



CASE STUDIES

Triveni
TURBINES

Case Study 1

1.2MWe Back Pressure Single Stage Turbine in Indonesia



Turbine Details

1.2 MWe Backpressure Steam Turbo Generator unit

Challenge

- ⊗ Fluctuating process and power demand

Solution

- ⊗ Multi-functional hand valve to meet process demand and operate turbine with higher efficiency

Customer Benefit

- ⊗ Un-interrupted steam and power supply

Project Highlights

- ⊗ Mill Capacity : 50 TPH
- ⊗ Power required by the mill : 1000kW
- ⊗ Boiler Parameters : 30 Bar/Saturated
- ⊗ Boiler Capacity : 35 TPH
- ⊗ Single Stage Capacity : 1200kW

Case Study 2

8 MWe Extraction Condensing Steam Turbine in Medan, Indonesia

Inlet Steam : 38 Bar

Inlet Temperature : 400 Deg C

Challenge

- ❁ Space constraint for future expansion as there was an existing 45TPH Boiler and TG unit
- ❁ Combined Heat and Power Solution for 3 different refineries and factories adjacent to the unit

Customer Benefit

- ❁ Existing units replaced with highly efficient extraction condensing steam turbine to meet power and heat requirement of other units

Solution

- ❁ Modified the standard frame of the turbine to meet the existing site conditions
- ❁ Hybrid optimised efficient extraction condensing turbine offered with customised design
- ❁ Modern control and operating system

Case Study 3

5 MWe Extraction Condensing Steam Turbine in Surat Thani, Thailand

Inlet Steam : 30 Bar

Inlet Temperature : 350 Deg C

Challenge

- ❁ Process steam required at 4.2 Bara (3.2 B arg) and variable flow from 12TPH to 18TPH during plant operation
- ❁ Power export to the grid

Customer Benefit

- ❁ Cost effective and Reliable solution

Solution

- ❁ Extraction Condensing TG set for variable process flow and maximum power export to the grid
- ❁ Water cooled condenser , Gear box – Double helical, Single reduction, Generator
- ❁ PLC base Control System

**POWER TO SUSTAIN
DREAMS**

THANK YOU



www.triveniturbines.com

