

UNIVERSAL MILLING MACHINE

Sr.#	Description /Specification	Qty. Req.
	<u>UNIVERSAL MILLING MACHINE</u> <u>Technical Data:</u> Name of Equipment: Universal Milling Machine Type : Horizontal and Vertical Universal Milling Machine Table: * Table Area ³ 1900 x 400 mm * Table Rotary motion ³ ± 45° mm Traverse: * Auto Traverses X/Y/Z ³ 1150 x 400 x 500 mm * Spindle to Overarm Distance ³ 200 mm	
1.	* Ram/Overarm Travel ³ 500 mm Feeds: * Longitudinal & Cross feed ³ 10 ~ 1000 mm/min * Vertical Feed ³ 5-400 mm/min * Feed Steps in X/Y/Z ³ Infinitely variable * Rapid Traverse in X/Y ³ 2500 mm/min * Rapid Traverse in Z ³ 600 mm/min Horizontal Spindle: * Spindle taper : ISO 41 * Spindle Speed ³ 50 -2000 rpm * Number of Spindle Speeds : 15 * Motor Power ³ 5.5 Kw (7.5 HP) Vertical Spindle: * Spindle taper : ISO 40 * Spindle Speed ³ 4000 rpm * Nos. of Spindle Speeds: Infinitely Variable (frequency inverter) * Motor Power ³ 3.75 Kw (5.0 HP) * Quill Travel ³ 125 mm * No. of Quill Auto Feed : 03 * Micrometer vertical stop for quill. * Rotation of vertical head ³ ± 90°. Essential Features: * 3-Axes DRO (Acu-Rite/Fagor.or Equivalent) * DRO Resolution 0.005 mm. * Powered RAM * Coolant system complete. * Infinitely variable Power feed on all axes. * Ball Screws for X & Y Axes. * Auto/Centralised ways Lubrication * Pnumatic Draw bars * Simultaneous traversing axes * Back lash eliminator in table feed * Control console on Pendent * CE Conformity	01 No

2.	Accessories:	
	* Chip Tray and Splash Guard	01No Each
	* Work Lamp	01No
	* Arbor Supports	02No
	* Universal Dividing Head with 3-Jaw Chuck & tail stock	01No
	* Rotary Table: 400 mm (give complete specs.	01No
	* Swiveable Rotary Table:400mm	01No
	* Hydraulic clamping vise (Job length/Jaw width:250/150 mm)	01No
	* Power Milling vise (Chucking length/Jaws width:250/150 mm)	01No
	* Milling vise (Chucking length/Jaws width:250/150 mm)	01No
3.	Toolings:	
	* Clamp Kit	02Nos
	* Short Arbors complete dia 22, 27, 32 and 40 mm	01No each
	* Transition Sleeves ISO-40 to MT1-MT4	01Set
	* ISO-40 Collet Holder with set of collets 4-25 mm (17 pieces)	02Set
4.	* ISO-40 Side and Face Cutter Holder 22 mm and 27 mm	01No each
	Spares:	
	* Set of belts	01 Set
	* Spare motor for vertical head.	01No
	* Magentic contactors/relays	03No each type
	* Limit Switches	03No each Type
	* Feed Motor, coolant pump & Lubricant pump	01No each
	* Set of all bearings including: Thrust bearing, ball bearings, needle bearings & combination bearings etc	06No each
	* Set of magnetic clutches (if used)	01Set
	* Set of Fuses	02 Sets
5.	* Main ON /OFF Breaker with Handle (if used)	02 No
	* Ball Screws for X & Y Axes with ball nutts	02Set each
	Power Available : 380V , 50 Hz, 3 Phase	
5.	Documents:	
	<i>Supplier must provide operator manual, parts manual and maintenance manuals in English including mechanical & electrical drawings.</i>	