Bharat Heavy Electricals Limited

(A Govt. of India Undertaking)
RCPURAM, HYDERABAD-502 032

Doc Ref: HY/GT/Read/001

1. Reading instructions for BHEL specifications :

BHEL Hyderabad Gas turbine material codes are unique for each item procured & they are derived from GT specification numbers as per logic given below.

The BHEL material code is a 12 digit alphanumeric number. (Ex: GT9754313059).

Digit 1&2: GT (indicating this item is required for gas turbine application)

Digit 3&4: 97 (a constant indicating this item is made metallic component).

Digit 5 to 9: Specification number (this is GT specification number unique for item).

Digit 10 & 11: Variant.

Digit 12: This is a check digit internally generated for system checking.

Variant is an important concept in BHEL specification usage. Since items with different size but having similar construction or type are clubbed in single specification , variant helps to pin point which particular item of the specification being asked for quotation.

For example: in the enclosed specification for exhaust ducting GT54313
A total of five variants are listed on page 8 & 9. If BHEL calls for a material code GT97**54313****05**9 it means the specification to be referred for supply of this item is **GT54313** (digit 5 to 9) and the variant called is **05** (digit 10 &11)
The characteristic features of variant **05** are listed in variant table of the specification GT54313 on page 9 like the outline drawing to be followed is 1-36409-61014 and this is for project GGSR, Fr6 type GT.

Same logic to be followed for understanding specification for other items also. The current EOI is required for following:

1. Gas Turbine Exhaust Duct (Specification GT54313 variants required are 01, 04 & 05)
2. Gas Turbine Inlet Ducts (Specification GT54320 varients required are 01, 02, & 03)
3. Gas Turbine Acoustic Enclosures (variants required are 26, 30 & 32)

For any further clarifications on above can be emailed to bhisatya@bhelhyd.co.in

In the event of conflicts in the ordering requirements (specification, drawings, and subtitled specifications of standards. The vendor shall notify the buyer immediately upon recognition.

11.01 Exceptions / Clarifications to this specification

Exceptions, where necessary, shall be documented by supporting analysis and / or data delineating the engineering logic and technical basis for the exception. These exceptions shall be presented to BHEL engineering for review. Exceptions resulting in a material or process substitution shall be submitted to the BHEL for approval.

Var No.	Project	Ref. Drg. No.	Remarks	BHEL Matl. Code.
01	Essar Vadhinar Jamnagar	1-364-09-91005	Noise: 85 DB(A) Near field Steel design as per: IS 800 Altitude: 31.5m above MSL Min temperature (Dry bulb):5°C Max temperature (BD): 48°C Normal ambiant temp (DB):33°C RH max / design / min :27/70/96 Design wind velocit / direction : Wind speed m/s: 50 62.5 75 85 Elévation m : 10 20 40 60 seismic zone: Zone- IV as per IS 1893 Exhaust parameters : Maximum flow = 1555800 kg/hr Maximum temperature=595 deg C Maximum pressure=762mm WC(g) Painting scheme GTEG/ESSAR/001	GT9754313016
02	Fr-6 RIL-DAHEJ	1-364-09-61012	NOISE: 85DB(A) NEAR FIELD STEEL DESIGN AS PER IS800 wind as per IS 875,sesmic as per IS 1893 EXHAUST FLOW: 624690 kg/hr at 615°C DESIGN PRESSURE: 650WC DAMPER INTER FACE DRAWING:- 2-365-02-61001 Min temp: 13°C , Max temp: 45°C RH: 30% - 100% Seismic: Zone - V ISI893 Wind: 235 kg/M2 Outdoor Altitude: 6m above MSL	GT9754313024

Var No.	Project	Ref. Drg. No.	Remarks	BHEL Matl. Code.
03	Fr-5 BARAMURA	1-364-09-51008	NOISE: 85DB(A) NEAR FIELD STEEL DESIGN AS PER IS800 wind as per IS 875,sesmic as per IS 1893 EXHAUST FLOW: 624690 kg/hr at 615°C DESIGN PRESSURE: 650WC DAMPER INTER FACE DRAWING:- 2-36502-51001 Min temp: 13°C , Max temp: 45°C RH: 30% - 100% Seismic: Zone - V ISI893 Wind: 235 kg/M2 Outdoor Altitude: 6m above MSL	GT9754313032
04	Fr-5 MUL	1-364-09-51007	NOISE: 85DB(A) NEAR FIELD STEEL DESIGN AS PER IS800 wind as per IS 875,sesmic as per IS 1893 EXHAUST FLOW: 624690 kg/hr at 615°C DESIGN PRESSURE: 650WC DAMPER INTER FACE DRAWING:- 2-36502-51001 Min temp: 13°C , Max temp: 45°C RH: 30% - 100% Seismic: Zone - V ISI893 Wind: 235 kg/M2 Outdoor Altitude: 6m above MSL	GT9754313040
05	Fr-6 GGSR	1-364-09-61014.	NOISE: 85DB(A) NEAR FIELD STEEL DESIGN AS PER IS800 wind as per IS 875,sesmic as per IS 1893 EXHAUST FLOW: 624690 kg/hr at 615°C DESIGN PRESSURE: 650WC DAMPER INTER FACE DRAWING:- 2-365-02-61001 Min temp: 13°C , Max temp: 45°C RH: 30% - 100% Seismic: Zone - V ISI893 Wind: 235 kg/M2 Outdoor Altitude: 6m above MSL	GT9754313059