

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

PH (O) : +91 - 22 - 25235386
: +91 - 22 - 25234478

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

1 No. – 37 MW BHEL make, Condensing type Steam Turbine Generator set, having the Following Technical Specifications:

STEAM TURBINE DETAILS:

Make : BHEL
Model : HNK 71/2-8-4(Condensing)
Set : IK 033
M/c no : T-0473
Rated Capacity : 37.09 MW
Inlet Steam pressure : 60 kg/cm2
Inlet Steam temperature : 475 Deg. C
Steam flow (HP/LP) : 130 TPH
Condenser vacuum : 0.1 kg/cm2
HP blading : 34 (Reaction type)
LP blading : 17 (Reaction type)

ALTERNATOR DETAILS:

Make : BHEL
Capacity : 37090 kW
Speed : 3000 RPM
Voltage : 11000V
P.F. : 0.8
Frequency : 50 Hz
No. of Phase : 3
Connection : Y
Year of Make : 1998
Insulation Class : F
No. of Poles : 2

LUBE OIL SYSTEM : Main Lube Oil Tank

Capacity : 18 m³
Rundown Tank Capacity : 10 m³
Overhead Tank Capacity : 10 m³

MAIN OIL PUMP DETAILS:

Make : KSB Pumps Ltd
Type : RPK EM-80-315
Serial no : 9850260-751-1999
EX : 5892/99, 5891/99
Flow : 138m³/h
Head : 113.6 m

AUXILIARY OIL PUMP DETAILS:

Make : KSB Pumps
Type : RPK EM-80-315
Serial no : 9850261-751-1999
EX : 5892/99, 5891/99
Flow : 138 m³/h
Head : 113.6 m

EMERGENCY OIL PUMP DETAILS:

Make : KSB Pumps Ltd
Type : RPK-EV-150-200
Serial No : 9850266-751-1998
Exl : 5903/99
Flow : 40m³/h
Head : 45.45 m
N : 2900 rpm

JACKING OIL PUMPS DETAILS:

Make : Tushaco Pumps
Type : High pressure gear pump
Model : HPG 3E
Flow : 50 Lpm
Discharge pressure : 120kg/cm²
Rpm : 1500
HP : 25

OIL COOLER DETAILS:

Make : BHEL
Serial No : 0227, 0228
Shield : 10 THK 700 X 12
No of coolers : 2 X 100
Quantity of oil : 48.4 cu m/hr
Inlet temp of oil : 55 deg C
Outlet temp of oil : 45 deg C
Pressure drop in oil side : 0.25 kg/cm²

Quantity of cooling water	:	100 cu m/hr
Inlet temp of water	:	33 deg C
Outlet temp of water	:	35 deg C
Pressure drop in water side	:	0.6 kg/cm ²
Cooling surface area	:	238 m ²
Size of tubes (OD x THK)	:	15.875 X 1.65
Total no of tubes	:	776
No of water passes	:	4
Water side design pressure	:	6 Atg
Oil side design pressure	:	9 Atg
Water side design temp	:	100 deg C
Oil side design temp	:	100 deg C
Water side test pressure	:	9
Oil side test pressure	:	13.5
Test temp	:	Ambient

L. O. CENTRIFUGE DETAILS:

Make	:	Alfa Laval
Type	:	MAB -103
Rpm	:	1400
Kw	:	0.75

BOOSTER PUMP DETAILS:

Type	:	Gear pump
Motor	:	Crompton Greaves Ltd
Kw	:	0.75
Rpm	:	1400

LUBE OIL TANK VAPOR EXHAUST FAN DETAILS:

Make	:	Radiant
Model	:	190 AWS
Air discharge	:	396 m ³ /hr
Sp	:	100 wgm
Rpm	:	2880

L O DUPLEX FILTER DETAILS:

Make	:	EPE Process Filters & Accumulator Pvt. Ltd
Model	:	25D180IG25 CEG M 04-08
Size	:	25 microns
Capacity	:	960Lpm

OIL ACCUMULATOR DETAILS:

Make	:	EPE Germany
Model	:	CFOAS-55P30

ST CONDENSATE SYSTEM DETAILS:

Surface condenser Shape	:	Circular
-------------------------	---	----------

Type	:	Shell and Tube
Quantity of steam	:	134000 Kg/hr
Enthalpy of condensing steam	:	549.3 Kcal/kg
Condenser vacuum	:	0.1 ata
Cleanliness factor	:	0.85
Size of tubes (OD X THK)	:	19.05 X 0.711mm
Total no of tubes	:	7750
Free oxygen in condensate	:	20 ppb
Cooling surface area	:	3483 m ²
Quantity of cooling water	:	7500 m ³ /hr
Cooling water inlet temp	:	33
Cooling water outlet temp	:	42
Resistance on water side	:	7.6 MWCL
Velocity of cooling water	:	2.2 m/sec
No of water side passes	:	2
Water chambers	:	Divided
Water chamber design pressure	:	4 atg
Bolt leak tightness pressure	:	6 atg
Steam side design pressure	:	1.1 atg & vacuum
Steam side test pressure	:	Hyd fill
Water side design temp	:	65 deg C
Steam side design temp	:	100 deg C
Test temp	:	Ambient
Hot well capacity	:	3 min

CONDENSATE EXTRACTION PUMP DETAILS:

Make	:	KSB Pumps
Type	:	WKT - 150 - 4
Serial No	:	9819048 – 751 / 9819049-751
Ex No	:	6923/99, 6922-99
Flow	:	198.35 TPH
Head	:	106
N	:	1480

STARTING EJECTOR DETAILS

Make	:	BHEL
Working steam pr/temp	:	10 ATA/ 350
Steam consumption	:	1250 kg/hr
Suction pressure	:	0.35 ata
Working steam temp	:	350 deg C
Capacity of dry air	:	220 kg/hr

MAIN EJECTOR DETAILS:

Make	:	BHEL
Type	:	SJAE 107350
Standard no	:	HEI/ BHEL
Working steam pr/temp	:	10 ATA/350°c

Steam consumption	:	1000kg/hr
Suction pr. (I stage)	:	0.035 ATA
Surface Area of inter condenser	:	40m ²
Surface Area of after condenser	:	18m ²
No. of tubes in inter condenser	:	300
No. of tubes in after condenser	:	300
Size of tube (OD x THK)	:	19.05 x 0.889 mm ²
Number of passes	:	2
Inter / after condenser tube length	:	855 / 1000 mm
Condensate quantity (100% capacity):	:	134000 kg/hr
Condensate inlet temp	:	45.45 deg C
Tube side design pressure	:	20 atg
Tube side test pressure	:	30 atg
Tube side design temp	:	100 deg C
Shell side design pressure	:	3.5 atg & vacuum
Shell side test pressure	:	5.3 atg
Shell side design temp	:	200
Test temp	:	Ambient

GLAND STEAM CONDENSER DETAILS:

Make	:	BHEL
Type	:	Shell & tube, 2 pass
Serial No	:	05620
Drawing no	:	1-16010-00671
Shape	:	Circular
Qty of steam	:	134000 kg/hr
Condenser vacuum	:	0.1 ATA
Total no. Of tubes	:	7750
Size of tube (OD x THK)	:	19.05 x 0.711
Free oxygen in condenser	:	20 ppb
Cooling surface area	:	3483 m ²
Qty of cooling water	:	7500 m ³ /hr
Cooling water inlet temp	:	33°C
Cooling water outlet temp	:	42°C

GLAND STEAM CONDENSER EXHAUST FAN DETAILS:

Make	:	Pat fans
Capacity	:	11 m ³ /sec
Spr	:	500wg
Rpm	:	2850

GLAND STEAM SURFACE CONDENSER DETAILS:

Make	:	BHEL
Serial No	:	02386
Std no	:	HEI/BHEL

PHOTOGRAPHS:















