



DUO HEAD *SERIES*

DUO HEAD TYPE VERTICAL MACHINING CENTER

The best productivity and innovation out of its class

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DVD4300 / DVD4300L / DVD4300P / DVD5200 / DVD5200L / DVD5200P



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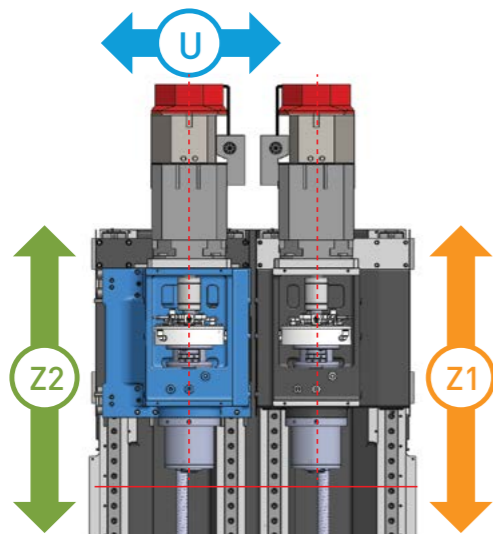
The best productivity and innovation out of its class

DMC DVD series, the highest speed and strongest power with a wide range of processing capabilities, achieves innovation in productivity and optimum stability.



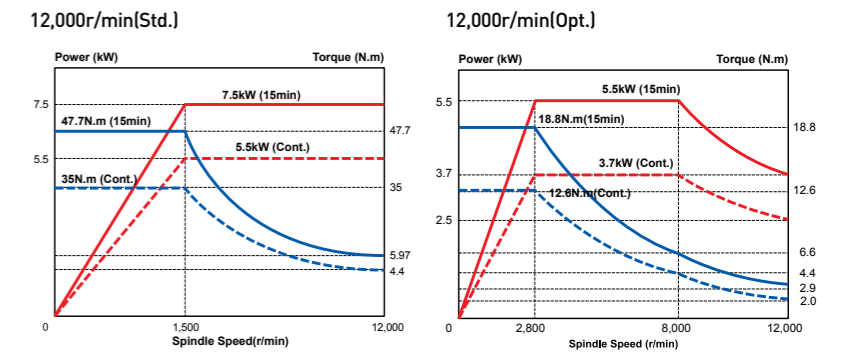
Hyper productivity with 2-HEAD and 2-ATC

- Productivity base on simultaneous machining
- Reduce 25% total investment cost compared to standard 1-headed machine
- Minimize personnel expenses and plant operation costs
- Under the same machining process conditions
 - At least 2 times better productivity the equivalent
 - Up to 40% space saving aspect of footprint



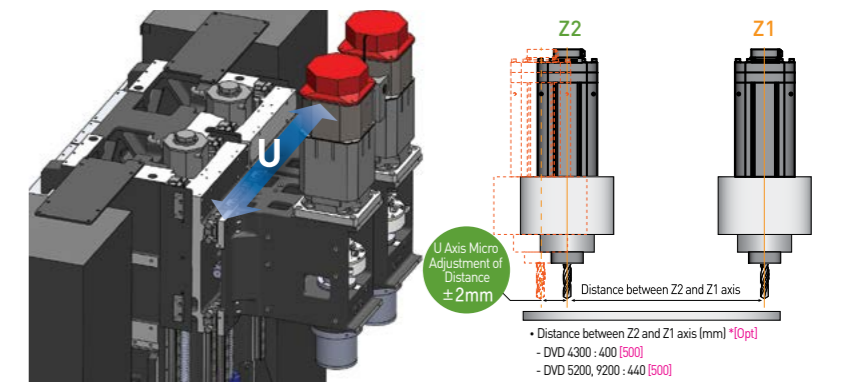
DVD4300 Core

SPINDLE POWER TORQUE DIAGRAM



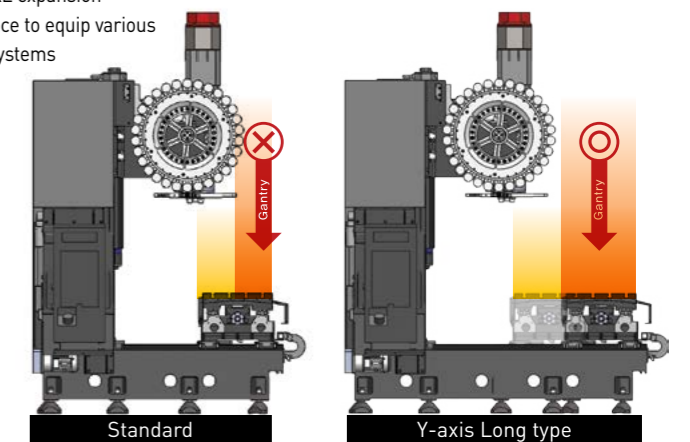
High Precision and High Reliability with U axis Micro adjustment of distance

- Z1, Z2 Independent structure allows individual tool offset
- Micro adjustment of distance between main axes save the jig setting time



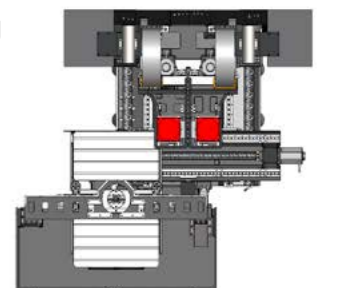
Alternative long Y axis option for automation

- Y-axis STROKE expansion
- Sufficient space to equip various automation systems



Unique APC structure of table moving method by DMC

- Minimizing Loading / Unloading Time
- Exclusion of existing column moving method, maximization of rigidity
- Maximize productivity by reducing set-up time
- Accomplish various automations with external cleaning



Features

DVD 4300 / 4300L / 4300P / 5200 / 5200L/5200P

ITEM		Unit.		DVD 4300		DVD 4300 L		DVD 4300 P	
Travel	X / Y / Z1,Z2 axis	mm	inch	720 / 430 / 360	28.34/16.92/14.17	720 / 710 / 360	28.34/27.95/14.17	720(Right +300) / 430(+25) / 360	28.34/16.92/14.17
	U-axis/W-axis	mm	inch	± 2 mm / -	± 0.079 inch/ -	± 2 mm / -	± 0.079 inch/ -	± 2 mm / -	± 0.079 inch/ -
	Distance Of Table To Spindle Nose	mm	inch	150 ~ 510	5.91 ~ 20.08	150 ~ 510	5.91 ~ 20.08	150 ~ 510	5.91 ~ 20.08
	Distance between Z2 and Z1 axis	mm	inch	400[500]	15.75[19.69]	400[500]	15.75[19.69]	400[500]	15.75[19.69]
Table	Table Dimension	mm	inch	1,040 x 430	40.94 x 16.93	1,040 x 430	40.94 x 16.93	850 x 430	33.46 x 16.93
	Max. Loading Weight	kgf	kgf	400	400	400	400	250	250
	Dimension Of T-Slots	mm	inch	14H8 x p120 x 3ea	0.55H8 x p4.72 x 3ea	14H8 x p120 x 3ea	0.55H8 x p4.72 x 3ea	14H8 x p120 x 3ea	0.55H8 x p4.72 x 3ea
Main Spindle	Max. Spindle Speed	min_1	min_1	12,000	12,000	12,000	12,000	12,000	12,000
	Max. Spindle Torque	N-m	N-m	47.7[30min]	47.7[30min]	47.7[30min]	47.7[30min]	47.7[30min]	47.7[30min]
	Spindle Front BearingInner Diameter	mm	inch	Ø50	Ø1.97	Ø50	Ø1.97	Ø50	Ø1.97
Rapid Travers	Rapid Traverse X/Y/Z axis	m/min	inch/min	60/60/60	2,362/2,362/2,362	60/60/60	2,362/2,362/2,362	50/50/60	1,968/1,968/2,362
Guide Way				Roller GUIDE	Roller GUIDE	Roller GUIDE	Roller GUIDE	Roller GUIDE	Roller GUIDE
ATC/MG	Type Of Tool Shank	-	-	BBT30	BBT30	BBT30	BBT30	BBT30	BBT30
	Tool change time [T-T]	sec	sec	0.8	0.8	0.8	0.8	0.8	0.8
	No. Of Tools	ea	ea	2-24	2-24	2-24	2-24	2-24	2-24
	Max. Tool Diameter (without adjacent tools)	mm	inch	Ø65 (Ø125)	Ø2.56 (Ø4.92)	Ø65 (Ø125)	Ø2.56 (Ø4.92)	Ø65 (Ø125)	Ø2.56 (Ø4.92)
	Max. Tool Length/Weight	mm/kgf	inch/kgf	200/3	7.87/3	200/3	7.87/3	200/3	7.87/3
Moter	Spindle Motor (Cont./30min/S3 25%)	Kw	Kw	5.5/7.5/11	5.5/7.5/11	5.5/7.5/11	5.5/7.5/11	5.5/7.5/11	5.5/7.5/11
	Servo Motor (X/U/Y/Z1,Z2)	Kw	Kw	3/0.5/3/4,4	3/0.5/3/4,4	3/0.5/3/4,4	3/0.5/3/4,4	3/0.5/3/4,4	3/0.5/3/4,4
Power	Power Capacity	kVA	kVA	35	35	35	35	35	35
Dmension	Floor Dimension [LxWxH]	mm	inch	2,715 / 2,150 / 2,750	106.89 / 84.65 / 108.27	3,045 / 2,150 / 2,750	119.88 / 84.65 / 108.27	3,175 / 3,125 / 2,900	125/123.03/114.17
Machine Weight		kgf	kgf	5,000	5,000	5,000	5,000	8,000	5,000
Controller	NC Unit	-	-	FANUC 0 i / MITSUBISHI M80VA					
	NC Display	-	-	10.4", DM42V ;8.4" Color TFT		10.4", DM42V ;8.4" Color TFT		10.4", DM42V ;8.4" Color TFT	

* Design and specification can be subject to change without notice.

ITEM		Unit.		DVD 5200		DVD 5200L		DVD 5200P	
Travel	X / Y / Z1,Z2 axis	mm	inch	1,040/520/600	40.94/20.47/23.62	1,040 / 920 / 600	40.94/36.22/23.62	1,040 / 920 / 600	40.94/36.22/23.62
	U-axis/W-axis	mm	inch	± 2 mm / -	± 0.079 inch/ -	± 2 mm / -	± 0.079 inch/ -	± 2 mm / -	± 0.079 inch/ -
	Distance Of Table To Spindle Nose	mm	inch	150 ~ 750	5.91 ~ 29.52	150 ~ 750	5.91 ~ 29.52	150 ~ 750	5.91 ~ 29.52
	Distance between Z2 and Z1 axis	mm	inch	440[500]	17.32[19.69]	440[500]	17.32[19.69]	440[500]	17.32[19.69]
Table	Table Dimension	mm	inch	1,200 x 520	47.24 x 20.47	1,200 x 520	47.24 x 20.47	950 x 520	37.40 x 20.47
	Max. Loading Weight	kgf	kgf	800	800	800	800	400	400
	Dimension Of T-Slots	mm	inch	18H8 x p125 x 4ea	0.71H8 x p4.92 x 3ea	18H8 x p125 x 4ea	0.71H8 x p4.92 x 3ea	18H8 x p125 x 4ea	0.71H8 x p4.92 x 3ea
Main Spindle	Max. Spindle Speed	min_1	min_1	12,000	12,000	12,000	12,000	12,000	12,000
	Max. Spindle Torque	N-m	N-m	118[15min]	118[15min]	118 [15min]	118 [15min]	118 [15min]	118 [15min]
	Spindle Front BearingInner Diameter	mm	inch	Ø70	Ø2.76	Ø70	Ø2.76	Ø70	Ø2.76
Rapid Travers	Rapid Traverse X/Y/Z axis	m/min	inch/min	40/40/40	1,575/1,575/1,575	40/40/40	1,575/1,575/1,575	40/40/40	1,575/1,575/1,575
Guide Way				Roller Guide	Roller Guide	Roller GUIDE	Roller GUIDE	Roller GUIDE	Roller GUIDE
ATC/MG	Type Of Tool Shank	-	-	BBT40	BBT40	BBT40	BBT40	BBT40	BBT40
	Tool change time [T-T]	sec	sec	1.6	1.6	1.6	1.6	1.6	1.6
	No. Of Tools	ea	ea	2-30	2-30	2-30	2-30	2-30	2-30
	Max. Tool Diameter (without adjacent tools)	mm	inch	Ø80[Ø160]	Ø3.15[Ø6.30]	Ø80 (Ø160)	Ø3.15[Ø6.30]	Ø80 (Ø160)	Ø3.15[Ø6.30]
	Max. Tool Length/Weight	mm/kgf	inch/kgf	300/8	11.81/8	300/8	11.81/8	300/8	11.81/8
Moter	Spindle Motor (Cont./30min/S3 25%)	Kw	Kw	11/15/18.5	11/15/18.5	11/15/18.5	11/15/18.5	11/15/18.5	11/15/18.5
	Servo Motor (X/U/Y/Z1,Z2)	Kw	Kw	3/0.75/4/4,4	3/0.75/4/4,4	3/0.75/4/4,4	3/0.75/4/4,4	3/0.75/4/4,4	3/0.75/4/4,4
Power	Power Capacity	kVA	kVA	65	65	65	65	65	65
Dmension	Floor Dimension [LxWxH]	mm	inch	2,305 / 3,000 / 3,470	90.75 / 118.11 / 136.61	2,755 / 3,000 / 3,470	108.46/118.11/136.61	3,590 / 2,970 / 3,470	141.33/116.92/136.61
Machine Weight		kgf	kgf	8,700	8,700	9,200	9,200	12,000	12,000
Controller	NC Unit	-	-	FANUC 0 i / MITSUBISHI M80VA					
	NC Display	-	-	10.4", DM42V ;8.4" Color TFT		10.4", DM42V ;8.4" Color TFT		10.4", DM42V ;8.4" Color TFT	

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NC Specifications

FANUC 0i Controller

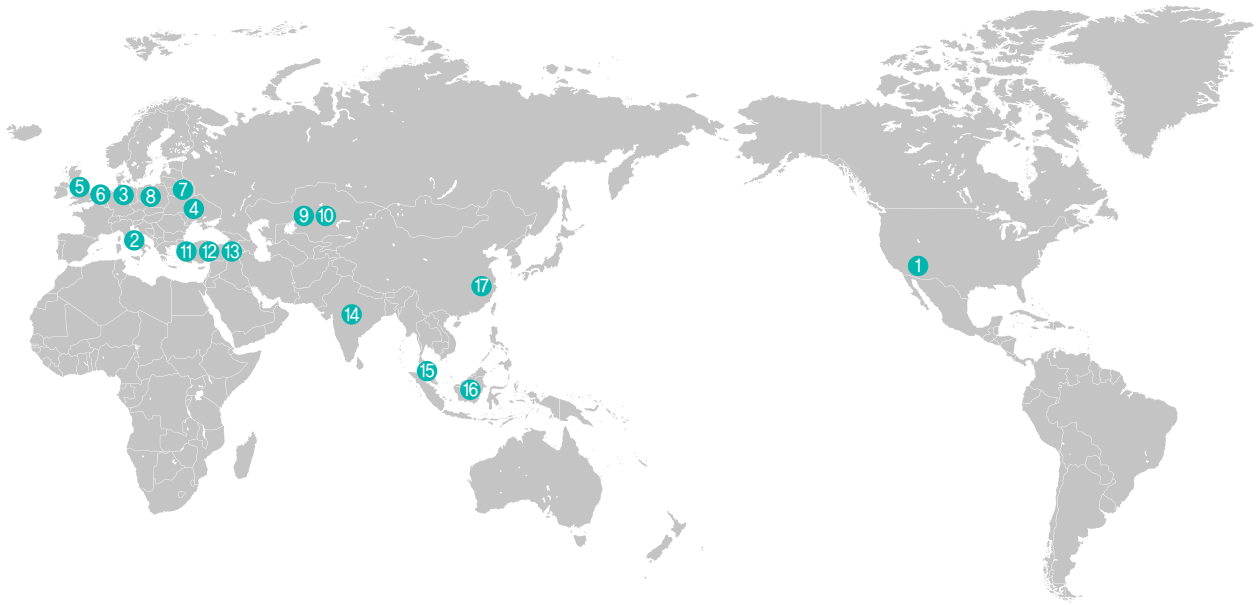
Axes Control			Programming & Editing function		
Controlled axes		3(X,Y,Z)	Local / Machine coordinate system	G52 / G53	3(X,Y,Z)
Simultaneously controllable axes		4 axes	Maximum commandable value	± 99999.999mm/± 9999.9999 inch	4 axes
Positioning	G00	○	No. of registered programs	400ea	○
Linear interpolation	G01	3 axes	Optional block skip		3 axes
Circular interpolation	G02, G03	2axes	Optional stop	M01	2axes
Backlash compensation		○	Program file name	32 characters	○
Emergency stop / overtravel		○	Playback		○
Follow up		○	program number	04-digits	○
Least command increment	0.001mm / 0.0001"	○	Program protect		○
Least input increment	0.001mm / 0.0001"	○	Program stop / end	M00 / M02, M30	○
Machine lock	All axes / Z axis	○	Rigid tapping	G84, G74	○
Mirror image		○	Sub program	Up to 4 nesting	○
Position switch		○	Tape code	ISO / EIA Automatic discrimination	○
Stored pitch error compensation		○	Thread cutting		○
Pitch error offset compensation for each axis		○	Work coordinate system	G54-G59	○
Stored stroke check 1		○	Others functions (Operation, setting & display, etc)		
Overtravel controlled by software		○	3rd / 4th reference return		○
Interpolation & Feed Function			Additional work coordinate system	G54.1 P1-48 (48 pairs)	○
2nd reference point return	G30	○	AI APC(Advanced Preview Control)	20 block preview	○
Circular interpolation	G02, G03	○	Alarm display		○
Cylindrical interpolation	G07.1	○	Alarm history display		○
Dwell	G04	○	Automatic corner override	G62	○
Exact stop mode	G09, G61 (mode)	○	Clock function		○
Feed per minute	mm/min	○	Coordinate system rotation	G68, G69	○
Feedrate override(10% increments)	0-200 %	○	Cycle start / Feed hold		○
Helical interpolation		○	Display of PMC alarm message	Message display when PMC alarm occurred	○
Jog override (10% increments)	0-200 %	○	Dry run		○
Linear interpolation	G01	○	Embedded Ethernet		○
Manual handle feed (1 unit)		○	Graphic display	Tool path drawing	○
Manual handle feedrate	0.1 / 0.01 / 0.001 mm	○	Help function		○
Override cancel	M48 / M49	○	High speed skip function		○
Positioning	G00	○	Loadmeter display		○
Rapid traverse override	F0 (fine feed), 25 / 50 / 100 %	○	Manual handle interruption		○, 10.4", DM42V ,8.4"
Reference position return	G28	○	MDI / DISPLAY unit	8.4" or 10.4" Color LCD, keyboard for data input (small), soft-keys	○
Reference position return check	G27	○	Memory card interface		○
Skip function	G31	○	USB interface		○
Spindle & M-code function			Operation functions	Tape / Memory / MDI / Manual	○
M-code function	M 3 digits	○	Operation history display		○
Spindle orientation		○	Optional angle chamfering / corner R		○
Spindle serial output		○	Polar coordinate command	G15 / G16	○
Spindle speed command	S5 digits	○, 400 Pairs	Program restart		○
Spindle speed override (10% increments)	50-120%	○	Programmable data input	Tool offset and work offset are entered by G10, G11	○
Tool function			Programmable mirror image	G50.1 / G51.1	○
Cutter compensation	G40, G41, G42	○	Run hour and part number display		○
Number of tool offsets	400 ea	○	Scaling	G50, G51	○
Tool length compensation	G43, G44, G49	○	Search function	Sequence NO. / Program NO.	○
Tool life management		○	Self-diagnostic function		○
Tool number command	T2 digits	○	Servo setting screen		○
Tool offset memory C	Geometry / wear and length / Radius offset memory	○	Single block		○
Tool offset	G45-G48	○	Single direction positioning	G60	○
Programming & Editing function			Stored stroke check 2,3		○
Absolute / Incremental programming	G90 / G91	○	Optional specifications		
Automatic coordinate system setting		○	Additional controlled axes	5 axes in total	OPT.
Background editing		○	AI contour control I	40 block	OPT.
Canned cycle	G73, G74, G76, G80-G89, G99	○	AI contour control II	200books	OPT.
Circular interpolation by radius programming		○	Dynamic graphic display (w/ 10.4" color LCD)	Machining profile drawing	OPT.
Custom macro		○	Fast data server	Need option board	OPT.
Dcimal point input		○	Fast ethernet	Need option board	OPT.
I/O interface	RS-232C / LAN PORT	○	Manual guide i	400 ea	OPT.
Extended part program editing		○			
Label skip		○			

MITSUBISHI M80VA Controller

Machining center system		
Number of control axes	Max. number of axes (NC axes + Spindles + PLC axes)	11
	Max. number of NC axes (in total for all part systems)	8
	Max. number of spindles	2
	Max. number of PLC axes	6
	Number of simultaneous contouring control axes	4
	Max. number of NC axes in a part system	8
	Max. number of part systems (main+sub)	○2
	Max. number of main part systems	○2
	Max. number of sub part systems	-
	Control unit-side High-speed program server mode	-
	Display unit-side High-speed program server mode	○
	Front-side SD card mode	○
	Least command increment	○ 0.1m
	Least control increment	○ 1m
	Max. number of tool offset sets	○400 sets
	Built-in PLC capacity	○64000
	Multi-project (number of projects stored)	○3
	Touch gesture operation(*2)	○
	Data protection by user's level	○
	Workpiece coordinate system shift	-
	3D solid program check	○
	Interactive cycle insertion	-
	Multiple spindle synchronization set control	-
	Spindle superimposition control	-
	High-accuracy control(G61.1/G08)	○
	High-speed high-accuracy control (G5P10000) maximum [kBPM]	○67.5
	High-speed high-accuracy control (G05P20000) maximum [kBPM]	○135
	SSS control	○
	Tolerance control	○
	Variable-acceleration pre-interpolation acceleration/deceleration	-
	OMR-FF	○
	Rapid traverse block overlap	○
	Spindle-mode servo motor control	○
	Real-time tuning 1 (speed gain)	○
	Real-time tuning 2 (rapid traverse time constant)	○
	Tool center point control	○(*4)
	Inclined surface machining command	○
	3-dimensional manual feed	○
	Finish shape view programming	○
	CC-Link (Master/Local)	□
	PROFIBUS-DP (Master)	○
	MES interface library	○
	EcoMonitorLight connection	○
	Machine group-based alarm stop	□
	Smart safety observation	□

○ Standard △Optional □ Selection (Additional unit)

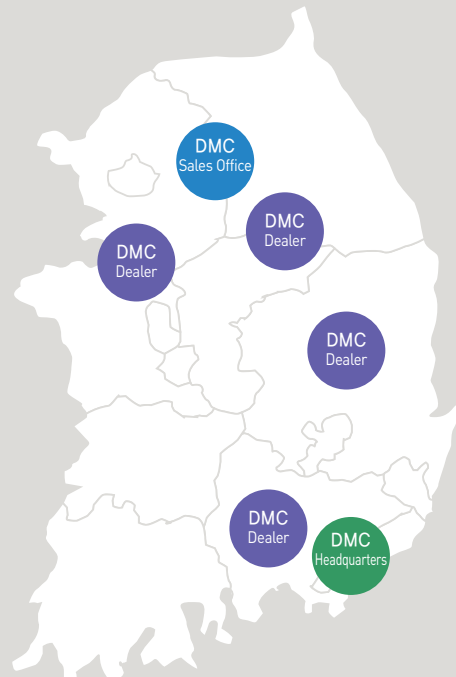
Global Network



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| ④ Ukraine | ⑩ Kazakhstan 2 | ⑯ Indonesia |
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• Dealer and Sales / AS Center(Domestic)

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