

Specifications for Miscellaneous components manufacturing and Assembly

Objective: To obtain quotations for manufacturing and assembly of turbomachinery components listed through IIT Madras and GE collaboration project.

Work scope:

Quotations are requested for **2 sets** as per following requirement.

Inputs provided by IIT Madras and GE Project team:

1. CAD Models
2. Drawings
3. BOM

Above items will be provided to you through secured GE box folder link

Supplier Scope will be as follows

- Manufacture the hardware as per drawings requirements and CAD models provided by GE and IIT Madras project team.
- Manufacture hardware as per drawings and solid models provided by GE and IIT Madras project team
- Material testing including manufacturing of material test coupons (test specimen) for supplier sourced material to validate the material as mentioned in drawing (Example. Tensile and chemical testing)
- 100%-Dimensional report inspected through NABL certified instruments
- Quality report for Heat treatment and other special processes as per the drawing notes
- Assemble the parts manufactured and standard hardware (Supplier Procured and GE-IITM supplied) in clean environment
- Machine on assembly as per the drawing provided
- Procurement of standard hardware such as wave spring, bolts, dowels, inserts etc
- Assembly of Instrumentation such as Accelerometer and thermocouples as per instrumentation plan provided by GE-IITM team
- Design and Manufacture required assembly/disassembly tooling
- Prepare Process plan to meet assembly requirement
- Component and sub-assembly level balancing of the rotating components to ISO 1940 G2.5 (spin speeds during operation are up- to 60,000 RPM) and .09gm-in for carrier arm and clutch assembly (Spin speeds during operation are up-to 15,000 RPM).
- Support during Prototype testing for machining / disassembly/ re-assembly of components during test or after test for evaluation or re-testing

Other notes

1. Manufacturing suppliers may engage other suppliers for components manufacturing and or special processes following NDA process meeting GE & IIT Madras Collaboration project requirements. Other suppliers need to be ready to enter into NDA with the project team.
2. If the supplier has capability to perform sub-system and/or prototype level performance testing, they may indicate their capabilities for further discussion on testing requirements with the IIT Madras and GE project team.

Guidelines for Quotation

Quote should be as per the details below.

- 1) Lead time from PO date
- 2) Price per Piece (INR)
- 3) Tooling cost/NRC (If applicable)

1. Company/Institution Name: Indian Institute of Technology, Madras.

2. Billing Address The Senior Manager,
Project Purchase,
IC & SR Building, 2nd floor,
I.I.T. Madras,
Chennai – 600 036

3. Contact Person & Designation: Dr.B.V.S.S.S.Prasad
Professor,
Turbo machines Laboratory,
Department of Mechanical Engineering,
I.I.T.Madras

4. Contact telephone: 00 91 44 2257 4671 / 098400 69487 / 091760 69487

5. E- mail : prasad@iitm.ac.in<<mailto:prasad@iitm.ac.in>>