INVITATION FOR BIDS/NIT

Tender No. NAL/PUR/CSMST/457/19-Y Dated: 20-Dec-19

CSIR- National Aerospace Laboratories (NAL), Bengaluru, India is one of the premier laboratories under Council of Scientific and Industrial Research (CSIR), an autonomous body under Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites online quotation for procurement of the following item(s) for day to day research work.

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Description of Items</th>
<th>Unit</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pneumatic Tools &amp; Trolley with Foam Programming Please refer Annexure for detailed specification.</td>
<td>Set</td>
<td>1</td>
</tr>
</tbody>
</table>

Single / Double Bid: Single
Bid Security (EMD) (in INR): Bid Security Declaration should be enclosed with quotation.
Performance Security: 10% of the purchase order value

01. Tender Documents may be downloaded from Central Public Procurement Portal [https://www.etenders.gov.in](https://www.etenders.gov.in). Aspiring Bidders who have not enrolled/registered in e-procurement should enroll/register before participating through the website [https://www.etenders.gov.in](https://www.etenders.gov.in). The portal enrolment is free of cost. Bidders are advised to go through instructions provided at ‘Instructions for online Bid Submission’.

02. Tenderers can access tender documents on the website (For searching in the NIC site [https://www.etenders.gov.in](https://www.etenders.gov.in), kindly go to Tender Search option, select tender type and select ‘Council of Scientific and Industrial Research’ in organization tab and select NAL-Bengaluru-CSIR in department type. Thereafter, Click on “Search” button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website [https://www.etenders.gov.in](https://www.etenders.gov.in) as per the schedule given in the next page.

03. Either the Indian Agent on behalf of the Foreign principal or the Foreign principal can bid directly in a tender but not both. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. To maintain sanctity of tendering system, one Indian Agent cannot represent two different Foreign principals in one tender.

04. Unsolicited / conditional / unsigned tenders (Quotations) shall not be considered. Quotations received after the due date and time shall be summarily rejected.

05. The Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.

06. The Director, CSIR- National Aerospace Laboratories, Bengaluru reserves the right to accept any or all the tenders either in part or in full or to split the order without assigning any reasons there for.

Raman Kumar
Section Officer (S&P)

P. O. & S. 1779, AYPSHAGIRI ROAD, KODIHALI, BENGALURU - 560 017, INDIA
P.O. No 1779, HAL Airport Road, Kodihalli, Bengaluru - 560 017, INDIA
Phone / Fax: +91-80-2508 6040 -45, 9996-2508 6040 - 45, FAX : +91-80-2526 9611

http://www.nal.res.in
purchase@nal.res.in
## SCHEDULE CUM CRITICAL DATE SHEET

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name of Organization</td>
<td>CSIR-National Aerospace Laboratories, Bengaluru</td>
</tr>
<tr>
<td>2</td>
<td>Tender Reference No</td>
<td>NAL/PUR/CSMST/457/19-Y dated: 20-Dec-19</td>
</tr>
<tr>
<td>3</td>
<td>Tender Type (Open/Limited/EOI/Auction/Single)</td>
<td>Open</td>
</tr>
<tr>
<td>4</td>
<td>Type/Form of Contract (Work / Supply / Auction / Service / Buy / Empanelment / Sell)</td>
<td>Supply</td>
</tr>
<tr>
<td>5</td>
<td>No of Covers (One/Two/Three/Four)</td>
<td>One</td>
</tr>
<tr>
<td>6</td>
<td>Tender Category (Services/Good/Works)</td>
<td>Goods</td>
</tr>
<tr>
<td>7</td>
<td>Allow Resubmission (Only in online mode within scheduled period)</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>Allow Withdrawal (Only in online mode within scheduled period)</td>
<td>Yes</td>
</tr>
<tr>
<td>9</td>
<td>Allow Offline Submission</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>Work Item Title</td>
<td>Pneumatic Tools &amp; Trolley with Foam Programming</td>
</tr>
<tr>
<td>11</td>
<td>Work Description</td>
<td>Pneumatic Tools &amp; Trolley with Foam Programming</td>
</tr>
<tr>
<td>12</td>
<td>Delivery Schedule</td>
<td>40 days from the date of purchase order</td>
</tr>
<tr>
<td>13</td>
<td>Product Category (Civil Works / Electrical Works / Fleet Management / Computer Systems)</td>
<td>R &amp; D Equipment</td>
</tr>
<tr>
<td>14</td>
<td>Is Multi Currency Allowed</td>
<td>Yes</td>
</tr>
<tr>
<td>15</td>
<td>Tender Publishing Date</td>
<td>23-Dec-19, 1800 Hrs</td>
</tr>
<tr>
<td></td>
<td>a) Document Download Start Date</td>
<td>23-Dec-19, 1800 Hrs</td>
</tr>
<tr>
<td></td>
<td>b) Bid Submission Start Date</td>
<td>23-Dec-19, 1800 Hrs</td>
</tr>
<tr>
<td></td>
<td>c) Bid Submission End Date</td>
<td>13-Jan-20, 1000 Hrs</td>
</tr>
<tr>
<td></td>
<td>d) Bid Opening Date</td>
<td>14-Jan-20, 1100 Hrs</td>
</tr>
<tr>
<td>16</td>
<td>Bid Validity Days</td>
<td>90 days</td>
</tr>
<tr>
<td>17</td>
<td>Address for communication</td>
<td>Stores and Purchase Officer, CSIR-National Aerospace Laboratories, HAL Airport Road, Kodihalli, Bengaluru - 560017</td>
</tr>
<tr>
<td>18</td>
<td>Inviting Officer</td>
<td>Director, CSIR-NAL</td>
</tr>
<tr>
<td>19</td>
<td>Contact No</td>
<td>25086040, 25086041</td>
</tr>
<tr>
<td>20</td>
<td>E-Mail Address</td>
<td><a href="mailto:purchasek@nal.res.in">purchasek@nal.res.in</a></td>
</tr>
<tr>
<td>21</td>
<td>Detailed specification of item</td>
<td>Refer Invitation for bids / NIT</td>
</tr>
<tr>
<td>22</td>
<td>Tender Terms &amp; Conditions &amp; Instruction for online bid submission</td>
<td>The prospective bidders are requested to refer to the Standard Tender Document available on NAL Internet <a href="http://www.nal.res.in">www.nal.res.in</a> under the icon Tender-Purchase before formulating and submitting their bids</td>
</tr>
</tbody>
</table>
# Specification of “Composite Fabrication/Repair Tool Kit with Foam Programming”

## A) Items List

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Tools</th>
<th>Nos</th>
<th>Annexure (l)</th>
<th>Page no:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Tool Trolley</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ratchets (1/2 Inch)</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ratchets Handle (1 Inch)</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>WRENCHES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Ratcheting Combination Standard Handle</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Align Key Combination</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Adjustable Cushion Handle</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Adjustable cushion Handle</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Screw Driver</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Screw Driver Type -1</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Screw Driver Type -2</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>PLIERS &amp; CUTTER SET</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Pliers and Cutter Set</td>
<td>1</td>
<td>4,5</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>PUNCHES CHISELS/HAMMERS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Soft Grip Hammer</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Claw Hammer</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Mallet Hammer</td>
<td>1</td>
<td>5,6</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Stamping Set</td>
<td>1</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Stamping Set</td>
<td>1</td>
<td>6,7</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>GENERAL HANDLE TOOLS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Swiss Pattern Needle Files</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Bastard Cut Individual Files (Round Files)</td>
<td>1</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Bastard Cut Individual Files (Mill Files)</td>
<td>1</td>
<td>7,8</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Bastard Cut Individual Files (Half Round Files)</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Striking Scrapers And Putty Knives</td>
<td>1</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>POWER TOOLS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Cutting Tools</td>
<td>1</td>
<td>8,9</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>ACCESSORIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Blow Guns</td>
<td>1</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Tool Trolley</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Tool Trolley With Foam Programing for all the tools</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Screw Drivers (Pneumatic Tools)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Screwdrivers (Pistol)</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Screwdrivers (Straight)</td>
<td>1</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Screwdrivers (Angle Head)</td>
<td>1</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>
B) Commercial Terms and Conditions

- Items being offered should be a standard product of the manufacturer.
- The Bidder needs to quote for the complete range. Partial quotes will not be preferred.
- All the specification and features should be met meet invariably.
- Parties should quote with detailed specification and manufacturer’s catalogue.
- All Hand Tools should be of ANSI Standards.
- Supplier should be original manufacturer or their authorized agents. The authorized agents should give the authorization letter from the manufacturer otherwise, their quotation will not be considered.
- The supplier shall provide the list of customers to whom the similar items are already been supplied.
- Supplier should give details of guarantee or warranty of the product and accessories.
- A copy of the calibration chart for the torque wrenches and drivers shall be sent before shipment for verification and clearance.
- All the tools should come inside a tool trolley with foam programming for each tool inside the trolley.
1) Ratchets (1/2 Inch)

**Specification**

1. Dimension C, Length, inches 25-3/4
2. Gear Teeth 80
3. Description (Chart) red soft grip handle locking flex head ratchet
4. Finish chrome
5. Swing Arc 4.5 degree
6. Dimension B, head width, inches 1-5/8
7. Square drive, inches 1/2
8. Dimension A, head depth, inches 3/4
9. Handle grip collar - Black & Red

**Features Should Comply**

1. Similar or Dual 80 ratchet design features 80 tooth gear with dual-pawls
2. Dual-pawls engage seven teeth with gear at all times
3. Up to 25% less ratcheting arc to engage next gear tooth
4. Sealed head should be provided to keep dirt and contamination out
5. Nine position positive locking
6. Soft grip handles for additional comfort and control

2) Ratchets Handle (1 Inch)

**Specification**

1. Hand Grip - Plain
2. Dimension A, Dia, 1-1/8 inches
3. Dimension B, length, 29 inches
4. Finish chrome

**Features Should Comply**

1. Plain handle with locking buttons at both ends
3) Ratcheting Combination Standard Handle

**Specification**

1. Size 10 - 19
2. Dimension A, head depth, 25 – 35 mm
3. Dimension B, head width, 28 – 41 mm
4. Dimension C, head depth, 8 – 12 mm
5. Dimension D, head depth, 7 – 10 mm
6. Dimension E, length, 230-300 mm

**Features Should Comply**

1. Nickel-chrome finish surface
2. Wrench handle should be sized for optimum length, comfort and balance
3. Tool manufactured should be special alloy steel, precision forged, heat treated, and nickel-chrome finish for optimum strength and durability
4. Longer-length, wrench handle is sized for optimum comfort and balance, and provides increased leverage, especially in tight spaces
5. Handle by offset 15°

4) Align key

**Specification**

1. Set of thickness between 0.05 - 9/64 inch
2. Set, Size of dimension (A) between 1.8 - 2.9 inch
3. Finish Industrial chrome
4. Set of 9 Piece

5) Adjustable Cushion Handle Spanner

**Specification**

1. Dimension A, length, (300) mm
2. Finish chrome
3. Dimension B, Jaw capacity, (35) mm
4. Handle grip collar – Red
Features Should Comply

1. Adjustable jaws feature the Flank Drive Plus; wrenching system that "bites" into the fastener for more turning power with less risk of tool or fastener damage
2. Nickel-Chrome Finish Surface
3. Tool should be special alloy steel, precision forged, and heat treated for optimum strength and durability
4. Elastomer handle surface should be soft.
5. Quick reference for metric sizing

6) Adjustable Cushion Handle Wrench

**Specification**

1. Dimension A, length, (220) mm
2. Finish chrome
3. Dimension B, Jaw capacity, (40) mm
4. Handle grip collar – Red

Features Should Comply

1. Jaws should open wider than standard adjustable
2. Nickel-chrome finish surface
3. Metric and scales for quick reference
4. Adjustable moving jaw should not fall out
5. Elastomer handle should be soft, insulates against cold to provides a nonslip surface
6. Opens as wide as a 10" adjustable wrench

7) Screw Driver Type 1

**Specification**

1. Flat Tip .040" Hard Grip Red Screwdriver
2. Flat Tip .035" Hard Grip Red Screwdriver
3. Flat Tip .040" Hard Grip Red Screwdriver
4. Flat Tip .050" Hard Grip Red Screwdriver
5. Flat Tip .055" Hard Grip Red Screwdriver
6. Handle Collar - Red
7. 2 Hard Grip Standard Screwdriver

**Features Should Comply**

1. 8 pc Hard Grip Combination Red Screwdriver Set
2. Flat tip, plus (3) Screwdrivers in a storage tray
8) Length Screw Driver Type 2

Specification
1. Handle color orange
2. Dimension B, blade Dia., 1/4 inches
3. Dimension A, tip width, 040 inches
4. Dimension C, blade length, 8 inches
5. Finish chrome
6. Dimension D, length, 20 inches
7. Handle grip collar - Red & Black

9) Pliers and Cutter Set

Specification
1. 4pc Pliers Cutters Set (Red)
2. Adjustable Joint Interlocking Channel Pliers (10 - 1/6)
3. 7" Needle nose pliers (Red)
4. 8" Talon grip combination Slip-Joint Pliers (Red)

Features Should Comply
1. Cold-forged should be increased strength, from top to bottom
2. Joints should be positioned close to the cutting edge
3. Every set of pliers and cutters should be made with special alloy steel
4. Handel gripper collar - Red for easy identification/Marking with permanent pens

10) STAMING SET (0-9)

Specification
1. Characters 0-9
2. Figure Size, 3/16 inches
3. Length, 2 - 7/16 inches
4. Square Body, 5/16 inches
5. Numbers of Stamps: 09
11) STAMING SET (A-Z)

**Specification**

1. A–Z Steel Stamping Set
2. Characters A–Z
3. Figure Size, 3/16 inches
4. Length, 2-7/16 inches
5. Square body, 5/16 inches
6. Number Stamps 27

12) Soft Grip Hammer

**Specification**

1. Length, 12 mm
2. Net weight: <1 Kg
3. Face dia., 1-9/18 mm
4. Head length, 4-1/8 mm
5. Face dia., 1 - 9/20 inches
6. Head length, 4 -1/8 inches

**Features Should Comply**

1. Free flowing should be improving dead blow action while reducing rebound
2. Compact head has larger surface striking area and heavier caps to improve as 40%
3. Soft grip handle with ribbed

13) Mallet Hammer

**Specification**

1. Hammer material: rubber
2. Handle: wood
3. Hammer type: mallet hammer
4. Weight of rubber: ~500 grams
5. Material: rubber - wooden handle
6. Length, 3-3/4 inches
7. Face dimensions, 3-1/6 inches
8. Solid-rubber head is 3-3/4" long, 3-1/6" dia.
14) Claw Hammer

**Specification**

1. Claw style curve
2. Handle length 5 inches
3. Head length 130 mm
4. Overall length 14 inches
5. Overall length 350 mm
6. Weight <1kg

**Features Should Comply**

1. Drop forged carbon steel head
2. Oversized striking surface
3. Polyurethane should be improving grip and offers abrasion resistance and low temperature

15) Swiss Pattern Needle Files

**Specification**

1. 12 Piece standard needle file set
2. File length: 175 mm
3. Cutting length: 70 mm
4. Handle Dia: 4 mm
5. Set consists of 12 different shape Swiss pattern needle files
6. Round, Triangle, Flat, Hand, Barrette, Slitting, Square, Half-Round, Knife, Oval, Round Edge & Pippin

16) Bastard Cut Individual Files (Round Files)

**Specification**

1. Ergonomic handle bastard cut round file: 6 inch
2. 8" Ergonomic handle bastard cut round file
3. 10" Ergonomic handle bastard cut round file
4. 12" Ergonomic handle bastard cut round file
5. Handle grip (Red & Black)
6. Overall length Inches 11
17) Bastard Cut Individual Files (Mill Files)

Specification
1. Bastard cut mill file 6
2. Bastard cut mill file 8
3. Bastard cut mill file 10
4. Bastard cut mill file 12
5. Soft grip file handle (Red)
6. Handle grip (Red & Black)

18) Bastard Cut Individual Files (Half Round Files)

Specification
1. Bastard cut half round file 6
2. Bastard cut half round file 8
3. Bastard cut half round file 10
4. Bastard cut half round file 12
5. Soft grip file handle (Red)
6. Handle grip (Red & Black)

19) Striking Scrapers and Putty Knives

Specification
1. Striking scraper set 3 pc
2. Single bevel striking scraper
3. Single bevel striking scraper
4. Dual bevel striking scraper
5. Handle grip (Red & Black)

20) Cutting Tools

Specification
1. Free speed RPM 10,000 - 11000
2. Sound pressure level dB(A) 87.1
3. Length inches 9.4 mm
4. Air consumption free speed: 1.5
5. Stroke length (11) mm
6. Vibration level 3.55 m/s²
7. Air inlet thread size 1/8-19
8. Free speed SPM 9000-11000
9. Net weight:< 2Kg
Features Should Comply

1. Dual chuck accepts standard air saw blades long reciprocating saw blades
2. Can smoothly cut
3. Comfort grip handle with low vibration
4. Feather should be trigger with a safety lever for easy operation
5. 360° adjustable

21) Blow Guns

Specification

1. Nozzle length 90 mm
2. Nozzle opening diameter 3.5-4.5 mm
3. Air mounting outlet: Rc1/4
4. Total length 237-300 mm
5. Max working Pressure: 1.6-2mpa

Features Should Comply

1. Built-in valve should be improving trigger control
2. Impact-resistant material for long-lasting service
3. Galvanized blow tube for corrosion resistance
4. Handle grip (Red & Black)

22) Tool Trolley with Foam Programming for all the tools

Specification

1. No. of drawers 13
2. Load capacity, 2400-2500 kg
3. Caster size, 6 x 2 inches
4. Net weight, 280±300 kg
5. Tool trolley width (1000±100) mm
6. Tool trolley height (900±100) mm
7. Tool trolley depth (500±50) mm
8. Double slide (1 drawer)
Features Should Comply

1. Double slides on top wide drawer for 250 kg capacity
2. 125 kg ball bearing slides for smooth drawer operations
3. Round key lock for higher security
4. Factory installed aluminum trim for professional appearance
5. Powder coated paint finish

23) Screwdrivers (Pistol)

Specification

1. Output drive: Hex. 1/4" F
2. RMP speed: 300 – 400 rpm
3. Weight of the tool: < 1 kg
4. House size and Nepal size: 10 mm
5. Type of tool: 90 Angle Head
6. Operating pressure: 4 – 7 Bar
7. Screwdriver vibration <= 2.5 m/s²

Features Should Comply

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

24) Screw Driver (Straight)

Specification

1. Output drive: Hex. 1/4" F
2. RMP speed: 300 – 400 rpm
3. Weight of the tool: < 1 kg
4. House size and Nepal size: 10 mm
5. Type of tool: 90 angle head
6. Operating pressure: 4 – 7 Bar
7. Screwdriver vibration: 2.5 m/s²

Features Should Comply

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided
25) Screwdrivers (Angle Head)

**Specification**

1. Output drive: Sq. 3/8 m
2. RMP speed: 300 - 400 rpm
3. Weight of the tool: < 2 kg
4. House size and Nepal size: 10 mm
5. Type of tool: 90 angle head
6. Operating pressure: 5.5 – 7 Bar
7. Drilling vibration: <=2.5 m/s²

**Features Should Comply**

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

26) Drilling (Motor) 300 Watts 5000 RPM

**Specification**

1. RMP Speed: 4000 – 5000 RPM
2. Output Power: 300 – 350 Watts
3. Weight of the tool: < 1 kg
4. House size and Nepal size: 6 mm
5. Drilling vibration: <2.5 m/s²
6. Operating pressure: 5.5 – 7 Bar

**Features Should Comply**

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

27) Drilling (Motor) 450 Watts 2700 RPM

**Specification**

1. RMP speed: 1000 – 1300 RPM
2. Output Power: 900 – 1 kw
3. Weight of the tool: < 2 kg
4. Belt width: 16 mm
5. House size and Nepal size: 10 mm
6. Operating pressure: 4 - 6.3 Bar

**Features Should Comply**

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided
28) 30° Degree Collet

**Specification**

1. Spindle or chuck type: Compact
2. Chuck size: 30 mm
3. Handel type: 1/32 - 3/16
4. Length: 0.37 mm
5. Operating pressure: 4 - 6.3 Bar
6. Features: quick release compact head 30° - collet

**Features Should Comply**

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

29) 360° Degree Collet

**Specification**

1. Spindle or chuck type: Compact
2. Chuck size: 360 mm
3. Handel type: 1/32 - 3/16
4. Length: 0.55 mm
5. Operating pressure: 4 - 6.3 Bar
6. Features: quick release compact head 360° - collet

**Features Should Comply**

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

30) 30° Degree & 360° Degree collet drill bits

**Specification**

1. Collets for compact angle drills - maximum capacity: 5mm (3/16")
2. 0.8 mm
3. 1.0 mm
4. 1.5 mm
5. 1.6 mm
6. 1.7 mm
31) 90° Degree Heavy Duty Chuck

**Specification**

1. Spindle or chuck type: Chuck mounting
2. Chuck size: 90 mm
3. Length: 0.95 mm
4. Operating pressure: 4 - 6.3 Bar
5. Features: heavy duty 90° head chuck output

**Features Should Comply**

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

32) 90° Degree heavy duty chuck

**Specification**

1. Spindle or chuck type: Chuck mounting
2. Chuck size: 13 mm
3. Length: <100 mm
4. Operating pressure: 4 - 6.3 Bar
5. Features: heavy duty 90° head chuck output

**Features Should Comply**

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

33) Grinders Type 1

**Specification**

1. RPM speed: 40000 - 50000 RPM
2. Output power: 300 – 450 W
3. Weight of the tool: <1 kg
4. House size and Nipple Size: 8 mm
5. Operating pressure: 4 - 6.3 Bar
6. Cutter length: 168 mm
7. Collet max. capacity: 6.35 mm
8. Cutter vibration: < 2.5 m/s²
9. Cutter type: grinders for trimming operation
Features Should Comply

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

34) Grinders Type 2

Specification

1. RPM Speed: 40000 - 50000 Rpm
2. Output Power: 300 – 450 W
3. Weight of The Tool: <1kg
4. House Size and Nipple Size: 8 mm
5. Operating Pressure: 4 - 6.3 Bar
6. Cutter Length: 248 mm
7. Collet max. capacity: 6.35 mm
8. Cutter vibration: < 2.8 m/s²
9. Cutter Type: grinders for trimming operation

Features Should Comply

1. Type certificate to cut FRP material should be provided
2. Operator manual should be provided

35) Grinders Type 3

Specification

1. RPM Speed: 13000 – 14000 RPM
2. Output Power: 350 - 500 Watts
3. Weight of the tool: < 1 kg
4. Wheel max. capacity: 100×7×9.52 & 15.9 mm
5. House size: 8 mm
6. Cutter vibration: <2.5 m/s²
7. Operating pressure: 3.5 – 7 Bar
8. Type of tool: angle grinder

Features Should Comply

1. Safety guard around the Belt should be provided
2. Type certificate to cut FRP material should be provided
3. Operator manual should be provided
36) Non Vacuum Random Orbital Sander

**Specification**

1. RPM speed 12000 - 13000 rpm  
2. Out Power  210 - 350 W  
3. Type of tool Sander with palm grip  
4. Comment Non - vacuum  
5. Pad diameter 89 mm  
6. Orbit diameter 2.4 mm  
7. Net weight <1 kg  
8. Length 127 mm  
9. Height 95 mm  
10. Air inlet thread size 0.25 BSP  
11. Min. hose size 6 mm  
12. Air flow at max. capacity 8 l/s  
13. Sound pressure 76 db. (A)  
14. Vibration <=2.5 m/s²

**Features Should Comply**

1. Safety guard around the disc should be provided  
2. Type certificate to cut FRP material should be provided  
3. Operator manual should be provided

37) Belt Sander

**Specification**

1. RMP Speed: 16000 – 16300 RPM  
2. Output Power: 300 - 350 Watts  
3. Weight of the tool: < 1 kg  
4. Belt width: 16 mm  
5. House size and Nepal size: 6 mm  
6. Belt sander vibration: <2.5 m/s²  
7. Operating pressure: 5.5 - 7 Bar  
8. cutter type Belt Sander  
9. Belt vibration: 205 m/s²  
10. Belt length: 480 mm

**Features Should Comply**

1. Safety guard around the Belt should be provided  
2. Type certificate to cut FRP material should be provided  
3. Operator manual should be provided
38) Torque and Positioning ARM

**Specification**

1. Max Torque: 25 NM  
2. Weight of the tool: <3 kg  
3. Tool Clamp diameter: 28.5 – 41 mm  
4. Dimension A: 1158 mm  
5. Dimension B: 296 mm  
6. Dimension Max B: 470 mm  
7. Radius R: 685 mm  
8. Radius R1: 183 mm

**Features Should Comply**

1. Type certificate to cut FRP material should be provided  
2. Operator manual should be provided
Tender No.: NAL/PUR/CSMST/457/19-Y

BID-SECURING DECLARATION FORM

Date: __________________________
Bid No. __________________________

To (insert complete name and address of the purchaser)

I/We, The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

| (a) | have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of  bid validity specified in the form of Bid; or |
| (b) | having been notified of the acceptance of our Bid by the purchaser during the period of bid validity |
|     | (i) fail or refuse to execute the contract, if required, or |
|     | (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders. |

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder)

Dated on ____________ day of ______________________ (insert date of signing)

Corporate Seal (where appropriate)

Note:
1. In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.
2. Bid Security declaration must be signed in by the Proprietor/CEO/MD or equivalent level of Officer of the company.