

Data Sheet

Machine: Steam Turbine

Manufacturer: Nuovo Pignone

Model: EHNK 50/5 m2

Serial number:

Year: 2001

Turbine type: Reaction

Number of Stages: 41 HP + 10 MP + 3 LP

Velocity: 3000 rpm

Exhaust: Axial, exhaust surface 5 m²

Last stage blade: 26 inch

First critical: 1800 rpm

Second critical: 5800 rpm

Bearings: Radial and thrust bearing type Tilting Pad

Valves: 2 main/stop inlet

1 extraction/Induction

Inlet

Pressure: 75 ± 2 bara

Temperature: 480 ± 5 °C

Flow: 173 ton/h

Extraction/Induction

Pressure: 6,5 bara

Temperature: 195 °C

Max Flow: 26 ton/h (induction - A)

6,8 bara

197 °C

14 ton/h (extraction - B)

7,5 bara

208 °C

64 ton/h (extraction - C)

Exhaust

Pressure: 0,07 ± 0,02 bara

Temperature: 36/31 °C

Power: 55310 kW - A

48890 kW - B

41570 kW - C

Materials

High Pressure Outer Casing: GS-17CrMoV511

Shaft: 30CrMoV411

High Pressure InnerCasing: GS17CRMOV511

Blades 1-33 stg: X22CrMoNiV12

Exhaust Casing: Fe430B

Blades 34-54 stg: X20Cr13

Nozzle ring: X22CrMoNiV12.1 Diaphragm blades: X20CrMo13

Weight of the rotor: 35000 kg

Operating hours:

70000

Last major overhaul: 2009