

Technical Delivery Conditions for Machined Components

Doc No: GR/TD/4967

Sl. No.	Description	Compliance as "Complied or NA"
1	Company Profile to be attached will photographs of products, infrastructure, list of equipments and testing facilities	
2	Vendor Credential of the Firm with supply record of at least 3 years attached for 3 MRTS projects.	
3	General Requirements for the Supply of Metallurgical Materials shall conform to IS 1387	
4	All materials under the scope of supplier shall be tested for chemical composition and mechanical properties as per applicable standards stipulated above. The materials qualified as per standard shall be accepted.	
5	Materials shall be procured by the contractor from genuine sources directly from reputed manufacturers as far as possible or through their authorized dealers. Purchaser's authorized representative shall witness all tests on the raw material at the place of manufacturer. In case of supply through authorized dealers, the original mill test certificates and shipping documents from the place of manufacturer shall be provided for verification.	
6	In case of original documents and mill certificates are not available or are in doubt, each length of materials shall be tested for its conformance to this specification at laboratories / agencies approved by the purchaser.	
7	All parts shall be manufactured strictly conforming to the applicable drawings.	
8	Dimensional / Geometrical tolerances wherever not specified, general tolerances as per IS 2102 Part 2 (Fine) shall apply.	
9	Geometric tolerances, surface finish, concentricity, etc., must conform to those mentioned in the drawing.	
10	All sharp corners shall be burr free and rounded to R 0.2	
11	All dimensions and other details shown in the drawing shall conform to the standard temperature of 20° C. Hence care shall be taken to incorporate appropriate corrections for thermal expansion or contraction during manufacturing and inspection depending on the room temperature.	
12	Subcontracting is generally not permitted. However in cases where it is unavoidable, the same shall be subject to prior approval by Purchaser. The bidder shall define the part or services they plan to subcontract in the technical bid. Reasons for subcontracting shall be described.	
13	Detailed profile of the subcontractor shall be attached in the technical bid. All subcontractors are subject to assessment and qualification by the purchaser.	
14	For welding subcontract, the welder and welding methodology shall comply with EN 15085. Proper certifications and other relevant documents should be submitted along with the tender.	
15	A detailed Quality Assurance Plan in line with this specification shall be submitted and the same shall be got approved by the purchaser before commencing the manufacturing activities	
16	All the items after the final machining shall be visually inspected for any scratches, dent marks, cracks, folds, other material defects, damages or any other surface irregularities	
17	The supplier shall carry out inspection as per approved QAP. Reports of inspection in format acceptable to the purchaser shall be prepared and offered to the purchaser's authorized representative at the time of purchaser's inspection.	
18	Only items found acceptable by the supplier shall be offered for purchaser's inspection.	

19	The supplier shall carry out inspection of all dimensions for 100% of the items using standard inspection procedures acceptable to the purchaser.	
20	Supplier shall use suitable inspection gauges, instruments and comparators designed and made to relevant IS standard for inspection. The calibration of instruments and gauges has to be made at a reputed labs and a reference has to be kept with them for the same.	
21	All GO and NOGO gauges shall be got done from standard gauge manufacturer confirming to IS 2334.	
22	For dimensions and forms having tolerances of 50 microns or less special comparators with dial gauge of suitable least count shall be preferred.	
23	Measuring instruments when used for inspection shall have a least count better than 10% of the corresponding dimensional tolerance.	
24	Suitable positional gauges shall be made for inspection of hole positions. All gauges comparators instruments shall be got approved from the purchaser before their actual use.	
25	An identical set of inspection gauges and comparators used for inspection of the part shall be given to the purchaser free of cost, which shall be used as a reference for site inspection.	
26	Calibration certificates for all the equipments to be submitted.	
27	Painting/coating specification shall be submitted and only after due approval of BEML painting/coating should be carried out.	
28	Supplier shall take prior approval of BEML in case of any deviation and any change in approved standard procedure.	
29	Machining after welding should be carried out for the applicable components as per the applicable machining standard and dimensions and tolerances to be maintained as per the applicable standard.	
30	Vendor shall submit the list of applicable standards used in the supply of components.	

