

**ANNEXURE TO TENDER NO DPS/MRPU/1/1/1247**

**Technical Specification**

| <b>Item Sl. No.</b> | <b>Description of Item</b>   | <b>Unit</b> | <b>Qty</b> |
|---------------------|--|-------------|------------|
| I.                  | Supply of Tungsten Carbide threading inserts of 55° partial profile to suit the existing ISO <b>internal right hand</b> threading tool holder as per the following specifications<br>a) The shape of the insert is triangle with 3 cutting edges<br>b) Inscribed Circle diameter- 4.75 to 5mm<br>c) Thread pitch Maximum-1.5mm<br>d) Threads per inch maximum- 48<br>e) Threads pitch minimum-16<br>f) Inserts length-8 to 8.25mm<br>g) Corner radius-0.05mm<br>h) Profile distance in 'Y' direction of the insert-0.6 mm<br>i) Profile distance in 'X' direction of the insert-0.7 mm<br>j) The base material of the insert shall have minimum 93% tungsten and 3.75% cobalt<br>k) The coating method shall be –PVD<br>l) The coating layer shall be TiN or TiCN+ TiN | Nos         | 20         |
| II.                 | Supply of Tungsten Carbide threading inserts of 60° partial profile to suit the existing ISO <b>internal right hand</b> threading tool holder as per the following specifications<br>a) The shape of the insert is triangle with 3 cutting edges<br>b) Inscribed Circle diameter- 4.75 to 5mm<br>c) Thread pitch Maximum-1.5mm<br>d) Threads per inch maximum- 48<br>e) Threads pitch minimum-16<br>f) Inserts length-8 to 8.25mm<br>g) Corner radius-0.05mm<br>h) Profile distance in 'Y' direction of the insert-0.6 mm<br>i) Profile distance in 'X' direction of the insert-0.7 mm<br>j) The base material of the insert shall have minimum 93% tungsten and 3.75% cobalt<br>k) The coating method shall be –PVD<br>l) The coating layer shall be TiN or TiCN+ TiN | Nos         | 20         |

|      |   |     |    |
|------|---|-----|----|
| III. | <p>Supply of Tungsten Carbide threading inserts of 55° partial profile to suit the existing ISO <b>internal left hand</b> threading tool holder as per the following specifications</p> <ol style="list-style-type: none"> <li>a) The shape of the insert is triangle with 3 cutting edges</li> <li>b) Inscribed Circle diameter- 4.75 to 5mm</li> <li>c) Thread pitch Maximum-1.5mm</li> <li>d) Threads per inch maximum- 48</li> <li>e) Threads pitch minimum-16</li> <li>f) Inserts length-8 to 8.25mm</li> <li>g) Corner radius-0.05mm</li> <li>h) Profile distance in ‘Y’ direction of the insert-0.6 mm</li> <li>i) Profile distance in ‘X’ direction of the insert-0.7 mm</li> <li>j) The base material of the insert shall have minimum 93% tungsten and 3.75% cobalt</li> <li>k) The coating method shall be –PVD</li> <li>l) The coating layer shall be TiN or TiCN+ TiN</li> </ol> | Nos | 20 |
| IV.  | <p>Supply of Tungsten Carbide threading inserts of 55° partial profile to suit the existing ISO <b>internal left hand</b> threading tool holder as per the following specifications</p> <ol style="list-style-type: none"> <li>a) The shape of the insert is triangle with 3 cutting edges</li> <li>b) Inscribed Circle diameter- 6.35mm</li> <li>c) Thread pitch Maximum-1.5mm</li> <li>d) Threads per inch maximum- 48</li> <li>e) Threads pitch minimum-16</li> <li>f) Inserts length-11 mm</li> <li>g) Corner radius-0.05mm</li> <li>h) Profile distance in ‘Y’ direction of the insert-0.8 mm</li> <li>i) Profile distance in ‘X’ direction of the insert-0.9 mm</li> <li>j) The base material of the insert shall have minimum 93% tungsten and 3.75% cobalt</li> <li>k) The coating method shall be –PVD</li> <li>l) The coating layer shall be TiN or TiCN+ TiN</li> </ol>            | Nos | 20 |
| V.   | <p>Supply of Tungsten Carbide threading inserts of 55° partial profile to suit the existing ISO <b>internal right hand</b> threading tool holder as per the following specifications</p> <ol style="list-style-type: none"> <li>a) The shape of the insert is triangle with 3 cutting edges</li> <li>b) Inscribed Circle diameter- 6.35mm</li> <li>c) Thread pitch Maximum-1.5mm</li> <li>d) Threads per inch maximum- 48</li> <li>e) Threads pitch minimum-16</li> <li>f) Inserts length-11 mm</li> <li>g) Corner radius-0.05mm</li> <li>h) Profile distance in ‘Y’ direction of the insert-0.8 mm</li> <li>i) Profile distance in ‘X’ direction of the insert-0.9 mm</li> <li>j) The base material of the insert shall have minimum 93% tungsten and 3.75% cobalt</li> <li>k) The coating method shall be –PVD</li> <li>l) The coating layer shall be TiN or TiCN+ TiN</li> </ol>           | Nos | 20 |

## **Terms and conditions to the bidder**

- I. Make, model no. or code, and manufacturer name shall be mentioned in the Tender
- II. The relevant original catalogues shall be enclosed along with the Quote. It must clearly contain all the dimensions
- III. Quotations from Original manufacturers and their authorized dealers only will be considered, supporting documents shall be enclosed
- IV. The Bidder, in case of Original Equipment Manufacturers shall submit a self-declaration on their letter-head, along with the Bid, confirming that they are regular in manufacturing & supplying the similar tooling.
- V. The bidder in case of authorized dealer, the bidder shall submit a proof confirming that they are supplier of similar tooling.
- VI. The tender will not be considered for evaluation in the absence of the above documents
- VII. The base material of the insert shall have minimum 93% tungsten and 3.75% cobalt. The chemical composition will be tested at our lab by removing the coating. The supply will be rejected, if the specified percentage of chemical composition is not met.**
- VIII. Acceptance Criteria:** - The material will be accepted only after the performance test satisfactorily as per terms and conditions Sl no.X.
- IX. The performance test has to be duly witnessed by the supplier at our site.
- X. The performance test shall be carried in SS 304 materials with the following parameters
  - Cutting speed: 140m/min
  - Depth of cut: 0.5mm
  - Feed: 0.2mm/revolution
  - Tool life: 30 minutes minimum
  - Machine: CNC lathe
  - Lubrication: Dry machining