

**LIST OF MAJOR MACHINERY/EQUIPMENT PROCURED FOR Y-256
OFFSHORE WORK BOAT CUM SUPPLY VESSEL**

Sr. No.	Description	Qty	year
A	<u>MAIN MACHINERY & SYSTEM</u>		
1	Marine diesel engines Make: Caterpillar Model : 3516B, V-16 – four stroke capacity : 2000 bhp (1491 kw) @ 1600 rpm Fuel : Diesel oil	2	2008
2	Shaft Generators: Make: Stanford Model : HCM534E2 Capacity : 350 KW @ 1500 rpm, 3 Ph, 50 Htz, 0.8 pf Brussless, Separately Excited with PMG (One Shaft generator lying on Deck)	2	2008
3	Steering Gear: Ram type electro hydraulic gear system and its accessories along with electronic tie bar in line with our specification. Steering stand with electronic helm, indicators, jog lever, etc. (Inside Navigation Cabin which is closed)	1	2008
4	Bow Thrusters: Make : HRP Model: HRP 2000 series, type:HRP 2001 TT of Fixed pitch type 200 kw each Electric motor driven	2	2008
B	<u>AUXILIARY MACHINERY & SYSTEM</u>		
1.	Main Diesel Generator Sets : a Make: Caterpillar Model : C-18 Diesel engine driven capacity : 350 kw, 440v, 3 phase, 0.8 pf, 50 Hz	2	2007
b	Emergency Diesel Generator Set : Make: Caterpillar Model : C-4.4 capacity : 100 kw @ 1500 rpm, 440v, 3 phase, 0.8 pf, 50 Hz	1	2007

	<p>c Diesel Generator Set : Make: Caterpillar capacity : 100 kw @ 1500 rpm, 440v, 3 phase, 0.8 pf, 50 Hz</p> <p>With Panel Board (alternator at ship yard) (on deck inside cabin near CO₂ Bottles)</p>	1	2007
<p>2.</p>	<p>Air Compressors :</p> <p>a. Air Compressors Make : Sperre(Norway) – A3 Lister Petter Electric Motor Driven</p> <p>b. Air Compressors Make : Sperre Electric Motor Driven</p> <p>c. Air Compressors Make : Sperre(Norway) – A3 Type:LL2/160 Capacity : 145 m³/hr Pressure-8 Bar Electric Motor Driven</p> <p>d. Air Receivers Make : Sperre Capacity : 250 Ltr.</p> <p>e. Service Air Receivers Make : Sperre Capacity : 100 Ltr.</p> <p>f. Service Air Receivers Make : Sperre Capacity : 500 Ltr.</p>	<p>2</p> <p>1</p> <p>1</p> <p>2</p> <p>1</p> <p>2</p>	<p>2007</p> <p>2007</p> <p>2007</p> <p>2007</p> <p>2007</p> <p>2007</p>
<p>3.</p>	<p>MARPOL Compliance Equipment :</p> <p>a Sewage treatment plants Make : EVAC Capacity : 9.975 m³/Day</p>	2	2008
<p>4.</p>	<p>Oily Bilge Separator:</p> <p>Volume : 240 Ltr Capacity : 0.5 m³/Hr (15 PPM) Max. Pressure : 2.5 Kg/Cm³</p>	1	2008
<p>5.</p>	<p>Auxiliaries:</p> <p>a Reverse Osmosis Make : Rothen Separation System Model : RO-510 Capacity : 445 Ltr/Hr</p>	2	2008

b	Hot water calorifier Make : K Denki Engineers Co. Capacity : 500 L Heater : 3 x 12 KW Marine Type	1	2008
c	Diesel Oil Purifier (FO Purifier)	1	2008
d	F.O. Transfer Pump	1	2008
e	Lube Oil Purifier	1	2008
f	L.O. Transfer Pump	1	2008
g	Fresh Water Pump Capacity : 45 M ³ /Hr	2	2008
h	Sea Water Hydrophore Pump Make : Royson Engineers, Kolkata Capacity : 500 Ltr/Min. at 10 Kg/Cm ²	1	2008
i	Electric motor driven Bilge/fire pump of capacity 45 m ³ /hr at 25 MWC	2	2008
j	Electric motor driven ballast pump of capacity 60 m ³ /hr at 25 MWC	1	2008
k	Electric motor driven fresh water hydrosphore system of capacity 20 m ³ /hr at 20 MWC with standby pump	1	2008
l	Electric motor driven sea water hydrosphore pump of capacity 20 m ³ /hr at 20 MWC with standby pump	1	2008
6.	Engine Room Workshop:		
a.	Lathe Machine Make : MEET Flame Hardered Bed – 3'	1	2008
b.	Arc Welding Rectifier Make : Best Technocrats Capacity : 400 A	1	2009
7.	Air conditioning and ventilation system : Work order for supply and installation to M/s. Hennan and Hopman (around 60% work completed)		2008

C.	DECK MACHINERY & EQUIPMENT		
1.	Deck Cranes :		
a	Marine Deck Crane Make : SEKWANG without foldable boom (boom lying in open yard) Capacity : 4.5 T at 5 M (swing 5 to 30 M)	1	2008
b	Small crane Make : Plimsoll Capacity 5 t SWL @ 10 mtr outreach	1	2008
2.	Tugger Winches:		
a	Tugger Winches Make : Plimsoll Capacity : 10 T x 15 m/Min with 150 M x 22 mm dia.. wire drum	2	2007
b	Windlass Winch Make : Plimsoll Capacity : 34 mm dia. Rope – grade – 2 4.9 at 10 M/Min 7.4 T over load pull	1	2007
D.	SAFETY EQUIPMENT		
1	Life Saving Appliances:		
a	Boat Davits Make: Aquqrium Fibre Glass, Goa Capacity : 1000 Kg at 3500 M	2	2008
b	Semi-inflatable rescue boat (10 men Zodiac/25 bhp OBM) to be operated by single-arm davit)lying at open yard)	2	2008
2	Fire Fighting Equipments:		
	CO ₂ System CO ₂ cylinders – 20 Nos. CO ₂ panel – NK Co. Ltd. make	1	2008
E	ELECTRICAL SYSTEM		
1	Transformers		
a	Dry Transformers Natural air-cooled Insulation – H, Delta – Delta, 3 phase winding Capacity : 60 KVA, 440/230 V	2	2008

	b	Marine Dry type Transformer Capacity ; 12 KVA, 230/30 A	2	2008
	c	Surge Tank Make : Team rec Capacity : 700 Ltr Operating voltage : 440 V	1	2008
	2	DC System:		
	a	Transformer Rectifier Make : Marine Electricals Capacity : 3 KW, 415 V, 3 Ph, 50 HZ to 24 V DC	2	2008
	3	Main Switchboard and Distribution Panels – Cables &* Cable trays: Distribution panel boards for 415 V, 230 V and for 24 V DC, Cables & cable trays etc. (Electrical supply & installation by M/s. Marine Electricals) (Work not completed)	Lot	2008
F		NAVIGATION & COMMUNICATION EQUIPMENTS (Supply & installation by M/s. Marine Electricals)		2008
G		MACHINERY NOT IN SHIP BUT AVAILABLE AT SHIPYARD.		
	1.	Controllable pitch propellers Make : Scana Volda Model : ACG 62/525	2	2008
	2	Cathodic Protection System Sacrificial anodes system only 260 Kg Zinc available at shipyard	1	2008
	3.	Rudders and Rudder trunk	2	2008
	4	Anchors & Accessories as under	2 sets	2008
	i	AC-14 HHP Anchor each 1440 KG – 3 Nos.		
	ii	Anchor Chain Grade – 3, 27.5 m length – 16 Nos.		
	iii	Kenter shakles, Grade -3 – 16 Nos.		
	iv	Swivel adopter with accessories, Grade – 3 – 2 Nos.		
	v	D-type joining shackle, Grade-3 - Nos.		
	vi	D-type anchor shackle, Grade-3 - Nos.		
	5	Mooring Equipments, Mooring lines, tow lines etc. Mooring lines : 4 x 220 M long mooring ropes of min. 105 KN breaking strength (polypropylene) (8” circumference) Tow line: 1 x 200 M long tow line of min. 277 KN breaking strength (Polypropylene)	1 set	2008

