# OPE OF WORK FOR CONVERSION OF FORGED COMPONENTS TO SEMI

### 1.0 Scope of work

- 1.1 Collection of forged components from OFAJ.
- 1.2 Machining of forgings to semi finished components as per drawing no SM-938D.
- 1.3 Dispatching of semi-finished components to OFAJ along with suitable protection ensuring safe delivery to OFAJ.
- 1.4 Qty may be split in 60:40/50:30:20 or on the basis of monthly capacity mentioned by the firm between L-1 and L-2/L1,L2 and L3 subject to acceptance of L1 rate.

### 2.0 <u>Delivery Condition</u>:-

- 2.1 Firm has to submit the security deposit (SD) in the form of bank guarantee equivalent to quantity (minimum 500 nos) of forged components to be lifted by the firm within one week after placement of supply order and lift immediately. The value of each forged components is Rs.13,462/-.
- 2.2 Firm has to commence the supply of semi-finished components along with inspection report within one (01) month from date of placement of supply order. Subsequent supplies to be maintain on weekly basis @ 1000 nos. minimum or 5000 nos. monthly whichever higher. However rate of supply shall be apportioned if quantity is split as per clause no. 1.4 above.
- 2.3 Material shall be issued in batches ranges from 200-500 numbers and after machining, the semi- finished component to be returned back in batches of same qty.
- 2.4 The Firm shall deliver the semi-machined component duly passed to OFAJ for final inspection and acceptance.
- 2.4 The Firm has to arrange transport for collection of forged components from OFAJ to their works and return to OFAJ after conversion, at their own cost and risk. Necessary labourers shall be provided by the firm for loading and unloading of forged/semi-machined component at OFAJ. OFAJ shall only provide overhead Crane/forklift if required to facilitate loading and unloading of component free of cost.
- 2.5 Components, will be in forged and normalized condition (approx. hardness 280-320BHN). Each forged components shall carry **Cast Code** marked with paint for traceability. After machining, firm must transfer the same on each semi machined components with metallic stamp.
- 2.6 Failing to meet the monthly supply target as per the SO for the consecutive two months from the date of contract, OFAJ reserves the right to short close the order.

#### 3.0 Eligibility Criteria:

- 3.1 The firm should have previous experience in executing the same/similar work involving turning, facing, parting operations in a steel component having dimension minimum 180mm dia and 1000mm length type of work in any central/state Govt./PSU company/ Private organization (Listed company at NSE/BSE) during last five years from the date of issue of this tender. The Firm shall submit the documentary evidence (Work order copy along with Job Completion certificate or Customer satisfaction certificate) for the work completed as supporting document along with the offer.
- 3.2 The firm must have in-house adequate machining facilities available at their works required for machining of Component as per attached drawing and should have at least **two(2)** no. of CNC machines/similar machines of following configuration:
  - a) Centre to centre distance- 1000mm minimum.
  - b) Swing over machine bed- 400mm minimum

- c) Turret with minimum 4 tool stations.
- d) Spindle motor capacity- Minimum 30KW.
- 3.3 The firm, should attach the exhaustive List of Plant and Machinery indicating machining capacity of given component (Drg no. SM-938D) including Inspection/measuring facilities available in their premises.
- 3.4 OFAJ may carryout capacity verification if felt necessary to ascertain the machining capacity mentioned by the firm in bid.
- 4.0 <u>Consignee</u> :-General Manager, Ordnance Factory Ambajhari, Nagpur, Maharashtra, Pin-440021

### **Machining of Forge Component:**

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- 5.1 Firm has to do machining of Forged components as per Drg. No SM-938D.
- 5.2 Input weight of forged components is 72.5+1 Kg. Output weight of semi finished machined components is 44.510kg(avg).
- Turning scrap arising out of machining operations shall be retained by the Firm. The firm should quote the rate considering retention of turnings scrap at their end. Scrap rate to be considered as Rs 35.0/Kg. Weight of the scrap per component is considered 27.54 kg including process loss.
- 5.5 The component shall be completely free of machining defect and conforming to the drawing dimensions. No rejection is allowed due to machining defect and dimensional non-conformity. Any undesirable machining marks on internal surface are not acceptable.
- 5.6 No welding or filling up of metal on any portion of the semi finish component is acceptable.
- 5.7 Forged component shall be issued by OFAJ marked with cast number and Serial number (painted). During machining of Forge component, identification and traceability of OFAJ cast number, serial number and firm identification mark (02 alphabet e.g. Aditya Enginering –AE) must be strictly maintained with metallic punching at base of component. No, deviation in above marking shall be accepted.
- Repairing / salvaging of semi finish component having machining defects shall not be allowed by welding, localized heating, arc spot, any surfacing by metal spraying, electrolytic or chemical deposits together with retouching intended to hide a defect. If found any time, supply order will be short closed and firm shall be debarred from OFAJ for participating in future tenders.

## 6.0 <u>Inspection</u>:-

Final Inspection shall be carried out at OFAJ. However OFAJ reps may visit the firm for audit inspection if required. Firm has to provide all necessary arrangement for the same.

- 6.1 The firm shall carry out inspection of each semi finish component at their own premises by themselves using proper gauges and measuring tools (having valid calibration certificate by competent authority), Generate Internal Inspection Report as per format provided by OFAJ after placement of supply order. One copy of the Internal Inspection Report must be submitted to executing authority for scrutiny before Final Inspection of finished materials by OFAJ.
- On receipt of Semi-Finished Component, final inspection and acceptance shall be done at OFAJ premises which shall be binding by both to parties.
- 6.3 The inspecting authority of the OFAJ shall have free access to the works of the manufacturer at all reasonable times.

# 7.0 Protection and Packing:-

Machined component to be packed and protected suitably to avoid any damage/deterioration during loading, unloading and transportation.

The machined component shall be protected with temporary anti rust coating if

required.

7.3 Notwithstanding anything contained in the specification, the responsibility of carrying out proper packing and following good engineering practices to ensure safe and damage free delivery of the semi finish component shall rest with the firm.

### 8.0 Guarantee certificate:-

Firm shall submit a guarantee certificate for their workmanship / quality of the job up to period of 6 months from the date of delivery.

### 9.0 Payment:-

9.1 Payment shall be made as per OFAJ payment terms and condition mentioned in bid.

9.2 OFAJ shall raise Tax Invoice on Scrap value with GST. Firm has to make the payment on Tax Invoice in the form of DD/any electronic mode in favor of GM/OFAJ separately.

9.3 Bill payment shall be made to the firm only after acceptance of the supplied material and clearance of payment against Tax Invoice raised by OFAJ for the scrap value. The firm shall raise the Contractor's Bill clearly showing the Machining charges and shall indicate the OFAJ Invoice No. and date against which the firm has submitted the total Scrap value including taxes.

### 10.0 Rejection Penalty:-

If component is rejected due to firm's workmanship, an amount of Rs.13462/- per component shall be recovered from the firm, either from MSD, PSD or any pending bills at OFAJ (refer clause no 2.1) and components has to be retuned back. No residual value of rejected components shall be paid to the firm.

### 10.3 General Conditions:-

- 10.1 The Firm may check the dimensions and surface of the forgings before undertaking machining job and point out deviation, if any.
- 10.2 Appropriate inspection facilities to be provided by the Firm as and when required by OFAJ authorized inspectors.
- 10.3 Necessary tools fixtures, Gauges, measuring equipments and tackles to be arranged by the firm at his own cost.

Paranjay dadbari Works Manager