

## SCOPE OF WORK AND TECHNICAL SPECIFICATIONS FOR SUPPLY OF MINI LATHE MACHINE

### 1. Scope of Work

The scope of work for the supplier shall include the following:

#### 1.1 Supply

- Supply of **one (1) Mini Lathe Machine – Maxcut LD 175** or equivalent conforming to the technical specifications mentioned in Section 3.
- Supply of all **standard accessories**, tooling, and electrical components required for normal operation of the machine.
- Supply of **machine documentation**, including manuals, drawings, and warranty information.

#### 1.2 Delivery

- Packing suitable for safe transportation to prevent damage during transit.
- Delivery of the machine to **BrahMos Aerospace, Nagpur**
- Responsibility for unloading at site (unless otherwise specified by purchaser).

#### 1.3 Installation & Commissioning

- Initial trial run and demonstration of machine operation.
- Verification of machine performance against technical specifications.

#### 1.4 Acceptance

- Machine shall be considered accepted after successful installation, commissioning, and satisfactory trial run.

## 2. Technical Specifications – Mini Lathe Machine

### 2.1 General

- **Model:** Maxcut LD 175 or equivalent
- **Type:** Mini / Bench Lathe – Industrial Light Duty
- **Construction:** Rigid cast iron bed and structure suitable for continuous workshop use

### 2.2 Capacity

- **Length of Bed:** 4.6'
- **Swing Over Bed (mm):** 350

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- **Swing Over Cross Slide(mm):** 200
- **Distance Between Centres(mm):** 650
- **Maximum Turning Diameter:** As per OEM specification
- **Maximum Turning Length:** As per OEM specification

*(Vendor to clearly mention actual values in the tender submission.)*

### 2.3 Spindle & Drive

- **Spindle Bore(mm):** 40
- **Power (H.P):** 1
- **Power Supply:** 415 V, 3 Phase, 50 Hz
- **Spindle Speed Range(RPM):** 30-825
- **Spindle Nose:** 8 TPI

### 2.4 Feed & Threading

- Cross Slide Travel (mm): 225
- Lead Screw TPI: 4 TPI
- Tailstock Sleeve: MT 3
- Change gears or equivalent threading mechanism (as per OEM design)

### 2.5 Standard Accessories (To Be Included in Supply)

The following accessories shall be supplied along with the machine:

- 3-Jaw Self-Centering Chuck
- 4-Jaw Independent Chuck
- Face Plate
- Tool Post
- Dead Centers
- Square Tool Post Key
- Tool Post Key
- Dial Indicator



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## 2.6 Safety & Ergonomics

- Proper guarding for rotating parts
- Emergency stop provision
- Electrical safety as per standard industrial practice

## 2.7 Documentation

- Operation & maintenance manual
- Spare parts list
- Warranty certificate

## 3. Inspection & Acceptance Criteria

- Visual inspection for workmanship and finish
- Verification of machine specifications against OEM datasheet
- Trial machining operation to demonstrate satisfactory performance
- Smooth operation without abnormal noise or vibration

## 4. Warranty & Support

- Machine shall be covered by **OEM standard warranty**.
- Vendor shall provide technical support for installation and commissioning.
- Availability of spares and service support within India.

## 5. Delivery Schedule

The vendor is expected to supply the items within  $T_0+2$  months, where  $T_0$  is the date of issue of purchase order



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