

12 Years Germany Technology Accumulated and Made by EUMASPINNER





Notice: Euma policy prohibits these products being used for the development or production use or stockpiling of weapons of mass destruction.

(nuclear weapons ,biological weapons ,chemical weapons or missiles)

- According to the content of catalogue, please contact with EUMASPINNER agency or service center if you have any question.
- The content of catalogue start and valid from July 2019, it will not notice separately if any design change of Spec.
- EUMA has final explanation if the content of catalogue and machine have any difference.



WENZHOU EUMA MACHINERY CO., LTD.

Machine tool Sales&Service center

508-5, Success Building, Liuhongqiao Road, Lucheng District, Wenzhou, Zhejiang P. C. : 325000 Tel:+86 577 8823 9930 Mob:+86 138 1973 8388 Justin E-mail: info@eumaspinner.com Http://www.eumaspinner.com

EUMASPINNER (Nanjing) CNC Technology Co., LTD.

Machine tool production base

No.1 Chayuan Road, Huangmei street, Jurong City, Jiangsu Province P. C. : 212400 E-mail: office@eumaspinner.com Http://www.eumaspinner.com



DU SERIES UNIVERSAL MACHINING CENTER



Universal Machining Centers Designed to Dramatically Improve Machining Efficiency

The EUMA DU Series Universal Machining Center is a high speed vertical machining center designed to meet the needs of those who require high precision. 3D complicated parts machining. The advanced DU Series provides a choice of 3, 4 or 5-axis machining. Its high spindle speed combined with 42M/min. rapid



DU5-650

traverse makes high efficiency machining easy.

Its many outstanding integrated features include:

Fully enclosed splash guard with top cover (optional)



Choice of spindle speeds -12,000, 15,000 or 20,000 rpm. 42M/min. rapid traverse or

- 42M/min. rapid traverse on X, Y, Z axes.
- TAIWAN HIWIN/THK linear guideway on 3 axis.
- SIEMENS ONE control system.
- Structural parts are manufactured from high quality cast iron (FC30).
- 32 tools chain type magazine.
- Chip conveyor is a standard equipment.
- Enclosed splash guard (standard).
- Heidenhain linear scales on 3 axes (optional).







RTCP measurement

3, 4 or 5 Axis Machining EUMA DU Series Make Complicated Parts Machining Simple!

High precision ball bar inspection

Laser inspection is applied on each machine to ensure perfect quality before delivery.





DU4-650 4-axis configuration Large rotary table X, Y, Z-axis travel 620 x 520 x 460mm



DU5-650 5-axis configuration



DU3-650

Fixed table

3-axis configuration

X, Y, Z-axis travel 620 x 520 x 460mm









Rotary with tilting table X, Y, Z-axis travel 620 x 520 x 460mm



X/Y/Z axes are mounted on the top of bridge base Moving column structure features high rigidity

Patent No. M385428 (Taiwan)

Various Tables to meet **Extremely Versatile** Machining Requirements.

EUMA DU Series is compact with rigid construction to significantly boost structural rigidity and stability. Major structural parts are manufactured from high quality cast iron (HT30), tempered and stress relieved for deformationfree performance. Linear guide ways on X, Y, Z axes permit high speed traverse and a reduction of friction to increase positioning accuracy. 3 axes column moving avoid chips and coolant problems.





Fixed Table (Model DU3-650/1550/2550) Max. table loading:1000/2000/3000 kg





Complex Parts Machining in One Setup.





Heidenhain Linear Scales on 3 Axes (Optional)

The X, Y, Z-axis are available to be equipped with high precision linear scales, allowing closedloop feedback control. With these linear scales, extra high positioning accuracy on 3 axes is guaranteed.



Taiwan Hiwin/THK Linear Guide Ways on 3 Axes

The X-axis slideways are mounted with ball type linear guide ways, and Y, Z-axis are mounted with roller type linear ways. The optimal linear guide ways layout on each axis permits high speed traverse and increased stability.



Guide Direct Drive Motor The 3 axis ball screws are directly

driven by servo motors to fully eliminate backlash problem, while ensuring precision transmission performance.



Direct-drive Spindle (standard)

- 12,000/15,000 rpm
- SK40/HSK A63 spindle taper









Built-in Spindle (optional)

- 15,000/20,000 rpm
- SK40/HSK A63 spindle taper







8

PARAMETERS & CONFIGURATION

	SPECIFICATION	UNIT	DU5-500	DU5-650
	X/Y/Z axis travel	mm	520/450/420	620/520/460
B/C axis	B axis swing range	degree	±120	±120
	B/C axis drive mode	-	Direct drive motor	Direct drive motor
	C axis rotation range	degree	360(0.001)	360(0.001)
	Distance from spindle to table	mm	150-570	150-610
	Worktable size/max.working	mm	Ø500/540*R480	Ø650/880
	Number of T-slot X slot width	-	6-12H8	5-14H8/H11
	Max. load weight	kg	200	300
	Max. speed of B/C axis	rpm	60/150	60/100
	Rate torque of B/C axis	Nm	335/106	2000/600
	Max. torque of B/C axis	mm	1680/840	4200/2400
Spindle	Max. spindle speed/taper shank	rpm	15000/HSK-A63	15000/HSK-A63
	Power (S1/S6 40%)	kw	16.8/23.5	18/25.2
	Output torque (S1/S6 40%)	Nm	53/100	82/118
Feed system	X/Y/Z axis fast moving speed	m/min	42	42
	X/Y/Z axis cutting feed rate	m/min	0.001~20	0.001~20
	X/Y/Z axis feed motor power	kw	3.1/4.29/4.29	3.1/4.29/4.29
Tool magazine	Number of tools	pcs	32	32
	Max. length of tool	mm	300	300
	Max.tool diameter/adjacent empty	mm	Ø75/Ø150	Ø75/Ø150
	Max. tool weight	kg	8	8
Others	Cutting coolant motor power	kw	1.0+1.0	1.0+1.0
	Air pressure requirement	kg/cm ²	5-8	5-8
	Coolant pump pressure	bar	4	4
	Water tank capacity	L	180	240
	Required power capacity	kva	50	65
Positioning accuracy	X/Y/Z axis (VDI 3441 full travel)	mm	0.008	0.008
	B/C axis (VDI 3441 full travel)	arc sec	10	10
Re-positioning accuracy	X/Y/Z axis (VDI 3441 full travel)	mm	0.005	0.004
	B/C axis (VDI 3441 full travel) (arc sec)	arc sec	4	4
CNC sytem	Siemens	-	Siemens One	Siemens One
Machine size	Total height (mm)	mm	2900	2995
	Length X Width (no conveyor)	mm	2840X3000	2850X3354
	Net weight (no accessories)	kg	6000	6800

Maximize Your Production with EUMA DU-series

Standard Configuration

- 1. Fully enclosed covers
- 2. Automatic tool changer
- 3. Spindle oil cooler
- 4. Coolant supply unit
- 5. Auto centralized lubrication
- 6. Hydraulic unit
- 7. Spindle air blast system
- 8. Chip flushing device
- 9. Chip conveyor
- 10. Working light
- 11. Operation finish light & alarm light
- 12. Automatic power off M30
- 13. Movable manual pulse generator
- 14. RS-232 interface
- 15. Heat exchanger for control cabinet
- 16. Standard service tool kits
- 17. Leveling bolts and pads
- 18. Operation / maintenance manuals
- 19. B/C axis DD motor
- 20. B/C axis Heidenhain circle encoder
- 21. B/C aixs water cooling device
- 22. Tool magazine 32 positions
- 23. Safety door lock

Optional Configuration

- 1. 3-axis HEIDENHAIN grating scales
- 2. Taiwan CELLS electrical spindle 15000/20000rpm
- 3. Renishaw tool measurement NC4
- 4. Renishaw workpiece measure device OMP40
- 5. Oil-mist collector
- 6. Spindle inner coolant 20/30/50/70 bar
- 7. Automatic doors
- 8. Rotating window
- 9. Magnetic separation chip conveyor
- 10. Anti-collision system
- 11. Shopmill
- 12. NX post-processor
- 13. Spindle and ball screw temperature compensation
- 14. 5-axis coordinate conversion vector measurement and correction
- 15. Top full cover
- 16. EUMASPINNER ultra high accuracy production
- 17. Tool magazine 40 positions
- 18. Water oil separator