



Description	MAN	Customer
MAN Engine 18V32/40 with steel foundation frame and spring elements for flexible mounting	X	
Engine Panel	X	
Interface Panel	X	
Flexible coupling	X	
Three phase synchronous alternator	X	
Flexible pipe connections for the engine	X	
Lube oil module	X	
Lube oil replenishing and flow rate measuring device	X	
Lube oil separator module	X	
Lube oil supply pump	X	
Lube oil transfer pump	X	
Oil mist eliminator	X	
Two-circuit radiator cooler (LT/HT)	X	
Charge air temperature control valve (LT)	X	
HT cooling water regulating valve	X	
HT cooling water temperature sensor	X	
Cooling down pump, free-standing	X	
Nozzle cooling water module	X	
Cooling water expansion tank (LT/HT)	X	
Cooling water collecting tank	X	
Replenishing pump module	X	
Water treatment plant		X
Well pump		X
Fuel oil booster module	X	
HFO separator (operation)	X	
HFO separator (stand-by)	X	
HFO supply pump	X	
Diesel oil supply pump	X	
HFO filter module	X	
Diesel oil filter module	X	
HFO pressure limiting valve	X	
Diesel oil pressure limiting valve	X	
Intake air filter unit	X	
Intake air duct upstream turbo charger	X	
Starting air receiver	X	
Automatic draining equipment	X	
Compressor module (30 bar) with electrical motor	X	
Control air receiver	X	
Control air buffer receiver	X	



Description	MAN	Customer
Control air compressor module	X	
Control air dryer	X	
Pressure reducing station 30/10 bar	X	
Pressure reducing station 10/7 bar	X	
Service air compressor unit		X
Pressure reducer for service air (10 to 6 bar)		X
Sewage treatment plant		X
Effluent collecting system		X
Power house inlet ventilation	X	
Power house outlet ventilation	X	
Compressor room ventilation	X	
Pump house ventilation	X	
Exhaust gas silencer	X	
Set of exhaust gas ducts	X	
Sets of exhaust gas stacks (clustered ducts)	X	
Insulation material for exhaust gas ducts	X	
Ventilation system for exhaust gas duct	X	
Exhaust gas treatment		X
Exhaust gas steam boiler for own consumption	X	
Dump condensor	X	
Feed water tank	X	
Feed water pump module	X	
Condensate collecting unit – pump house	X	
Blow down tank	X	
Chemical dosing unit	X	
Condensate compensator	X	
Auxiliary container for steam generation	X	
Water measuring device	X	
Auxiliary steam boiler	X	
Feed water pump	X	
Genset Control Panel (GCP)	X	
Common Control Panel (CCP)	X	
Boiler Control Panel (BCP)	X	
Operation & Monitoring system	X	
CoCoS-EDS engine diagnosis system	X	
Set of control cables		X
Set of sensors for pipings	X	
Set of sensors for tanks	X	
MV switchgear system	X	
Neutral earthing system	X	
Station transformer	X	



Description	MAN	Customer
Step-up transformer		X
Set of MV cables		X
MV installation material		X
LV main distribution	X	
LV sub distribution	X	
Black start generating set	X	
DC system	X	
Uninterruptible Power Supply (UPS)	X	
Set of LV cables		X
LV installation material		X
HV sub station		X
HV transmission line		X
HV interface panel (HVIP) to CCP		X
Pipes for power plant		X
Fittings for power plant		X
Valves for power plant		X
Pipe supports for power plant		X
Boltsets and gaskets		X
Hook-ups		X
Lube oil storage tank		X
Lube oil maintenance tank		X
HFO storage tanks (15 days)		X
Drain tank for HFO storage tanks		X
HFO service tank		X
Diesel oil storage tank		X
Sludge tank		X
Fire fighting water tank		X
Raw water storage tank		X
Lube oil unloading pump module, with hoses		X
Diesel oil unloading pump module, with hoses		X
Sludge discharge pump module, with hoses		X
HFO unloading pump module, with hoses		X
Fire detection module		X
Portable fire extinguisher module		X
Fire water pump module container		X
Outdoor hydrant system		X
Pump house foam deluge module		X
Tank farm protection		X
Power house crane		X
Monorail hoist in PH mechanical annex		X
Monorail hoist in workshop		X
Monorail hoist in pump house		X



Description	MAN	Customer
Plant telephone system (PABX)		X
Public address system		X
Closed circuit television system (CCTV)		X
Connection to public telephone grid		X
Set of electrical machine tools		X
Set of electrical hand tools		X
Set of cutting / clamping tools		X
Set of hoisting devices		X
Laboratory equipment		X
Miscellaneous equipment		X
Site preparation, levelling and soil requirements		X
Power house building (steel structure)		X
Power house building (civil works)		X
Pump house building (steel structure)		X
Pump house building (civil works)		X
Exhaust gas cluster, steel structure, supports		X
Civil works in exhaust gas area		X
Steel structure for radiator coolers		X
Civil works in radiator cooler area		X
Civil works for tank farm (foundations, retention wall)		X
Administration building		X
Steel structure for unloading station		X
Civil works for unloading station		X
Civil works for HV sub station		X
Plant area, guard house and finishing		X
Temporary building, container		X
Telecom system, internet, server, PC		X
As built drawing PC, printer, plotter		X
Cars, transport facilities during installation of the plant		X
Temporary electrical installations, illumination		X
Temporary fence, guard system		X
First filling – HFO storage tank		X
First filling – HFO service tank		X
First filling – Diesel oil storage tank		X
First filling – Lube oil storage tank		X
Transformer oil		X
Grease for equipments		X
Water / glycole for cooling water systems		X
Set of standard and special tools for the engine	X	
Set of tools for the turbo charger	X	
Set of standard spare parts for the engine (commissioning)	X	
Set of spare parts for turbo charger	X	
Set of engine wear parts for 16,000 operating hours		X
Set of safety spares for plant equipment		X



Description	MAN	Customer
Technical project management	X	X
Commercial project management	X	X
Quality planning	X	X
HSE planning and inspection	X	X
Basic engineering	X	X
Process Flow Diagrams (PFDs)	X	X
Piping & Instrumentation Diagrams (P&IDs)	X	X
Detailed engineering	X	X
3D Planning		X
Material take out (MTO) for pipings and cablings		X
Civil engineering		X
Delivery of auxiliaries FCA European North Sea Port		X
Shipment of engines and auxiliaries to CIF Local harbour		X
Transport of auxiliaries to the site		X
Transport of engines to the site (Heavy Lift)		X
Unloading and placing onto foundations		X
Site Manager		X
Quality Manager		X
HSE Manager		X
Supervision of engine / genset installation	X	
Supervision of mechanical installation	X	
Supervision of electrical installation	X	
Mechanical installation of the equipment		X
Electrical installation of the equipment		X
Piping and steel works		X
Civil works		X
Tank farm		X
Commissioning of engines / gensets		
Commissioning of auxiliaries		
Performance test of the gensets		
Set of engine, turbo charger and plant documentation	X	X
Permits		X
Taxes		X
All what is not described in the scope above		X