


**TA section letter No. 6415/TA/C&S/21-22 DT. 23.05.2022**


Sl.No	Nomenclature and Drg.No.	Manufacturing Technology & Testing/ Inspection facilities required to produce the item		Must be possessed by the Vendor in his own premises (List of Plant and Machinery and Testing /Inspection facility to be submitted)	May be possessed by the Vendor in his own premises or may be Outsourced (Name and Address of sub-contractor ,list of plant and Machinery and Testing /Inspection facility to be submitted)
1	172.51.016-1/F TORSION BAR FORGING  172.51.016/F SHAFT TORSION FORGING	Technology 1	Metal Cutting	Band saw or Circular Saw or Shearing machine to cut Min 60mm dia rod.	
		Technology 2	Metal Heating	Bogie or Batch type Gas fired or Oil Fired or Induction furnace max Temp 1200 deg C.	
		Technology 3	Forging	1. Horizontal up setter with capacity Force 800T or more and Grip 400T or more.	
		Technology 4	Isothermal Annealing	Suitable furnace for Isothermal Annealing to accommodate 60mm rod with length 2.5M length capacity 1200 Deg.c	
		Technology 5	Shot Blasting		shot Blasting facility required to accommodate 60mm rod with length 2.5M length
		Technology 6	Truing of Bars after heating not less than 100 Deg.c	Suitable furnace with Auto cut off temperature at specified required temperature (in this case it should be less than 100 deg.c) Hydraulic press capacity 20T or more to accommodate 2.5m length of bar.	
		Technology 7	Die		Die manufacturing facility suitable CAD/CAM facility.
		Test/Inspection 1	Fixtures /Gauges/Testing Instruments	Magnetic particle testing facility(spectrometer, Rockwell BHN, UTM, Impact and metallographic ultra sound test) Firm has to develop as per Specification/Drawings and have to submit undertaking for the same.	


**Note: 1 . If the firm is not having the above facility and able to make components with alternate methods, the details of methods to be submitted during participation in Tender for validation and acceptance, if found suitable.**

**2. Facilities must be available with vendor own premises including facilities available with sister/parent concern/strategic partners.**


**3. Firm should give undertaking that they will develop all the testing facility as per QA/Ty if they get order.**

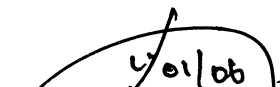
  
JWM/QA(ML)  
(B.CHIRANJEEVULU)

  
JWM/QA-RIP(COE)  
alt to DGM/QA-RIP(COE)  
Member/QA

  
JWM/FS  
(S.SATHYAVELAN)

  
DGM/CA, TRB, RH  
Member User

  
DGM/Operations-I  
Chairman

  
DGM/SMS&FS  
(C.SIVARAJ)