

5.6 MW 2011 New MAN 10L 32-44 CR HFO Generator Power Plant
(Engine Only)



Harnessing Energy for Life



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Description & Additional Notes

EXCLUSIVELY FROM USP&E!

USP&E is selling 5.6 MW 2011 New MAN 10L 32-44 CR HFO Generator Power Plant (Engine Only)

750RPM; Tier 2; 50 Hz

Units available: 7 x 5.6 MW Units

Price is per Unit

If you are like us, you read every day about how thousands of fast growth companies struggle to find energy generation that is affordable, reliable and available for immediate shipping and installation on a turnkey basis from a company that really understands the complexities of integration of balance of plant and other site infrastructure.

At USP&E, we have been in business now for over 20 years and have offices in 9 countries. But more importantly, WE ARE OBSESSED WITH EACH CLIENTS JOURNEY TO ENERGY SUSTAINABILITY & RELIABILITY AND ARE DRIVEN TO GUIDE EACH CLIENT TO SUCCESSFUL INTEGRATION OF THE BEST IN CLASS TECHNOLOGIES.

This is important and a huge differentiating factor for our clients because USP&E isn't the hero of our story, you are. We will do everything possible to make sure you are successful, and we have over 20 years of satisfied clients and meaningful, long-term client engagements that prove this out. The potential delays related to permitting, land access, shipping, etc must be dealt with head-on and with urgency. We have helped hundreds of companies like yours for over 20 years.



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The process is really simple:

1. Quick, 30 min Engineering/Design Meeting so we Can understand Your project goals, timelines and budgets. ✓

2. Scope of work and supply to match our plants to what you need. ✓

3. Work together to finalise commercial and technical aspects into a contract and move forward with the project. ✓

Please remember, USP&E is not just an equipment broker. We are a GUIDE to energy project excellence. We offer full Engineering, Procurement, Construction and long-term O&M in over 190 countries around the world in order to make sure our client projects are a RESOUNDING success.

Some of the companies we are currently working with include the City of Neom, Barrick Gold, SPACE-X, Firefinch Gold, Kurdistan MOE, Ivanhoe Mining, Boogertman Partners, and Molo Graphite.

At USP&E, we understand how most companies struggle to find energy generation that is affordable, reliable and available for immediate shipping and installation on a turnkey basis. Your partner must be a company that really understands the complexities of integration of balance of plant and other site infrastructure, and not just be a broker. Ideally, your partner offers complete O&M and warranty support services. This is what we have been doing for over 20 years.



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Scope of Supply for 7 units of MAN Diesel Propulsion Engines

S/No.	Equipment Name	Q'ty	Dimension/Weight
1	MAN Diesel Engine(s) type 10L32/44CR MCR : 5600KW (each), 7616 BHP at a speed of 750rpm, rotation anti-clockwise for diesel-mechanic propulsion for HFO operation, acceptance by DNV, unmanned engine room certificate acc. To IMO MARPOL, Annex VI-2008, reg. 13(4)/NOx – TIER2. ° Maximum continuous rating (MCR) measured at crankshaft flange, at <ul style="list-style-type: none"> - Intake air temperature max. 45°C - LT cooling water temperature before charge air cooler max. 38°C - Air pressure 1 bar - Fuel admission blocked at 100% - Fuel consumption acc. to ISO 3046-1 : 2002, based on a net calorific value of 42700kj/kg at a rating of 85% MCR without attached pumps fulfilling the above NOx emission limitations 177g/kWh corresponding to 130g/HPh (+5% tolerance). - Lube oil consumption approx. 0.5g/kWh (+20% tolerance) 	7 Units	8.54m / 2.55m / 4.45m / 63 tons Each
2	Boilers	4 units	See Sub-listing
3	SCR	8 units	ditto
4	40' HC Containers for loose equipment	7 Containers	As per packing list
5	Instrumentation Panels	7 cases	See Sub-listing
6	HFO Booster Unit (for 2 engines)	4 units	ditto
7	Nozzle Cooling Unit (for 2 engines)	4 units	ditto
8	Lube oil pump set, free standing	7 units	ditto
9	Lube Oil Auto backwash filter	7 nos.	ditto
10	Plate Type Lube Oil Cooler	7 units	ditto
11	Exhaust Expansion Bellow	7 units	ditto
12	Pre Heater for HT Cooling System	7 units	ditto
13	HFO Separator with control panel	4 units	ditto



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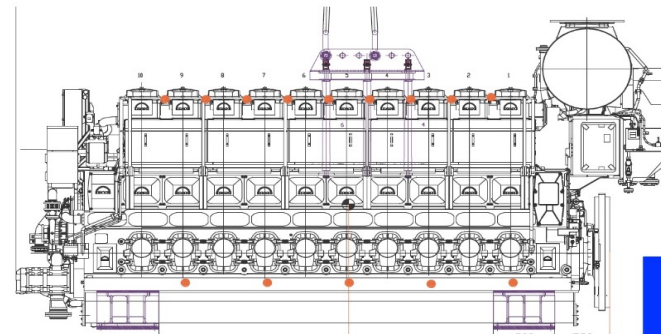
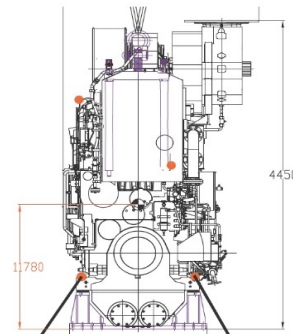
5.6MW MAN 10L32/ 44CR DIESEL ENGINES

5.6MW MAN 10L32/44CR Diesel Engines



MAIN FEATURES

- MAN 10L32/44CR
- IMO Tier II
- 750RPM
- Turbocharged with Intercooler
- Jet assisted for improved dynamic response
- Engine mounted pumps for improved efficiency
- Resilient Mounting
- Engine Safety and Control System



Engine Make	MAN 10L 32/44CR, IMO Tier II certified
Fuel	MDO / MGO / Diesel #2 / HFO / IFO, 180 or 380 CST

PERFORMANCE PARAMETERS

Manufacturer's Performance Rating, measured at Generator Terminals	
Tropical Condition	Shaft Power*
Capacity	5.6 MW (Gross)
Heat Rate	8,376 kJ/kWh
Efficiency	43%
Consumption	208 g/kWh
Fuel Cal. Value LHV	40,230 kJ/kg
Lube oil consumption	3.4 kg/hour

**The actual performance of the Plant is subject to site loads, environmental conditions, loading/operating mode, fuel calorific value (LHV) and is to be adjusted in accordance with Manufacturer's correction curves.*



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5.6MW MAN 10L32/ 44CR DIESEL ENGINES

SCOPE OF SUPPLY

MAIN FEATURES OF COMBUSTION ENGINE

- MAN 10L32/ 44CR DIESEL/HFO ENGINE, 5,600 KW, 750 RPM, IMO NOX TIER II CERTIFIED
- TURBOCHARGED WITH INTERCOOLER
- ENGINE MOUNTED PUMPS FOR IMPROVED EFFICIENCY
- ENGINE SAFETY CONTROL AND MONITORING SYSTEM
- BASE FRAME WITH RESILIENT MOUNTING

ANCILLARY EQUIPMENT *

- | | |
|---------------------------------------|-------------------------------|
| • 7 Lube Oil Pumpsets (Free Standing) | • 7 Pre-Heaters |
| • 7 Lube Oil Auto Backwash Filter | • 1 HT & LT Pump |
| • 7 Plate-Type Lube Oil Cooler | • 2 Fresh Water Pump |
| • 4 LO Separator | • 4 Fuel Nozzle Colling Units |
| • 4 Water Separators/Purifiers | |
| • 4 HFO Separators | |
| • Starting Air Reduction Valve | |

** Full list available on request*



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OPTIONAL CONFIGURATION – POWER GENERATION

GENERATOR

- 7,000KVA, 50HZ, 0.8 P.F
- 3.3KV/6.6KV/11.0KV/15.0KV
- WATER/AIR COOLED GENERATOR
- INSULATION CLASS F
- TEMPERATURE RISE: B
- GENERATOR AVR AND EXCITATION SYSTEM
- EFFICIENCY: APPROX. 96.5%

EXHAUST SYSTEM

- VERTICAL EXHAUST STACK
- EXHAUST GAS SILENCER
- EXPANSION BELLOW
- SCRUBBER SYSTEM (OPTIONAL)

- COMPRESSED AIR STARTING WITH AIR RECEIVERS
- SERVICE GENERATOR APPRO. 300 KW, 400VAC, 3-PHASE, 50 HZ
- FIRE PUMP

ELECTRICAL SYSTEM

- GENERATOR PROTECTIVE RELAYS
- AVR EXCITATION SYSTEM
- SYNCHRONISING & LOADING SHARING FEATURE
- MAIN SWITCHGEAR, MOTOR CONTROL CENTER & LIGHTING BOARDS
- AUXILIARY/SERVICE TRANSFORMERS
- BATTERY CHARGER WITH BATTERIES AND UPS

MECHANICAL SYSTEMS

- LUBE OIL SYSTEM WITH PLATE COOLER, STRAINER AND BACK-WASH FILTER
- LO SEPARATOR, WATER PURIFIER
- HFO SEPARATOR
- COMPRESSED AIR SYSTEM
- HT & LT COOLING WATER SYSTEM
- AIR COOLED RADIATORS / COOLING TOWERS
- FUEL NOZZLE COOLING SYSTEM
- FIRE PROTECTION SYSTEM

Manufacturer's Performance Rating, measures at Generator Terminal

Tropical Condition	Generator Terminal*
Capacity	5.4 MW (Gross)
Heat Rate	8,686 kJ/kWh
Efficiency	41%
Consumption	216 g/kWh
Fuel Cal. Value LHV	N/A
Lube Oil Consumption	N/A

**The actual performance of the Plant is subject to site loads, environmental conditions, loading/operating mode, fuel calorific value (LHV) and is to be adjusted in accordance with Manufacturer's correction curves.*

Specifications



Manufacturer	MAN
Model	10L 32-44 CR
Year	2011
Condition	new
Location	Eastern Asia
Price	\$592,500.00
Category	HFO Generators
Subcategories	<ul style="list-style-type: none">1 - 9 MW
Stock Number	USP010277
Wattage	5.6 MW
Hours	Zero
Frequency	60hz
Fuel type	HFO
Voltage	
Balance of Plant Available? (BOP)	-

Asset Images



- Images may be representative, and actuals can be supplied upon request.

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