

## **CORRIGENDUM**

This is in reference to tender no. NSIC/TOOL ROOM/ 2016-17/94 (5) dated 19.01.2017.

The said tender has been re-floated with tender reference no. **NSIC/TOOL ROOM/ 2016-17/94 (60)** with due date as 25.05.2017.

In the above tender, **the matter in 'Annexure A' should be read as: -**

### **Details of requirements and technical specifications of machine**

Name of the Machine: **Universal Knee type Milling Machine**

Sl. No	Description	Unit	Size
1	Table		
a	Overall dimension(l x w)	mm	1500 x 310
b	Clamping area	mm	1350 x 310
c	T slot / size / spacing	No, mm, mm	3 / ~15 / ~65
d	Minimum distance from left hand table end to centre of spindle	mm	250
e	Swivel of table to either side	Degree	45
f	Max. admissible weight on table	kg	250 (At least)
2	Power operated traverse		
a	Longitudinal(X - axis)	mm	800
b	Cross (Y - axis)	mm	230
c	Vertical (Z- axis)	mm	400
3	Feeds		
a	No. of Feed	No.	18
b	Cutting feed rate(X & Y axis)	mm/min	16-800
c	Cutting feed rate (z axis)	mm/min	4-200
d	Rapid traverse(X & Y axis)	mm/min	2500
e	Rapid traverse(Z axis)	mm/min	630
4	Feed Motor		
a	Type of Motor		AC
b	Power	kW	1.5

c	Average Speed	rpm	1500
5	Main Motor		
a	Type of Motor		AC
b	Power	kW	5.5
c	Average Speed	rpm	1500
6	Spindle		
a	Number of Speed		12
b	Speed range	rpm	45-1800
c	Diameter of front bearing	mm	85-86
d	Spindle nose	ISO	40
e	Distance between spindle centre to lower face of the over arm	mm	145-160
f	Min / Max distance , centre of milling spindle/lower face of milling spindle to table top surface	mm	68 /450
7	Power supply		415V,3 Phase
8	Net weight (Not less than)	Kg	2300

Note:

1. Machine casting conforms to FG 260 as per IS 210 (Testing report has to be produced at the time of delivery).
2. Should have Rugged and Vibration free structure.
3. Machine confirms to IS2200-1973/1994 for geometrical accuracy. (Testing report has to be produced at the time of delivery).
4. Separate motor for spindle drive and feed drive.
5. Spindle should be supported on preloaded high precession taper roller bearing (OD 136.5mm, ID 85.7mm, thickness B4mm) of reputed make GAMET/TIMKEN/FAG/NSK and are of precession class not less than p6.
6. Main spindle & Gears should be of Alloy steel with the hardness of 48-50HRC, Material composition 15Ni7Cr4MO2 as per IS:4432-1998 (Testing report has to be produced at the time of delivery).

7. Machine should run directly through Motor with direct coupling (No belt drive)
8. Automatic operated climb milling attachment in longitudinal axis.
9. Wiper should be provided for guide ways.

**Accessories:**

1. Draw bolt
2. Set of service tools
3. Operator manual in hard and soft copy
4. 3 Axes DRO
5. Machine Vice with Swivel base 200mm
6. Self-centering Vice
7. Stub Milling arbors ISO40
  - a.  $\Phi 22 \times 19 / 25$  mm
  - b.  $\Phi 27 \times 21 / 25$  mm
  - c.  $\Phi 32 \times 24 / 25$  mm
  - d.  $\Phi 40 \times 27 / 63$  mm
8. Collet holder ISO40
9. Coolant equipment with pump & Motor
10. Conical type collet dia. 5 to 20 (7 Nos. i.e. 5, 6, 8, 10, 12, 16 & 20)
11. ISO40 End mill holder dia. 5, 6, 8, 10, 12, 16, 20 & 25
12. Reduction sleeve type B ISO40/MT2
13. Reduction sleeve type B ISO40/MT4
14. Milling Arbors ISO40
  - a.  $\Phi 22 \times 500$ mm
  - b.  $\Phi 27 \times 500$ mm
  - c.  $\Phi 32 \times 500$ mm
15. Machine lamp for 220 volts with 7 watts, LED bulb

16. Vertical Milling head
17. Rack milling attachment
18. Slotting attachment
19. Angle Plate and sine table
20. Universal dividing head 135mm with tail stock supporting block & train of gears
21. Height adjustment tail stock 130/250mm
22. 3JAW self-centering chuck Dia. 160mm
23. Single lever hand operated vertical indexing head 12 notches, 3 jaw chuck dia. 160mm.
24. All accessories and consumables in all respect to run the machine smoothly.

Other terms and conditions of tender will remain same.

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