



## DATA TO TURBINE DESIGN

Sheet 1 of 1

**PROJECT** : Installation of GTC at GAIL Gandhar  
**SERVICE** : Natural Gas Compressor  
**CUSTOMER** : GAIL  
**CONSULTANT** : EIL  
**No. of Units** : 1

Condition	CASE1A	CASE1B #	CASE1C	CASE1D
Total Compr Power (kW)	5631	6061	5070	5357
Compr Speed (RPM)	10062	10386	9551	9867

Condition	CASE2A	CASE2B	CASE2C	CASE2D
Total Compr Power (kW)	7375	8013	6551	7140
Compr Speed (RPM)	10951	11499	10297	10822

Rated Speed: 11499 rpm

MCS: 12074 rpm

Trip Speed: 12678 rpm

## # Guarantee Case

Direction of rotation of compressor (Looking from driven end of Compressor/coupling end): CW

Speed Range % : 70 - 105% of 11499 rpm

Lube Oil System:

Lube Oil Requirements for Compressor

Flow 285 lpm

Heat Losses 113 kW

Oil grade ISO VG 32 / ISO VG 46

Pressure required at lube oil header mounted on compressor base plate is 2.5 kg/cm<sup>2</sup>g**Request to include above oil quantities in GT lube oil system design**Notes:

1. Request to consider additional 2% gear box power loss for each case to arrive power at gas turbine coupling (i.e each case indicated power to be multiplied by 1.02).

**Any special design requirements: Please refer enquiry specifications**

Rev
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