

ENERJİ SANTRAL EKİPMAN LİSTESİ

	Quantity:
Gen Set (Complete)	1
- Diesel Engine : MAN & B W HOLEBY 16 V 28/32 H Working Hours : 19.716	
- Alternator : AVK Made Capacity : 4225 kVA Rating : 3580 kW Voltage : 11000 V Frequency : 50 Hz Power Factor : 0.8	
Pressurized Uni Fuel Unit (PUF Unit)	1
- MAN B&W, Holtey Model : PUF 5400 Including with Control Panel, HFO Supply Pump, HFO Circulating Pump, MDO pump etc.	
Lube Oil Plate Cooler (Lube Oil Heat Exchanger)	1
- Alfa Laval : Type M10-MFM	
Low Temp/High Temp. Cooler	1
- Alfa Laval : Type M15 - BF MS	
Heat Exchanger	1
- Alfa Laval : M6 - FGL	
Oil Bath Filter	1
- Locker : Type LP 90	
Flowmeter & Viscocontroller	1 + 1
V1/V2 Valves with Thermostatic Valves	Set
Engine Protection and Supervision Panel	1
Alternator Protection and Supervision Panel	1
Control and Safety System (Woodward UG Dial Governor, Type UG-8), Turbocharger System, Air Intake System, Compressed Air System, Exhaust Gas System, Fuel-Oil System, Lubricating Oil System, Cooling Water System.	included

	<u>Quantity</u>
HFO Separator (Included with control panels)	2
- Alfa Laval: TOPX 605	
- Capacity : 850 l/h (700 cST, 50 °C)	
LUBE OIL Separator (Included with control panel)	1
- Alfa Laval : LOPX 705	
- Capacity : 1300 l/h	
Cleaning Device for Separators is included	
Fuel Oil Filter System	2
Diesel Oil Filter System	1
Compressed Air System	
* Air Compressor	2
- Capacity : 350 l/min	
- Operating pressure : 30 bar	
* Air Tank	2
- Capacity : 700 l/min	
- Operating pressure : 30 bar	
* Air Dryer	1
Control Panel	1
Air Filter	2
Tanks	
* HFO Storage Tank	1
Capacity : 200 m ³	
* HFO Service Tank	1
Capacity : 5 m ³	
LAL (Low Level) Alarm System and Heater included	
* Buffer Tank	1
Capacity : 3 m ³	
Level Alarm System, Heater, Thermostat included	
* DO Service Tank	1
Capacity : 20 m ³	
LAL, LAL Alarm System, Heater : included	

	Quantity
* Waste Oil Tank	1
Capacity : 200 lt Level Alarm System, Heater : included	
* Sludge Tank	1
Capacity : 6 m ³ LAL Alarm System : included	
* DO Black Start Tank	1
Capacity : 0.1 m ³ LAL Alarm System , Level Indicator : Included	
* Inhibitor Dosing Tank	1
Capacity : 0.02 m ³	
Cooling Water System :	
- Cooling Tower	3
EMAK ESK 2300 Type Capacity : 1250 kW Water Amount : 216 m ³ /h Wet Bulb Temp : 25°C Fans: 6 units (Axial Type) Pumps and Automation System : Included	
Pumps	
HFO Transfer Pump	2
DO Transfer Pump	1
Sludge Pump	1
Lube Oil System Filling Pump	1
Water Pump	
(MAS TLH-8835 , 90 m ³ /h 3 mss ; 18.5 kW 1450 rpm)	3
(MAS TLH-6305 , 30 m ³ /h; 30 mss; 11 kW; 1450 rpm)	2
Control Panels	
Main Control Panel, Generator Control Panel, Motor Control Panel, Fuel Oil System Panel, Cooling Water Control Panel, Low voltage and compensation panel	included
Ventilation System (for Engine Room)	
- Ventilation Fans	2
Capacity 45.000 m ³ /h each	

Electrical Equipment	Quantity
- Medium Voltage Cubicles (ALSTOM)	10
- Earthing Cubicle	1
- 24 V Power Source	1
- Battery Charger	
- Batteries	
- 110 V Battery and Rectifier Group	1
- Transformer for Differential Protection	1
- Step-Up Transformer (ALSTOM)	
- Nominal 11/24.5 Kv, 50 Hz	
- Power : 5000 kVA	
- Neutral Resistance	1

* All the pipings within the system is included.