

NITIN CORPORATION

402, 4th Floor,
Bezzola Commercial Complex,
Sion – Trombay Road,
Chembur,
Mumbai – 400071,
India.

WEB : www.corponit.com

E – MAIL : enquiry@corponit.com
nitincorporation@yahoo.com

Contact No.: +91 – 9920404345

THE FOLLOWING BACK PRESSURE STEAM TURBINE GENERATOR SET IS AVAILABLE FOR SALE WITH US WITH IMMEDIATE DELIVERY:

1 No. 3000 kW TRIVENI/JYOTI (2002) make Back Pressure type Steam Turbine Generator set, having the Following Technical Specifications:

TECHNICAL SPECIFICATIONS:

TURBINE:

Make	:	Triveni
Year of Make	:	2002
Type	:	Multi Stage, Back Pressure
Frame	:	FR - 2S
Maximum Power	:	3000 KW
Normal Steam Inlet Pressure	:	63 Kg/cm ² g
Normal Steam Inlet Temperature	:	485 °C
Normal Exhaust Pressure	:	1.5 Kg/cm ² g
Rotor Speed	:	8325 RPM
Output Shaft Speed	:	1500 RPM
Critical Speed Range	:	6000 - 6500 RPM
Tripping Speed Range	:	9158 - 9574 RPM
Steam Inlet Pipe Size	:	8" NB ASME # 300 RF
Steam Exhaust Pipe Size	:	16" NB ASME # 150 RF
Direction of Rotation of Turbine	:	Anti-Clockwise
Output Shaft (looking from Alt. end)	:	
No. of Stages	:	Six (3 HP + 3 LP)
Total Turbine Weight (Approx.) (Including Turbine Oil)	:	16000 Kgs
Driven Equipment	:	Alternator (JYOTI Make)

OIL SYSTEM:

Oil Tank Capacity (Approx.)	:	2000 LTR
Lubricating Oil	:	ISO-VG Servo Prime 68
Lube Oil Pressure	:	1.5 - 2.25 Kg/cm ² g

Control Oil Pressure : 5.60 Kg/cm²g

OIL SYSTEM COMPONENTS:

MAIN OIL PUMP

Make : Triveni
Type : Rotary Gear
Speed : 1500 RPM
Capacity : 55 GPM
Driver : Gear Wheel Shaft

AUXILIARY OIL PUMP

Make : Tushaco (Model: R-50-EG-F)
Pump Sl. No. : 023490-A/0549
Type : Rotary Gear
Capacity : 55 GPM
Speed : 1440 RPM
Drive : 7.5 KW, AC Motor (Siemens),
415 V, 3 Ph, 50 Hz
Model : 1LA733 - 4AA60
Motor Sl.No. : UD201/047309-051-59

OIL COOLER

Make : Southern Lubrication
Sl. No. : 0210692/0210693
Type : Horizontal, Duplex
Size : 10" x 84"
Capacity : 55 GPM
Oil Inlet Temperature : 60°C
Oil Outlet Temperature : 45°C
Water Inlet Temperature : 32°C
Water Outlet Temperature : 35°C
Water Flow : 400 LPM (Each Cooler)

OIL FILTER (Lubricating Oil)

Make : Industrial Enterprises
Sl. No. : 3794/3795
Type : Vertical Mounted (Duplex)
Capacity : 45 GPM / 10-15 Microns
Filtering Element No. : 45 - 07 - 98 / 2002

OIL FILTER (Control Oil)

Make : Industrial Enterprises
Type : Vertical Mounted (Single)
Capacity : 8 GPM
Filtering Element No. : 08 - 01 - 96

ACCUMULATOR

Make	:	Fawcet Christie India
Capacity	:	4.0 Ltrs
Working Pressure	:	6.0 Kg/Cm ² g
Pre-Charge Pressure	:	4.8 Kg/Cm ² g

PRESSURE RELIEF VALVE for AOP/MOP

Duty	:	AOP/MOP
Make	:	Tellace
Type	:	Nozzle
Size	:	1-1/2" NB # 150 RF
Set Pressure Range	:	5.6 Kg/Cm ² g

PRESSURE RELIEF VALVE

Pressure Relief Valve		
Duty	:	Lube Oil
Make	:	Leader
Size	:	1/2" NB Oval Flanged
Set Pressure	:	1.8 Kg/Cm ² g

HIGH SPEED COUPLING

(Turbine Rotor to G / Box Pinion Shaft)

Make	:	Euroflex
Sl. No.	:	11318
Type	:	Flexible
Model No.	:	6 GBL-160

LOW SPEED COUPLING

(Gearwheel Shaft to Alt. Shaft)

Make	:	Euroflex
Type	:	Flexible
Model No.	:	8 GBH-270
Sl. No.	:	11317

STOP AND EMERGENCY VALVE

Make	:	Triveni
Type	:	Hydraulic
Size	:	6" NB

GOVERNOR

Make	:	Triveni
Type	:	Centrifugal Fly Weight
Normal Governor Speed	:	1335 RPM
Power Supply to Governor Motor	:	415 V, 3 PH, 50 HZ, 1/6 HP

GEAR BOX:

Make	:	Triveni
------	---	---------

Type	:	Single Reduction
Input Speed	:	8325 RPM
Output Speed	:	1500 RPM
Gear Wheel	:	14 AT - 30G - 00230 - 0314
Gear Shaft	:	14AT - 30S - 00235-2384
Pinion Shaft	:	14AT - 30P - 243-1143

ALTERNATOR:

Make	:	JYOTI
Model	:	THGB-4-DS
Type	:	Double Bearing
Power	:	3000 kW (3750 kVA)
Voltage	:	420V
Speed	:	1500 RPM
Phase	:	3
Enclosure	:	CACW

ACB

Make	:	L & T
Model	:	CN-CS 4000 H2
AMP	:	4000

OVERSPEED TRIP

Make	:	Triveni
Type	:	Eccentric Spring Loaded
Set Point	:	10% - 15% (Rotor RPM)

LOW LUBRICATING OIL PRESSURE

Make	:	Triveni
Type	:	Hydraulic Plunger
Set Point	:	0.5 to 0.8 Kg/Cm ² g

MANUAL TRIP

Make	:	Triveni
Type	:	Hydraulic

EXCESSIVE AXIAL MOVEMENT TRIP

Make	:	Triveni
Type	:	Hydraulic
Set Point	:	0.8 to 2.2 Kg/Cm ² g

SOLENOID VALVE

Make	:	Rotex
Model	:	SRR-NW-10
Power Supply	:	240V, AC
Connection	:	1/2" NPT (F)
Operation	:	Energise to Trip

EXHAUST SENTINAL VALVE

Make	:	Asvin
Type	:	Spring Loaded
Set Pressure	:	1.75 - 2.05 Kg/Cm ² g

SCOPE OF SUPPLY:

The above Turbine & Alternator is complete with the following:

1. Turbine with Gearbox mounted with all fitments on common base frame.
2. Complete Oil Cooling system including 2 Nos. Oil Coolers, Valves, Oil Pumps with Motors, connected Oil Filters and attached Pipeline.
3. Complete Governing System including Triveni make centrifugal fly weight type Governor.
4. High Speed & Low Speed Coupling.
5. 6" Stop and Emergency Valve.
6. 1 No. Exhaust and bypass Valve.
7. Exhaust ducting and Exhaust Pipeline upto valve.
8. Bus Duct and Bus bar from Alternator Exciter to Switch Board.
9. 1 No. Turbine Local Control Panel.
10. Gauges as Installed.
11. Alternator mounted on Base frame.
12. Alternator control panel having 4000 AMPS ACB.
13. 1 No. Excitation Control Panel.
14. 1 No. AVR Panel.
15. 1 No. DC Panel.
16. Complete Alternator Cooling System.

NOTE:

Videos of the turbine operation at full speed and voltage in September 2026 are given the following link: [CLICK HERE](#) for videos.

PHOTOGRAPHS:





