
		Fitting and removing wooden plugs with stand-off pipes, each	15
12.		<u>Ballast water supply</u>	
	a.	Line connection & disconnection	60/time
	b.	Supply per ton	0.5
13.		<u>Pumping out bilges</u>	
	a.	Pump connection & disconnection	150
	b.	Pumping out, per ton	5
	c.	Disposal of oily bilge water incl. container, per ton	40
		(min. charge 10 ton)	
14.		<u>Sewage discharge line</u>	
		Connecting and disconnecting on completion, each	60/time
15.		<u>Sludge removal</u>	
		Digging out deposits (sludge) in tanks, incl. disposal:	
		0-500 tons per ton	290
		> 500 tons per ton	280
16.		Motor boat service per hour	60
17		Diver per hour	75



H.HULL TREATMENT

Hull cleaning

	Description	Charges/ M ² U.S.D
a.	Hosing down with fresh water	0.40
b.	HP water jet	0.62
c.	Light scraping to remove normal sea fouling	0.80
d.	Hard scraping	1.2
	Hard scraping for internals	1.24
e.	Rotary wire brush	6.00
f.	Wash down oil stains with chemicals	2.4
G	Hand hammering for side shells & decks	2.4
	Hand hammering for internal spaces	4.00
h.	Sand weep	4.00
i.	Sandblast - grade SA1	6.00
j.	Sandblast - grade SA2	7.00
k.	Sandblast - grade SA 2.5	8.00
l.	Painting per coat	0.5
	Painting per coat for internals	1.00

Remarks

- 1- Paints owner supply.
- 2- Touch up will be charged 25% extra, Min area 10% of total area.
- 3- Spot sand blasting (min10% of total area) extra charge 25%.
- 4- Scaffolding :
 - * For vertical bottom and boot topping extra charge 5%.
 - * For top side extra charge 10%.
 - * For boats, area above plimsoll mark extra charge 5%.

Tank Treatment



Description	Price/m2
	U.S.D
Hand Scraping	2
Hand Hammering	4.5
H.P. Fresh water washing include. Drying	2
Sandblasting	15
Sand sweeping	8
Painting per coat	1

Remarks :

- Blasting of cargo hold a 40% of blasting rates.
- Spot blasting additional 20%.
- Removals for access, protection, covering and staging additional cost.
- Tank test (on owner's request) / tank 100 U.S.D
- Scaffolding inside tanks additional 10%.

Names, Draft Marks, Home Port, Freeboard Marks, etc.

Repainting with one coat of Owner's paint, including access.

		Vessel gross tonnage				
		Up to 1000	2000	5000	15000	Over 15000
a.	Ships name and home port	100	125	150	250	300
b.	Repaint draft & plimsoll marks	60	80	100	200	350
c.	Company name	100	125	150	250	300

Remarks

Prices are based on the assumption:

1. - Paints are Owner supply.
2. - Manufacture and welding of new draught marks. 10 U.S.D / letter

Sea chest



<i>Gross Tonnages</i>	<i>Motor vessels for one sea chest U.S.D</i>
<i>Up to 1000</i>	<i>30</i>
<i>2000</i>	<i>40</i>
<i>5000</i>	<i>50</i>
<i>10000</i>	<i>80</i>
<i>15000</i>	<i>100</i>
<i>20000</i>	<i>120</i>
<i>30000</i>	<i>160</i>
<i>Above 30000</i>	<i>180</i>

Notes :

- 1- - For steam vessels extra charge 20%.
- 2- - Repair and renewals excluded.
- 3- - Welding of lugs 4 U.S.D/piece.
- 4- - Scaffolding if necessary extra charge 5%.

I. SEA SUCTION AND DISCHARGE VALVES

Open up, cleaning, grinding and repack in place:

Valve diam. Inch	Globe, angle	Charges in U.S.D
------------------	--------------	------------------



	and non return valves	Gate Valves	Butterfly Valves
Up to1	25	35	50
2	35	40	60
3	50	60	75
4	65	80	100
5	80	100	120
6	90	105	140
7	100	120	150
8	115	130	160
9	130	150	200
10	150	160	220
12	170	180	235
14	180	210	290
16	200	220	310
18	230	240	335
20	260	350	470
22	310	400	530
24	360	450	600
26	585	603	729
28	634	666	801
30	670	702	864
32	720	756	945
36	810	855	1152
40	918	967	1440
44	1044	1089	1530

Remarks

1. When valve is removed to shop, price is increased 30%.
2. Repair, renewal and access work excluded.
3. Dredger gate valves 50% additional charge.
4. Staging 5% extra charge if necessary.
5. Valves in pump room 30% extra.
6. Valves in cofferdams and tanks 20% extra.
7. Spare parts owner supply.
8. 50% reduction of butterfly charge will be applicable in case of cleaning & inspection of butterfly valves through sea chests.



J. ANCHORS, CHAINS AND CHAIN LOCKERS

- a) Range anchor cables & reboarding
- b) Cleaning & painting
- c) Calibration of both chains and report readings.
- d) Link pins fasting by welding per each (min. 10 nos).
- e) Disconnect end at chain lockers, exchange first shot and reconnect.
- f) Chain locker cleaning & painting (Two Coats).

Gross Tonnage	(a) U.S.D	(b) U.S.D	(c) U.S.D	(d) U.S.D	(e) U.S.D	(f) U.S.D
Up To 500	110	110	40	3	210	110
1000	145	145	50	3.5	250	135
2000	200	200	65	5	320	180
5000	235	250	75	6	380	210
10000	270	280	85	7	480	235
15000	345	295	90	8	560	250
20000	390	310	95	10	640	295
30000	430	345	105	12	740	325
Above 30000	As per agreement					

Notes :

- 1- - Paint owner supply.
- 2- - Removal from dock bottom, repair of shackles and anchor will be charged extra.
- 3- - Price based on two anchors (one on each side).
- 4- - Removal of grating and floor plates for chain locker are exuded.
- 5- - Removal of mud from chain locker additional 16 U.S.D / ton.
- 6- - Pumping out existing water from chain lockers if required U.S.D 3/ton
- Pumping connection & disconnection U.S.D 150



K.HULL CATHODIC PROTECTION

Renewing hull anodes, Owner's supply.

- Fitting on outside hull – zinc and sea chests	
Clamping	1.5 US\$ / kg
Welding	1.0 US\$ / kg
- Fitting zinc anodes inside tanks	
Clamping	2.0 US\$ / kg
Welding	1.5 US\$ / kg

Remarks

1. Owner supply anodes - price based on normal type.
2. Scaffolding excluded.
3. Access work excluded.
4. Fitting in tanks - price based on min. 100 anodes / tank.
5. Zinc anodes – Owner supply or as agreement



L. RUDDER

Gross Tonnages	Charges in U.S. Dollar			
	Pintle Clearance/ bearing	Repack Rudder gland (Owner's packing)	Disconnect steering gear sock up	Unship rudder in dock for examin.
Up to 500	40	65	320	400
1000	50	80	400	500
2000	80	100	600	1000
5000	100	150	800	1500
10000	120	200	950	2200
20000	180	280	1450	2900
25000	210	320	1800	3600
50000	302	302	4110	Case by case
100000	382	382	5790	Case by case
Above 100000	533	533	7200	Case by case

Notes :

- 1- Removal and refitting of closing plate if necessary 100 U.S.D. / piece
- 2- Drawing rudder pintle 200% of pintle clearance cost (not including removal and refitting of the closing plate).
- 3- Any machining or repairs will be extra charge.
- 4- Scaffolding 5% extra charge if necessary.
- 5- In case of unship the rudder to allow for withdrawal of propeller or propeller shaft additional charge of 40% of unshipping cost will be charged.



M.TAILSHAFT, STERNTUBE AND PROPELLER.

Shaft diam inch	Charges in U.S.D						
	Clearance / Bearing	Withdraw refit for survey	Crack inspect.	Stern gland repack	Propeller light polishing	Simplex Overhauling with owner's spares	
						Normal type Including shaft withdraw	Split
Up to 2.5	43	820	43	85	56	1000	600
4	50	960	50	100	65	1250	660
6	60	1200	60	120	80	1560	720
8	80	1500	80	160	100	1950	900
10	100	1800	100	200	125	2350	1080
12	150	2000	100	250	150	2600	1200
13	150	2200	100	250	175	2860	1320
14	150	2500	100	250	200	3250	1500
15	200	2800	100	300	220	3640	1680
16	200	3000	100	300	240	3900	1800
17	200	3500	100	300	260	4550	2100
18	250	4000	100	350	280	5200	2400
19	250	4500	100	350	300	5850	2700
20	250	5000	100	350	320	6500	3000
21	280	5500	100	400	340	7150	3300
22	280	6000	100	400	360	7800	3600
23	280	6500	100	400	380	8450	3900
24	300	7000	100	450	400	9100	4300

Notes:

- (1) For oil lubrication shaft (excluding CPP) extra charge 25%
- (2) Removal of second intermediate shaft 50% extra charge of tail shaft withdrawal.



- (3) Gland packing Owner's supply
- (4) CPP to be charged extra 50%
- (5) Rope guard removal and refitting 5% extra charge of tail shaft withdraw.
- (6) Over hauling of the oil seal unit excluded.
- (7) For in between size the rate of the nearest higher shaft size will apply.
- (8) Renewal of inner and outer bush excluded.
- (9) Extra charge for lignum vitae bush to be 40\$ per Kg .
- (10) Alignment checks and rectifications excluded.
- (11) Repair or machining will be extra charge.
- (12) Scaffolding 5% extra charge if necessary.
- (13) Cost for lowering of propeller if needed will be as per agreement.

N.B. :

In case scaffolding are used for more than one job. The extra charge will be based on the highest job cost.

N. STEEL WORK



Steel plates

- Shell plate renewal :
Flat rate 2400\$ /ton
 - Off fair and refit price to be 70% of it's renewal.
 - Fairing in place extra charge 50% of renewal.
 - Above charge assume steel in one location.
 - Size to be based on max dimensions of length and breadth.
 - Specific gravity to be calculated 8 gr/cm³.
 - Weight of steel to be calculated, from measurements plus 3% for wastage.
 - For steel renewals less than one ton each location to be calculated as follows:
 - * 300 + 2.4 (Weight of steel in kg) U.S.D.
 - Additional charges to be added for the above prices as follows:
 - + 10% for plates less than 10 mm.
 - + 5% for bottom shell plating.
 - + 10% for keel plates.
 - + 10% for tank top plating.
 - + 20% for stem plates.
 - + 30% for stern plating.
 - + 90% for bulbous bow and soft nose.
 - + Corrugated bulkheads 30% extra.
 - + 15% for all internals in way of renewed plates according to plates position.
 - + 20% for renewal inside peak tank, cofferdams, E.R. and chain locker
 - + 10% for renewal inside peak tanks , engine room & chain lockers.
 - +20% for renewal inside double bottom tanks.
 - + 20% for high tensile steel.
- Vee out and rewelding of seams / butts



Dia Inch	Charges in U.S. Dollar					
	Renewal / m Run	Pend	Tee	Welding of flange & nipple per one pipe	Clamps	Joints bolts per one unit pipe
Up to 0.5	12	4	14	4	10	10
0.75	12	5	16	5	10	10
1	14	6	18	6	10	14
1.25	16	10	23	7	12	14
1.5	28	14	27	8	16	14
2	32	16	32	10	20	16
2.5	36	18	35	11	22	18
3	42	20	44	13	24	20
4	45	30	55	18	26	20
5	80	47	80	30	30	22
6	90	60	115	40	40	80
8	125	145	180	50	45	80
10	280	210	360	85	50	80
12	320	240	400	140	60	80
Above 12	Per agreements					

Notes :

- 1- - Copper pipes extra charge 75%.
- 2- - Min length is based on one meter/pipe.
- 3- - Pipes in engine room, pump room, double bottom , cargo tanks, extra charge 20%.
- 4- - Removal and refit on board 40% of renewal.
- 5- - High pressure pipes as per agreement.
- 6- - Removal for burning and testing and refit 60% of renewal.
- 7- - Charges based on renewal of pipes up to schedule 40.
- 8- - In case of using any owner supply materials or reuse any part, charges will be reduced by 40% for the concerning parts.
- 9- - Renewal of branch without tee connection will be considered as normal pipe with min. length of 0.5 meter.
- 10 - Staging, clamp, insulation removals for access are excluded.
- 11 - Additional 30% will be charge for schedule 80.



P. DIESEL ENGINES

I - Drawing out Piston For Inspection :

Cylinder Bore In m. m.	Charges per Piston U.S.D	
	Normal Type	Cross head Type
Up to 450	800	900
550	1000	1100
650	1100	1200
750	1200	1300
850	1300	1400
950	1400	1500
Above 950	1500	1600

II – Withdraw and refit Cylinder Liner :

- Assume piston already removed

Cylinder Bore In m. m.	Charges U.S.D
Up to 450	650
550	750
650	850
750	950
850	1050
950	1150
Above 950	1250

III – Main Engine Bearings :

Open up for inspection and refit

Cylinder Bore In m. m.	Charges in U.S. Dollar		
	Cross head bearing (Ford & Aft)	Bottom end bearing	Main bearing (Top Half)
Up to 450	350	225	225
550	400	250	300
650	450	275	350
750	500	300	400
850	550	325	450
950	600	350	500

Notes :

- 1- - Overhaul and repairs of piston stuffing box. Cylinder cover and mounting excluded.
- 2- - Lapping machining of cylinder liner landing surfaces excluded.
- 3- - Taking lead wire clearances and necessary adjustments excluded.
- 4- - Re-metaling excluded.



R. MAIN BOILERS

I – Water Tube Boilers :

Remove access, clean, open up drums and headers for inspection and re-close.

Working pressure Kg / cm ²	Charges U.S.D.
Up to 20	1500
40	2000
Above 40	2500

Notes :

- 1- Manhole gaskets, owner supply.
- 2- Chemical cleaning excluded.
- 3- Staging 5% extra charge.
- 4- Any repairs excluded.
- 5- Spreading of water pipes (pipes vessel supply) additional changes will be as following
 - * 1st pipe to 10th pipe 70\$ / pipe
 - * From 11th pipe and over 15\$ / pipe

II – Boiler Valves :

* Open up, clean, grind in close up with new packing:

Valve Diam. In Inches	Charges U.S.D.
1	50
2	58
3	65
4	90
5	105
6	120
7	135
8	150

Notes :

- 1- Any renewals or repairs are excluded.
- 2- Safety valves to be charged as follow :
 - * Single seat 200\$
 - * Double seat 300\$



!!! – Condensers :

Remove doors , clean up tubes , test , clean doors paint and close up.

Shaft Horse Power	Charges U.S.D.
5000	700
10000	1200
20000	1850

Notes :

- 1- - Any repairs are excluded.
- 2- - Water for testing extra charge.



T. PUMPS (CENTRIFUGAL / HORIZONTAL)

- a. Open up in place, clean, survey, renew worn parts with Owner's spares, take clearances and close.
- b. Remove impeller, transport to shop and back in place.
- c. Dynamically balancing of impeller.

Capacity m ³ / hr	Charges in U.S.D		
	A	B	C
Up to 50	300	180	130
75	420	240	150
100	540	300	180
150	660	420	200

Notes :

- 1- - Cargo and Vertical pump 10% extra.
- 2- - If the pump removed to workshop charges will be increased by 20%.
- 3- - Any repairs or machining will be extra charge.
- 4- - Capacity more than 150m³ /hr by agreement.
- 5- - In case of checking the alignment without laser, charges will be decreased by 40% of charged of item "B".
- 6-



U.ELECTRIC WORKS

I – Generators

- Open up end covers, cleaning, varnish, heating and box up.

Size K.V.	Charges In U.S.D	
	A.C	D.C
50	175	+ 35 %
75	230	
100	290	
150	350	
200	400	
250	475	
300	520	
400	580	
600	640	
800	665	
1000	815	

Notes :

- 1- Transportation to work shops add 30%
- 2- Exciters excluded.
- 3- Rewinding will be extra charge.
- 4- Any other repairs are excluded.
- 5- Sizes more than 1000 K.V. per agreement.
- 6- For intermediate size interpolation will be applied.



II - MOTORS :

- Remove to shop, open up , clean , varnish , testing , reinstall.

Size HP.	Charges In U.S.D	
	A.C	D.C
Up to 2	50	+ 20 %
5	65	
10	80	
15	115	
25	130	
50	160	
100	200	

Notes :

- 1- Rewinding as per agreement.
- 2- Any other repairs excluded.
- 3- Accommodation fan motors add 30%.
- 4- Engine room ventilation fan motors add 50%.
- 5- Size more 100 HP. Per agreement.

III – Switch Boards (Up to 600 V) :

Rating in AMP	Charges In U.S.D	
	Maintenance	Insulation Resistance test
Up to 1000	750	130
1001 – 2000	1400	220
2001 – 4000	2700	325

Notes :

- 1- Maintenance , mean , cleaning and charging defected electric parts.
- 2- Spare parts owner supply.
- 3- More rating as per agreement.



IV – Miscellaneous Electric Works :

The following works can be done by yard owner's spares and will be charged case by case as per agreement :

- Repair and readjust alarm and protraction system for main engine and aux. Engine.
- Repair and readjust fire alarm system.
- Repair and charge general lighting.
- Repair galley equipment.