SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 1 /32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

DO D. 150 D. 1

To Don 100, Dona Queur

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line Amount
1100	BERTH PREPARATION, DOCKING & UNDOCKING:-	16,000.00
	Berth prepared, docked the vessel in floating dock and later undocked.	
	As per our quotation EM 15760, item E	
1101	DOCK HIRE, WHARFAGE CHARGES & SERVICES:-	309,060.00
	Dockhire/wharfage charges including the services provided during docking period.	
	Berthing crews provided at the time of arrival/undocking etc. Fire and safety watch watch provided. Galley garbage skip provided. Sea water cooling line connected and disconnected. Overboard line connected and disconnected Shore power line connected on 07.08.2021 and disconnected on 14.09.2021	
	Duration of stay at Shipyard: 22.06.2021 to 01.10.2021	
	QRs 3030 per day x 102 days = QRs 309,060.00	
	Based on our quotation EM 15760, item F	
1102	OVERBOARD DISCHARGE :-	
	Overboard discharge pipe provided.	
	Incl in job no 1101	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 2 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021 EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Description	Line Amount
SERVICE OF 120 TON CRANE:-	9,280.00
Service of 120 Ton crane from outside subcontractor provided for shifting Auxilary engine/client arranged works.	
QRs 580 per hour x 16 hours = QRs 9,280.00	
Rate as per purchase agreement signed between MSM and shipyard.	
THICKNESS MEASUREMENT:-	1,650.00
Carried out UT gauging - 150 spots	
MPI TEST:-	350.00
MPI Test carried out for Lifting pad eyes.	
As per our quotation EM 15760, item no 7.08	
SERVICE OF CRANE AND RIGGERS:-	16,990.00
Service of crane and riggers as requested by client.	
Forklift: QRs 350 per hours x 1 hours = QRs 350.00 Crane: QRs 580 per hours x 12 hours = QRs 6,960.00	
Rigger/Scaffolder NT : QRs 80 per hour x 86 hours = QRs 6,880.00 Rigger/Scaffolder OT : QRs 100 per hour x 28 hours = QRs 2,800.00	
	SERVICE OF 120 TON CRANE:- Service of 120 Ton crane from outside subcontractor provided for shifting Auxilary engine/client arranged works. QRS 580 per hour x 16 hours =QRS 9,280.00 Rate as per purchase agreement signed between MSM and shipyard. THICKNESS MEASUREMENT:- Carried out UT gauging - 150 spots MPI TEST:- MPI Test carried out for Lifting pad eyes. As per our quotation EM 15760, item no 7.08 SERVICE OF CRANE AND RIGGERS:- Service of crane and riggers as requested by client. Forklift: QRS 350 per hours x 1 hours = QRS 350.00 Crane: QRS 580 per hours x 12 hours = QRS 6,960.00 Rigger/Scaffolder NT: QRS 80 per hour x 86 hours = QRS 6,880.00 Rigger/Scaffolder OT: QRS 100 per hour x 28 hours = QRS

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 3 /32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line Amount
1160	NDT ON MAIN ENGINE CYLINDER HEAD :-	
	Not done.	
1161	PROPELLER BLADES DP TEST :-	
	Incl in job no 2504.	
1162	INSULATION WORKS:-	3,540.00
	Carried out insulation works by specialist subcontractor on main engine exhaust pipe port side.	
1163	CALIBRATION OF BOW AND STERN THRUSTER PARTS:-	3,300.00
	Calibration and dyecheck of thrusters. Bow thruster - 2nos Stern thruster - 1 nos	
	As per our quotation EM 15760 J , item 2	
1164	DIRTY OIL DISPOSAL:-	6,600.00
	Yard provided dirty oil tank - 4 nos 10.3 m3 dirty oil collected and disposed.	
	Based on our quotation EM 15760, item Q	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 4 /32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

1200	CHAIN LOCKERS:-	
	Job cancelled by Client	
1201	SEA CHEST:-	
	Incl in job no 1202	
1202	SURFACE PREPARATION:-	202,170.00
	Under water area approx. 2145 sq. m. treated and painted as follows:	
	Hard barnacles full scrape and cleaning (100%) H.P.F.W jet washing with fresh water Full Grit blast SA 1.0 100% (under water area) H.P.F.W washing with fresh water to remove the dust & Slats from blasted surface B119Applied one full coat primer (Jotamastic 80 alu redtone) Applied with one coat full of sealer (safe gurd UNI plum)Applied two full coats of anti fouling (sea force active plus light red and dark red)	
	Top side area preparartion:-	
	Top side area including surface area of bulwark approx. 800 sq. m. treated and painted as follows:	
	H.P.F.W jet washing with fresh water spot blasted in way for rusted area (approx. 20 % of the area) Spot blasted 20% of area H.P.F.W washing with fresh water to remove the dust & Slats from blasted surface B119	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 5 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description

Line Amount

Applied with first touch up coat (30%) (Jota mastic 80 alu)Applied with second touch up coat (30%) (Hard top Xp orange)Applied one Full coat of Topcoat with owner recommended colour shade (Hard Top XP orange)
Protection covering all sensitive items with masking tape.
Disposal of used grit/garnet/waste water which mixed with ferros, paint, oil and chemical, collection, transportation and safe disposal as per Qatar safety envionment regulation in Mesaieed, total 38 ton.

Hull markings done as per specification. (all names and drafts marks, tanks marking applied 2 coats of white)

Notes:All paint composition, thinners and tool cleaners supplied by client.

QRs 202,170.00

Based on our quotation EM 15760, item no 4

1350 ANCHORS & CHAINS:-

7,500.00

Ranging out for examination and later re-stowing. Cleaning by H.P. jet washedCalibrating and recording and report submitted
Marking shots (white and Red)

Note: All paint composition, thinners and tool cleaners

supplied by client.

Based on our quotation EM 15760, item no 2.01

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 6 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description

Line Amount

1400 TAILSHAFT / PROPELLER:-

83,875.00

Following work carried out under supervision of client arranged specialist:-

Port & Stbd. tail shafts withdrawn for Special Survey Port and stbd. rope guards to be opened, removed and poker gauge readings to be taken and recorded. Port and stbd. CPP blades to be opened, and shifted to workshop. Blades to be skimmed, if required, to remove any grooving on seal surfaces. Both inner and outer shafts seals to be opened and released. Both shaft's couplings opened; pitch shaft disconnected and fluid coupling removed from shaft by oil injection. Both shafts to be withdrawn and set up stand. Both A bracket bearing clearance to be recorded.Port and stbd. pitch head opened. Pull push rods disconnected and pitch heads to be shifted to workshop. Both pitch heads dismantled, cleaned and overhauled with owner's supplied spare and assistance of maker's specialist. Seal assembly shifted to workshop, dismantled and cleaned. Both side inner and outer liners to be set up on machine and liners to be skimmed to remove groving. Seal assembly reassembled with owner's supplied seal repair kit and shifted to vessel Stern tube and shaft fully cleaned and calibrated. Pitch head to be shifted to vessel, refitted in position and pull?push rod to be connected. Port & stbd. tailshafts to be refitted in position. coupling to be remounted to correct position by oil injection and pitch rods to be refitted.

Tailshaft to be coupled with gearbox, inner and outer seals to be set up and bolted with stern tube. Removed blades to be refitted in position and blades mounting bolts to be locked using SS round bar and welded in position. Final poker gauge reading to be taken, recorded. Seal space to be filled with oil in the presence of Chief Engineer. Vessel to be advised to fill stern tube oil and leak to be tested on completion. Propeller pitch operation to be tried out and zero pitch to be

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 7 /32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line	Amount
	confirmed.Rope guard to be refitted as original.		
	Based on our quotation EM 15760, item no 9.01		
1401	BOW THRUSTER NO.1 TOP SHAFT SEAL:-		
	Incl in job no 9103		
1402	STERN THRUSTER TOP SHAFT SEAL:-		
	Incl in job no 9103		
1403	STERN TUBE ARRANGEMENT:-		
	Incl in job no 1400		
1404	VALVES:-	19,	615.00
	Scope of work for below valves: Opening up hand operated valve for in workshop overhaul by disconnecting and removing cover, spindle and gland, cleaning all exposed parts, light hand scraping, checking bedding, pressure testing, painting internal exposed areas and reassembling with new cover joint and repacking gland with conventional soft packing.		
	MAIN SEA CHEST SERVICE PORT, E/R, TYPE : GATE VALVE SIZE : 350 A, Qty - 1 no MAIN SEA CHEST SERVICE STBD, E/R, TYPE : GATE VALVE SIZE : 350 A, Qty - 1 no MAIN SEA CHEST SERVICE CENTRE, E/R, TYPE : BUTTERFLY VALVE SIZE		

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

: 4771687



Telex : 4206 DH Cable : "NAVIGATION" Doha Bank A/c:QNB Main Branch P.O.Box 1000, Doha - Qatar Swift Code : QNBAQAQA QAR A/C No. 0013-000309-060 USD A/C No. 0013-000309-061

Page: 8 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description: M.V."HALUL-60"

Job No

Description

Line Amount

: 350 A, Qty - 1 no

RENEWAL OF FOLLOWING OWNER SUPPLIED VALVES:

- 2 INCH (DN 50) VALVE
- 1. Emergency Fire pump suction valve
- 4 INCH (DN 100) VALVE
- STBY emergency sea water suction valve from main sea chest
- Fire & GS pump sea water suction valve from main sea chest
- 3. Bilges pump seawater suction valve from main sea chest
- 4. Ballast pump seawater suction valve from main sea chest
- 5 INCH (DN 125) VALVE
- 1. Aft Peak tank filling valve at Ballast manifold
- 2. 1 PORT tank filling valve at Ballast manifold
- 1 STBD tank filling valve at Ballast manifold
- 2 Cen tank suction valve at Ballast manifold 4.
- Ballast manifold common filling valve
- 2 Cen Fresh water tank valve 6.
- 7. 3 PORT Fresh water tank valve
- 3 STBD Fresh water tank valve 8 .
- 4 PORT Fresh water tank valve
- 4 STBD Fresh water tank valve 10.
- Fresh water common manifold filling valve
- PME sea water cooling pump discharge valve

As per our quotation EM 15760 , item no 17

1405 RUDDER REMOVE & REFIT:- 6,600.00

Rudder (port and stbd) removed for access and refitted on location after completed the propeller work. Witnessed by client.

QRs 6,600.00

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060

USD A/C No. 0013-000309-061

Page: 9 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1 W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description

Line Amount

As per client instruction, Steering Room port and stbd sensor support and rudder gauge support fabricated by yard. Additional job.

MS plate 1" 1200mm sch40-01 no

MS Plate 200mmX40mmX6mm-01 no MS Plate 2220mmX160mmX-2no Drill hole 8mm-8nos

Drill hole 6mm -9nos Cutting grinding and welding as per the sample

As per our quotation EM 15760 E.

1406 RUDDER STOCK BUSH CLEARANCE :-

1,440.00

Check and record pintle and rudder stock bush clearances (port stbd) Witness by Client and Yard ${\tt QC}$

As per our quotation EM 15760 G, item no 3

1407 RUDDER THORDON TUBE MACHINING AND INSTALLATION:-

4,850.00

Carried out machining of 2 nos of thordon bushes supplied by client and installed.

STBD and PORT pintle bush HSNG 02 nos thordon bush machined as per client supplied calculation chart. (OD $252.15\,\mathrm{mm}$, ID 218.50 and long $227.2\,\mathrm{mm}$)

1409 RUDDER REMOVE / RFIT:-

Incl in job no 1405

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 10 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line Amount
1800	HULL ANODES:-	16,900.00
	Renewal/Manfacture of zinc anodes 17 pcs (Type A-33B) & 100 pcs (Type B12E) Weight 3.3kg each.	
	Renewal/Manfacture of zinc anodes $52Pcs$ (Type A-64B) - Weight 6.4kg, per piece.	
	QRs 100 per pc x 169 pcs =QRs 16,900.00	
	Notes: Anode owner supplied.	
1801	Job cancelled.	
1802	Job cancelled.	
1803	Job cancelled.	
1804	AHU ROOM CUT OUT :-	13,520.00
	Service of fabricator/welder provided to work as instructed by client for below AHU Room Modifications. Prepare opening by cut and remove approx 1.5 mtr x 1.5 mtr area, Grind the area smoothly. Necessary coaming prepared and installed. AHU door to modified as per client instruction. Exact dimensions has to be taken by fabricator and verified with C/E prior job execution. Additional:- Service of electrician provide for blower works	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 11 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1 W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line Amount
1805	FABRICATION OF ROPE GUARD :-	7,720.00
	Shift into the work shop and fabricated as per sample with 8mm plate, cutting, rolling, fitup and welding done. Zinc anode bush machined, drill and tapping done and welded on rope guard - 4 nos.Rope cutter fit-up and weld - 04 nos. blasting and priming done and installation done on vessel.	
	QRs 3,860 X 2 nos = QRs 7,720.00	
	As per our quotation EM 15760 E, item no 2	
1806	PINTLE HOUSING BUFFING:-	3,840.00
	Port and Stbd side rudder pintle housing buffing carried out.	
	QRs 1,920 per side x 2 sides = QRs 3,840.00	
1807	MODIFICATION OF ANCHOR CHAIN:-	2,350.00
	Anchor chain modification carried out as per client request. Removed 6 length from port side and added 3 length from stbd.	
1808	FABRICATION OF ROPE GUARD:-	
	Incl in 1805	
1809	FABRICATION OF FIFI PUMP PROTECTION COVER:-	2,950.00
	Fabricated the FIFI pump Protection cover at gland packing area (P&S).	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

: 4771687



Telex : 4206 DH Cable : "NAVIGATION" Doha Bank A/c:QNB Main Branch P.O.Box 1000, Doha - Qatar Swift Code: QNBAQAQA QAR A/C No. 0013-000309-060 USD A/C No. 0013-000309-061

Page: 12 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No	Description	Line Amount
	Aluminum plate size:150mm x 1000mm x 3mm01 No Aluminum Plate Size:50mm x 1200mm x 3mm01 No Aluminum $1/2$ " Pipe - 50mm long with one side thread - 02 nos bending, rolling and aluminum welding done and fix in ship.	
2200	WOODEN PLANK RENEWAL:-	8,500.00
	Required 50 Numbers of wooden sheath to be changed L 236.5 cm x 14.2 cm x 6.0 cm : QRs 6000.00 Carried out plaining of 50 nos wood.: QRs 2500.00	
	Based on our quotation EM 15760, 16.09	
2201	Incl in job no 2200.	
2400	SEWAGE TANK CLEANING:-	
	Job carried out by ship crew.	
2401	MUD TANK 4 NOS - 416 M3:-	83,700.00
	Carry out cleaning and painting of mud tanks - 4 nos, total volume - 416 $\mathrm{m3}$	
	Erecting manhole around securing using scaffolding material and installation access ladder and later removal: QRs 400.00	
	Gas free test and tank ventilation carried out and certificate issued: QRs 1,400.00	
	Erection and removal of scaffolding in 4 mud tanks: QRs	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 13 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description: M.V."HALUL-60"

Job No Description

Line Amount

23,800.00

HP jet washing and pump out, cleaned Power tool on rusty areas, remaining area hand scrap and H.P washing. 4 tanks \times 416 m3. Pump out of water from tank and cleaned Inspected by all the tanks : QRs 32,400.00

Pump out water from tank: QRs 1,100.00

Applied one coat t/up (Hempadur 85671) off white x 4 tanks: QRs 2,450 x 4 tanks = QRs 9,800.00

Applied one full coat (Hempadur 85671) off white x 4 tanks. QRs $2450 \times 4 \text{ tanks} = \text{QRs } 9,800.00$

Provide ventilation fan during preparation period for painting works : QRs 5000.00

As per our quotation EM 15760 A rev , item 1

2500 THORDON BUSH MACHINING:-

1,800.00

Incl in job no 1407

2501 REEFER CONDENSER END COVER :-

900.00

02 nos reefer condenser end cover repaired, Removed 03 nos seized fitting from cover retap the 06 nos thread hole, manufactured new brass fitting 02 nos with 1" BSP thread other end for hose connection diameter 32mm.another 04 nos with 3/4" BSP thread and other end hose connection for diameter 32mm.

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 14 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No	Description	Line Amount
2502	FABRICATION OF SPANNER :-	10,510.00
	01 nos Fabricated special spanner to open the bow thruster as per sample nut supplied by client representative from MS material.(yard material): QRs 1,750.00	
	Manufactured below items: spanner: 02 nos fixing plates: 04 nos propeller shaft: 01 nos lock nut: 01 nos hex nut: 01 nos Used S 235 JR material as informed by client. QRs 8,760.00 (Quoted)	
2503	RESLEEVING OF END COVERS - STERN THRUSTER:-	5,500.00
	02 nos stern thruster DE and NDE cover worn out bearing area repaired with resleeving. enlarged damaged area, manufactured new sleeve, inserted with 0.04mm interference fit, secured with grub screw and final machined according to new bearing.	
	Based on our quotation EM 15760 J, item no 3	
2504	PROPELLER BLADE REPAIR:-	3,230.00
	02 nos blade P-2 and S-6 blade damaged tip area repaired with weld and grind match the profile before repair and after repair DP checked by QC.	
	QRs 2,880 (Repair) + QRs 350 (DP) = QRs 3,230.00	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

: 4771687



Telex : 4206 DH Cable : "NAVIGATION" Doha Bank A/c:QNB Main Branch P.O.Box 1000, Doha - Qatar Swift Code: QNBAQAQA QAR A/C No. 0013-000309-060 USD A/C No. 0013-000309-061

Page: 15 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No	Description	Line Amount
2506	THRUSTER SKIMMING:-	1,500.00
	04 nos thruster blade seal area skim off as per client rep. instruction.	
	As per our quotation EM 15760 K, item no1	
2507	ALTERNATOR # 2 NDE COVER BEARING AREA REPAIR -	1,950.00
	Alternator # 2 NDE cover damaged bearing area repaired with resleeving. Enlarge the bore, fabricated new new sleeve from Grey cast iron, inserted with interference fit 0.04mm, secured with SS grub screw and final machined as per new bearing OD.	
	As per our quotation EM 15760 F, item no 1	
2508	MODIFICATION OF ALUMINIUM ANODES:-	3,680.00
	Fabricated 12 no's small anode for rudder as per sample from client supplied material. Approximate 70-75 no's hull anodes(client material) bolt hole enlarged and maintain the center distance 160mm.	
2509	BT # 2 NDE BEARING COVER RESLEEVE :-	1,800.00
	BT # 2 NDE bearing cover worn out area enlarged, fabricated new sleeve by using yard material, inserted with interference fit, secured with SS grub screw and final machined according OD of the new bearing.	
	As per our quotation EM 15760 C, item no 6	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 16 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1 W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No	Description	Line Amount
2510	MACHINING OF STBD HUB CYLINDER:-	1,750.00
	STBD Side hub cylinder ID enlarged from 350mm to 352 (0.00 to \pm 0.175) as per client representative instruction.	
2511	FABRICATION OF POTENTIOMETER ROD:-	450.00
	08 nos Potentiometer Support rod length modified as per client representative instruction maintained 65mm long.	
2512	RE SLEEVING OF SHAFT GENERATOR NDE COVER (STBD):-	1,950.00
	STBD shaft generator NDE cover worn out bearing area enlarged, fabricated new bush, inserted with interference fit, secured with grub screw and final machined as per supplied new bearing. (+0.01)	
	As per our quotation EM 15760 C, item no 6	
2800	FENDER:-	8,300.00
	Air craft tyre fenders (dia.1050mm) around hull removed for hull treatment / painting and refitted on completion of hull treatment. 16 pcs	
	As per our quotation EM 15760 , item no 2.06	
	Renewed pad of size approx 100 mm x 150 mm x 12 mm - 20 nos	
5050	Job cancelled.	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

: 4771687



Telex : 4206 DH Cable : "NAVIGATION" Doha Bank A/c:QNB Main Branch P.O.Box 1000, Doha - Qatar Swift Code : QNBAQAQA QAR A/C No. 0013-000309-060 USD A/C No. 0013-000309-061

Page: 17 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

W/O NO: 21-011190 / 1

EXPENSE A/C: 85.901.1434006

W/O REF: MDO21155

Vessel Name/Description: M.V."HALUL-60"

Job No Description Line Amount

5051 STBD MAIN ENGINE UNIT NO5 OVERHUALING :- 7,950.00

Unit no: 5

Open crank case door and take deflection .

Dismantled jacket water manifold and jacket water pipes from cylinder head.

Dismantled exhaust manifold cover, exhaust manifold form cylinder head.

Dismantled all temperature gauges and sensors from cylinder

Dismantled high pressure fuel pipes, rocker arms , push rod, lube oil pipes from cylinder heads.

Loosened cylinder head bolts.

Draw out cylinder head .

Dismantled con rod, piston, piston ring, piston pin, big end and big end bearing and shifted to yard workshop.

No exclusive carbon found in piston, liner and cylinder head

components.

Cleaned all parts.

Calibrated con rod, piston, piston ring grove, piston pin, big end, big end bearing, crank pin and cylinder liner.

All components calibration reading under user limits

Installed back with existing big and bearing, new piston ring, new protection ring.

All bolts tighten as per manual book.

Dismantled and draw out Main bearing No: 6

Inspect and calibrated main bearing .

Bearing calibration reading under user limits

Installed back main bearing no:6 (Hyd. oil pressure 610 bar

and Side bolts torque 1080N-m)

Main bearing draw out, install back and tighten bolts process

as per manual book .

Cleaned up engine block.

Cleaned up liner, exhaust manifold flange, cooling water pipe s

flange.

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 18 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description

Line Amount

Installed spare cylinder head with new packing, O-ring and gaskets

gaskets
Tightened cylinder head bolts (Hyd. Oil pressure 58 MPa)

Installed back exhaust manifold with new gasket

Installed back cooling water pipes and manifold with new gasket.

Installed back fuel injector nozzle with new O-ring.

Installed back rocker arm, push rod, temperature gauges, sensors and fuel pipes with new packing.

Adjusted tappet clearance, intake: 0.4mm and exhaust: 0.7mm

Top up cooling water and check any leak (okay)

Filled lube oil , run lube oil priming pump, check crankshaft lube oil, cylinder head lube oil, turbo charger lube oil and

check any leaking (okay)

Installed back bonnet, crank case door

All bolts torque tighten as per manual book

All work activities done as per port engineer instruction ${\tt Run}$ all auxiliary , purge out fuel system , cooling system

Blow through engine and close indicator valve

Start STBD main engine and check all parameter

Run engine 10 minutes and check bearing temperature (Lube oil

temp: 43*C, No#5 Big end bearing temp: 45*C and main bearing no#6 temp: 46*C

110 # 0 CCMP: 40 C

Installed back Fuel pump cover and exhaust manifold cover STBD main engine is performing well with C/E satisfactionNote: checked tappet clearance 50 running hour after servicing

QRs 7,950.00

Based on our quotation EM 15760 , item no 10.01 A

5052 STBD. ENGINE DEFLECTION:-

1,020.00

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 19 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line Amount
	Stbd engine deflection taken and recorded 1 time.	
	As per our quotation EM 15760 B , item no 2	
5600	EMERGENCY FIRE PUMP OVERHAUL:-	
	Job cancelled.	
5601	STEERING GEAR PUMP OVERHAUL:-	
	Job cancelled.	
5602	FUEL PUMP MAIN ENGINE STBD:-	
	Job cancelled.	
5603	FUEL PUMP MAIN ENGINE PORT:-	
	Job cancelled.	
5604	FUEL INJECTOR MAIN ENGINE STBD:-	
	Job cancelled.	
5605	PORT MAIN ENGINE LUBE OIL STANDBY PUMP:-	2,550.00
	Removed old pump and fit back new pump supplied by client.	
	As per our quotation EM 15760 B , item no 3	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 20 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No	Description	Line Amount
5606	STBD MAIN ENGINE LUBE OIL STANDBY PUMP:-	
	Job cancelled.	
5607	FIFI PUMP STBD:-	32,456.00
	Remove all pipe connections. Rmove all bolt foundation. Disconnect coupling between main engine and gearbox. Remove FIFI gearbox and bring to alongside jetty. Install reconditioned FIFI gearbox set. (reconditioning by client arranged subcontractor.) All pipes connected All bolt foundation tighten. Connect coupling between main engine and gear box . Alignment carried out.	
	As per our quotation EM 15760 A rev , item no 2	
5608	Job cancelled.	
5800	OVERHAULING OF LUFFING CYLINDER AND TELESCOPIC CYLINDER:-	7,150.00
	Luffing cylinder 1 no and telescopic cylinder 1 no remove for overhauling and fit back after works.	
	QRs 2950 x 2 nos = QRs 5,900.00	
	Scaffolding erect and remove : QRs QRs 1,250.00	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 21 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description Line Amount 6000 SCUPPER & DRAINS: -Not done. 6001 PIPING WORKS:-29,995.00 AHT Oil cooler sea water elbow 1,2,3 opened with condenser cover and after cleaning. We found pipe spool damage. street elbow(male, female threaded elbow), chemically cleaned and refitted to condenser and another side to pipe spool. New pipe spool fabricated and installed Stailess steel pipe , 1 1/4" , sch 80 , provided with one side threaded and one side exixting flange. Old flange ID machined in machine shop - 03 nos Access work Elbow condenser seating plate removed and refitted. 3" dia pipe x 500 mm long with 2 square flange, lube oil piece opened from port side, cleaned and refitted. PORT MAIN ENGINE A/C PUMP WATER LINE :-1 ½" dia. M.S. pipe, sch. 80. 1500mm long with 03 nos. 90 deg. Bend, and 02 nos. flanges - 01 nos.1 ½" dia. M.S. pipe,200mm long, with one nos. reducer (1 $\frac{1}{2}$ " X 01"), one flange and one hose gripping - 01 nos.5" dia. M.s. pipe, sch 80. 1700mm long, with 03 bend (45 deg.), one bend (90 deg.), 5" flange - 02 nos. 03 branches1 ½" Dia. provided to pipe with, 1 ½´. 03 flanges elbow (90 Deg.)- 01 spoolDistance pipe -5" dia. X 100mm

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR, FABRICATION & ENGINEERING DIVISION

long with 02 nos. flanges. One elbow 90 deg. - 01 spool.

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 22 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No D

Description

Line Amount

ACCESS WORK - Sea water pipe line of plate cooler, 6" pipe, 24mm mm long, with 02 flanges, removed and refitted. - 01 nos.1 ½" pipe sea water line 3000mm long - removed and refitted. - 01 nos.1 ½" gate valve, removed and refitted. - 01 nos.5" dia. N.R.V. removed and refitted. (dual plate type - 01 nos.4" dia. Sea water line opened from main engine body, removed and refitted - 1000mm long.Floor plates - 1000mm X 800mm chequered plate. - 03 nos.

HYDROPHORE LINE.

Temporary fresh water for keep running of hydrophore line connected to pump.Materials - 2" dia. M.S. flange. - 02 nos.,2" elbow, 90 deg. - 02 nos., 2" hose grip pipe - 02 nos.Clear hose, 63mm I.D. - 07 mtr. 2" dia. X 2300mm long with 02 bend and 02 flanges - 01 nos.2" dia. X 2000mm long with 04 bend (90 deg.) and 02 flanges - 01 nos.2" dia. Sch. 80, 1000mm long"Tee" branch pipe, 1 ½" pipe 600mm long, 1 ½" dia flange- 01 nos., 2" flange - 02 nos. - 01 spool.1 ½" 600mm long branch pipe sch. 80, 1 ½" flanges 02 nos. - 02 nos.2" dia, 1600mm long "Tee" branch pipe, provided with 2" dia flanges 03 nos. and 90 deg bend one nos. 2" 'U' bolt - 01 nos.

ACCESS WORK: -

2" Dia, bilge suction line3.5 mtr long removed and refitted.E.C.R suction line, 1 $\frac{1}{4}$ " dia. 02 mtr long, removed and refitted. - 01 nos.Chequered Plate, 1000mm X 1000mm . removed and refitted - 06 nos.

STBD SIDE:-

Stbd. side main engine sea water line renewed. Existing pipe removed from position, shifted to work shop. Approx 2000mm long, 02 flanges and 03 bend. - 01 nos. New pipe fabricated in two spools for easy removal and handling. Materials: -5" dia. M.S. Pipe. Sch. 80. 100mm long. - 02 nos. 5" dia. LR Elbow, sch.

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

: 4771687



Telex : 4206 DH Cable : "NAVIGATION" Doha Bank A/c:QNB Main Branch P.O.Box 1000, Doha - Qatar Swift Code : QNBAQAQA QAR A/C No. 0013-000309-060 USD A/C No. 0013-000309-061

Page: 23 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description Line Amount

80. -02 nos.5" dia.SR Elbow, sch. 80. -02 nos.5" dia. flange -04 nos. Pipe line blasted and painted, installed in position.

Access work:-

Floor plates (Chequered plates.800mm X 800mm X 6 mm thick.) removed and refitted for access.- 05 nos.1 $\frac{1}{4}$ " pipe, 03 mtr. long. removed and refitted for access. Floor plate angular frames cut and removed foraccess, refitted and welded the same after the completion of work. - 05 nos.

7000 THRUSTER MOTORS:- 85,960.00

Bow thruster Motor No1 & No 2.

Disconnected power control cables.

Megger tested.

Dismantled the motor.

Removed the end covers and cleaned, taken clearence.

Both end covers resleeving carried out. Motor stator winding cleaned by solvent.

Megger tested 2nd time.

Motor shifted to location and installed.

Run test carried out and found ok.

Grease nipples renewed.

Bearings renewed (Owner supplied)

Motor stator winding cleaned by solvent.

Megger tested 2nd time.

Motor shifted to location and installed.

Run test carried out and found ok.

As per quotation EM 15760, item no 5.04

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 24 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1 W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No	Description	Line Amount
7001	STERN THRUSTER ELECTRIC MOTOR OVERHAUL:-	42,980.00
	Disconnected power control cables. Megger tested. Dismantled the motor. Removed the end covers and cleaned, taken clearence. Both end covers resleeving carried out. Motor stator winding cleaned by solvent. Megger tested 2nd time. Motor shifted to location and installed. Run test carried out and found ok.	
	Access works:-	
	Hand rail cut and removed. 3 nos eyepad welded for shifting of motor	
	As per quotation EM 15760, item no 5.04	
7002	VARIOUS MOTORS:-	28,040.00
	Following electric motors disconnected and remove ashore to workshop. Motor opened ,cleaned, revarnished and baked in oven. Motor reassembled using your supply bearings, tested and return to vessel, refitted in position and reconnected.	
	Shark jaw motor -1 no Toilet Exhaust blower - 4 nos Main engine lube oil pump motor PS - 1 no	
	Remove/refit of following motors done.	
	Emergency firem pump motor - 1 no Windlass hydraulic motor -1 no	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 25 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description

Line Amount

Access work:-

ACCESSORY WORK FOR SHARK JAW MOTOR (item no 5.26.A) :- 1 No hydraulic tank/cooler unit has to be remove/refit.

ACCESSORY WORK FOR TOILET BLOWER (item no 5.26.D) :- Blower duct remove and refit for removing toilet blower - 4 nos

AHU UNIT BLOWER WORKS :-

Remove AHU unit existing blower and fit back new blower.

QRs 26,100 (Quoted) +QRs 6,354 (Quoted) + QRs 1200 =QRs 33,654.00

As per our quotation EM 15760, item no 5 & As per our quotation EM 15760 C, item no 2,3 & 4

7003 EMERGENCY SWITCH BOARD CLEANING:-

1,800.00

Area behind switch board cleaned. All connections to be examined and retightened as necessary. All terminal checked and tighten.

As per our quotation EM 15760, item no 18.01

7004 SUBSWITCH BOARD CLEANING:-

2,500.00

Area behind switch board of BT 1 and BT 2 cleaned. All connections to be examined and retightened as necessaryNote:

As per our quotation EM 15760, item no 18.02

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 26 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1 W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No	Description	Line Amount
7005	TRANSFORMERS:-	1,200.00
	Opened the access covers. Coil and terminal cleaned by angle brush, CRC and portable electrical blower. All terminals check and tighten. Close all access cover properly. Found satisfactory.	
	As per our quotation EM 15760, item no 18.03	
7006	MEGGER TEST:-	2,500.00
	Job identified. All motors megger tested as per chief engineer instruction. Megger test reports submitted to QAQC.	
	As per our quotation EM 15760, item no 18.09	
7007	PORT & STBD SHAFT GENERATOR:-	56,000.00
	STBD SHAFT GENERATOR.	
	STBD shaft alternator power cables, control cables disconnected from alternator terminal box. Shaft Coupling marked disconnected and shifted aside. Alternator drive coupling with drawn from Gear box. Alternator lifted from position and shifted aside. Alternator coupling removed. Alternator end covers marked dismantled. Alternator existing drive end and non-drive end bearings removed. All electrical mechanical parts cleaned using electrical cleaning solvent (using Eletrokleen-D4). End covers bearing clearance calibrated. Found NDE cover oversize. NDE cover brought to machine shop for re-sleeving. Alternator winding heat up heating lamp. Checked value of winding insulation reading noted. After ETO inspection re-assembled the alternator by using owner supplied new bearings.	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 27 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No Description

Line Amount

O ring renewed. Alternator boxed up and coupling fitted back. Alternator shifted back to position, aligned with gear box. Alternator alignment carried out with gear box. Taken airgap between stator and rotor. Reading noted and report submitted to QAQC, and Alignment report submitted to QAQC by mechanical team. Chock fast done. Power cables, control cables and control cables re-connected. Close all terminal covers. Run test carried out. found satisfactory.

NOTE: Bearings supplied by client.

PORT SHAFT GENERATOR:-

STBD shaft alternator power cables, control cables disconnected from alternator terminal box. Shaft Coupling marked disconnected and shifted aside. Alternator drive coupling with drawn from Gear box. Alternator lifted from position and shifted aside. Alternator coupling removed. Alternator end covers marked dismantled. Alternator existing drive end and non-drive end bearings removed. All electrical mechanical parts cleaned using electrical cleaning solvent (using Eletrokleen-D4). End covers bearing clearance calibrated. Found NDE cover oversize. NDE cover brought to machine shop for re-sleeving. Alternator winding heat up heating lamp. Checked value of winding insulation reading noted. After ETO inspection reassembled the alternator by using owner supplied new bearings. O ring renewed. Alternator boxed up and coupling fitted back. Alternator shifted back to position, aligned with gear box. Alternator alignment carried out with gear box. Taken airgap between stator and rotor. Reading noted and report submitted to QAQC, and Alignment report submitted to QAQC by mechanical team. Chock fast done. Power cables, control cables and control cables re-connected. Close all terminal covers. Run test carried out. found satisfactory.

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 28 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description

Line Amount

NOTE: bearings supplied by client.

As per our quotation EM 15760, item no 18.10

7008 AUXILARY ENGINE NO.1 , 2 & 3 ALTERNATOR MAINTENANCE:-

36,100.00

ALTERNATOR No:1

Job identified. Removed terminal cover and disconnected AVR. Taken megger test and noted. Removed excitor coil and rotor from the stator. Removed NDE bearing. All alternator parts cleaned by electro cleaner solvent. End cover sent to machine shop for calibration as per QC instruction. Found bearing housing oversize. Sent to machine shop for re-sleeving. After that start to re-assembling the alternator using by owner supplied bearings. Megger test and carried out. found satisfactory. Connected AVR cables as per marking. Installed terminal cover. After client inspection alternator shift to vessel.Note: bearings supplied by the client.

ALTERNATOR No:2

Job identified. Removed the terminal covers and disconnected all electrical cables. Foundation bolts loosen. Alternator shift to workshop. Removed PMD and coils. NDE cover bolts removed and excitor stator take out. Rotor take out from the main stator. All alternator parts cleaned by electro cleaner solvent. Stator and rotor kept in the oven. End cover sent to machine shop for calibration as per QC instruction. Found bearing housing oversize. Sent to machine shop for re-sleeving. After that start to re-assembling the alternator using by owner supplied bearings. Megger test and carried out. found satisfactory. Alternator shift to vessel. All coupling bolts and foundation bolts tighten. All electrical cables connected

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 29 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V. "HALUL-60"

Job No Description

Line Amount

as per marking. Installed terminal cover. Checked airgap and submitted to QAQC. Run test carried out. found satisfactory.Note: bearings supplied by the client.

ALTERNATOR No:3

Job identified. Removed the terminal covers and disconnected all electrical cables. Foundation bolts loosen. Alternator shift to workshop. Removed PMD and coils. NDE cover bolts removed and excitor stator take out. Rotor take out from the main stator. All alternator parts cleaned by electro cleaner solvent. Stator and rotor kept in the oven. End cover sent to machine shop for calibration as per QC instruction. Found bearing housing oversize. Sent to machine shop for re-sleeving. After that start to re-assembling the alternator using by owner supplied bearings. Megger test and carried out. found satisfactory. Alternator shift to vessel. All coupling bolts and foundation bolts tighten. All electrical cables connected as per marking. Installed terminal cover. Checked airgap and submitted to QAQC. Run test carried out. found satisfactory. Note: Bearings supplied by the client.

Based our quotation EM 15760, item no 18.11

7009 OVERHAULING OF ELECTRIC MOTORS:-

7,955.00

GS fire pump and service air compressor motor disconnected and removed foundation bolts. Motors shift to workshop. Megger tested. Dismantled the motors and all parts cleaned by electro cleaner solvent. Stator kept in the oven. Motor end covers sent to machine shop for calibration. GS motor DE end cover oversize. Re-sleeving done. Stator coils megger tested and revarnished. Reassemble the motor and bench tested. Motor shift to vessel. All foundation bolts tighten electrical cables

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

VOICE

Page: 30 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line Amount
	reconnected. Run test carried out. found satisfactory.	
	Note: for GS pump motor 6312 bearing (1No) supplied by yard. And other bearings supplied by client.	
	Based on our quotation EM 15760 C, item no 1	
7010	AHU MOTOR:-	
	Job not done.	
7250	CARGO FLOW METER CALIBRATION:-	2,550.00
7230	CARGO FLOW METER CALIBRATION.	2,330.00
	1 No. F.O. and 1 No. Fresh water flow meter received at our shipyard. Flow meter to be mounted on calibration machine, calibrated and certificate issued. QRs 1200.00	
	Additional	
	1 No FO flower meter service and gear renewed. New gear owner supplied QRs 1350.00	
7500	SUPPLY OF MATERIAL:-	890.00
	Following materials supplied against signed delivery note: - MS Flange 2" PCD 125 mm - 6nos - MS Flat bar 50 mm x 6 mm - 36 mtr 2 in No's Nitrogen cylinder supplied as per client request 1 ¼" MS Elbow 90 - 6pcs 2 x 1 ¼" MS Reducer - 2 pcs ½" MS Elbow 90 LR - 2 PCS ¼" MS Slipon flange 90 pcd - 4 pcs" 2 MS slip-on flange	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 31 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line Amount
	120 pcd - 4pcs	
9100	SERVICE OF SCAFFOLDER:- (Main mast work)	6,700.00
	Scaffolder NT: QRs 80 per hour x 50 hours = QRs 4,000.00 Rigger NT: QRs 80 per hour x 12 hours = QRs 960.00 Crane: QRs 580 per hour x 3 hours = QRs 1740.00	
9101	SERVICE OF MAN POWER FORWARD BOW THRUSTER FRAME WORKS:-	3,635.00
	Fabricator NT :- QRs 90 per hour x 24 hours = QRs 2,160.00 Fabricator OT :- QRs 112.5 per hour x 6 hours = QRs 675.00 Welding set: QRs 450 per day x 1 days = QRs 450.00 Matearial/consumables: QRs 350.00	
9102	SERVICE OF MAN POWER FOR M.E EXHAUST PIPE ALIGNMENT:-	
	Job cancelled.	
9103	SERVICE OF MANPOWER PROVIDED FOR BOW THRUSTER AND STERN THRUSTER OVERHAULING WORKS:-	131,181.00
	Mechanic NT: QRs 90 per hour x 737.5 hours = QRs 66,375.00 Mechanic OT: QRs 112.5 per hour x 316 hours = QRs 35,550.00 Riggers NT: QRs 80 per hour x 113 hours = QRs 9040.00 Riggers OT: QRs 100 per hour x 66 hours = QRs 6600.00 Machinist: QRs 110 per hour x 13 hours = QRs 1,430.00 Dock crane: QRs 310 per hour x 14 hours = QRs 4340.00 Forklift: QRs 350 per hour x 6 hours = QRs 2100.00 Consumables: - QRs 5,746.00	

E & O.E

for QATAR NAVIGATION (Q.S.C)

SHIP REPAIR & FABRICATION

Telephones

Office: 4771690 / 4771695

Fax : 4771687



Telex: 4206 DH
Cable: "NAVIGATION" Doha
Bank A/c:QNB Main Branch
P.O.Box 1000, Doha - Qatar
Swift Code: QNBAQAQA
QAR A/C No. 0013-000309-060
USD A/C No. 0013-000309-061

Page: 32 / 32

900001

SHIP MANAGEMENT - SHIPYARD INTERCO Shipyard WS

PO Box 153, Doha - Qatar

INVOICE NO: SFWK/INV/013052/2021

DATE: 03/11/2021

EXPENSE A/C: 85.901.1434006

W/O NO: 21-011190 / 1

W/O REF: MDO21155

Vessel Name/Description : M.V."HALUL-60"

Job No	Description	Line Amount
9104	SERVICE OF CLEANERS:-	6,862.50
	Cleaners NT: QRs 45 per hour x 120 hours = QRs 5,400.00 Cleaners OT: QRs 56.25 per hour x 26 hours = QRs 1,462.5	
9500	N.A	
9501	N.A	

Invoice Amount --> 1,373,594.50

(QAR - One Million Three Hundred Seventy-Three Thousand Five Hundred Ninety-Four And 50/100 Only)

E & O.E

for QATAR NAVIGATION (Q.S.C)
SHIP REPAIR, FABRICATION & ENGINEERING DIVISION