

## **PRODUCTION TECHNOLOGY :**

Power plant has been activated on September 2002. There are 2 (Two) MAN B&W Mirrless Blackstone 16V430MB type diesel engines.

Diesel Characteristics;

- 4 (four) stroke cycle, Turbocharged Diesel driven generator,
- Running with HFO #6,
- 18 cylinders – V type,
- Medium speed rates (600 rpm)

It is also produced Steam; 7 ton/h (7 bar-170°C) by using waste heat of exhaust gas temperature. Some of this steam (1ton/h) is used for internal requirements of power plant; the other steam (6 ton/h) can be used for steam requirements of factories.

## **PRODUCTS AND SERVICES :**

**Electricity;**

Nominal Power Rate: 21 MW

Internal electricity consumption of the power plant: 0,550 MW

Total Usable Energy Rate: 20,450 MW

Yearly Electricity Production Rate: 168.000.000 kWh/year (\*)

**Steam;**

Nominal Steam Production Rate: 7 ton/h

Internal steam consumption of the power plant: 1 ton/h

Total Steam Capacity: 6 ton/h

Yearly Steam Production Rate: 56.000 ton/year (\*)

**Hot Water;**

Nominal Hot Water Production Rate: 1 ton/h (steam equality)

Yearly Hot Water Production Rate: 8.000 ton/year (\*)

**Note: (\*) For minimum 8.000 running hours per year.**

## **DESCRIPTION:**

21 MW MAN B&W Co-generation Power Plant

Two (2) Mirrless Blackstone 16V430MB engines  
600rpm, 50HZ, 11000 volt, HFO #6,  
Year: 1999/2002  
Complete Plant, well maintained.

Diesel Engine-1  
Manufacturer "MIRRLEES  
BLACKSTONE"  
Type 16MB430V  
Power 10887KW  
Speed 600RPM  
Number of Cylinder 16  
Year 1999  
Total Working Hours 15327

Generator-1  
Manufacturer ALSTOM  
Rated Output 13187KVA  
Rated Voltage 11000V  
Rated Current 692A  
Speed 600RPM  
Rated power factor 0.8

Diesel Engine-2  
Manufacturer "MIRRLEES  
BLACKSTONE"  
Type 16MB430V  
Power 10887KW  
Speed 600RPM  
Number of Cylinder 16  
Year 2002  
Total Working Hours 16678

Generator-2  
Manufacturer LEROY  
SOMMER  
Rated Output 13255  
Rated Voltage 11000V  
Rated Current 695,7A  
Speed 600RPM  
Rated power factor 0.8