

MULTI-PURPOSE DOUBLE COLUMN
MACHINING CENTER WITH UNIVERSAL HEAD

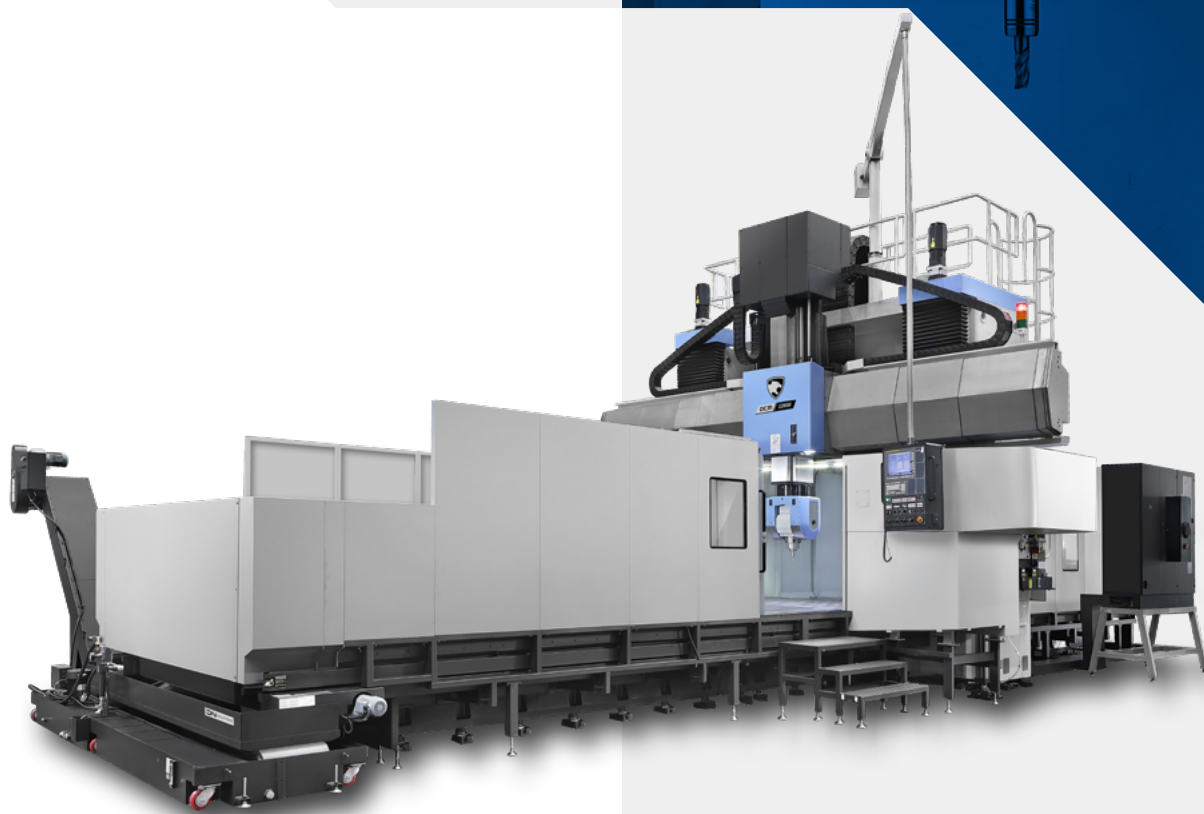
DCM-U series

DCM 2740U · 2750U · 2760U · 2780U

DCM 3250U · 3260U · 3280U

DCM 3780U · 37100U

DCM 4280U



BASIC STRUCTURE

DCM machines are large, multi-purpose double column machining centers designed for applications that include the heavy duty machining of large parts and high precision dies and molds. With the highest technical specifications in its class, the DCM series provides customers with an extensive range of machining capabilities and functions to help them improve their productivity and performance.



X x Y x Z x W axes Travel

X-axis
4250/5250/6250/8250/10250 mm
 (167.3/206.7/246.1/324.8/403.5 inch)

Y-axis
3200/3700/4400/5000 mm
 (126.0/145.7/173.2/196.9 inch)

Z-axis
1000 mm (39.4 inch)

W-axis
1100/1400/1450 mm (43.3/55.1/57.1 inch)

Table Load Capacity

DCM 2740U	20000 kg (44091.8 lb)	DCM 3250U	33000 kg (72751.5 lb)
DCM 2750U	25000 kg (55114.8 lb)	DCM 3260U	39000 kg (85979.0 lb)
DCM 2760U	30000 kg (66137.7 lb)	DCM 3280U/3780U/37100U/ DCM 4280U	45000 kg (99206.6 lb)
DCM 2780U	40000 kg (88183.6 lb)		

Rapid Traverse

DCM 2740U/2750U/2760U/2780U
 DCM 3250U/3260U/3280U
 DCM 3780U/37100U

X-axis **16** m/min
(629.9 ipm)

Y-axis **20** m/min*
(787.4 ipm*)

Z-axis **15** m/min
(590.6 ipm)

W-axis **3** m/min
(118.1 ipm)

DCM 4280U

X-axis **16** m/min
(629.9 ipm)

Y-axis **18** m/min
(708.7 ipm)

Z-axis **15** m/min
(590.6 ipm)

W-axis **3** m/min
(118.1 ipm)

* Specifications and delivery of DCM 3250U / 3260U / 3780U / 37100U / 4280U model, the rapid traverse is reduced to 18m/min(708.7ipm) or less in range of Y axis travel tip 250mm(9.84inch) for the stable deceleration.

Cutting Feedrate

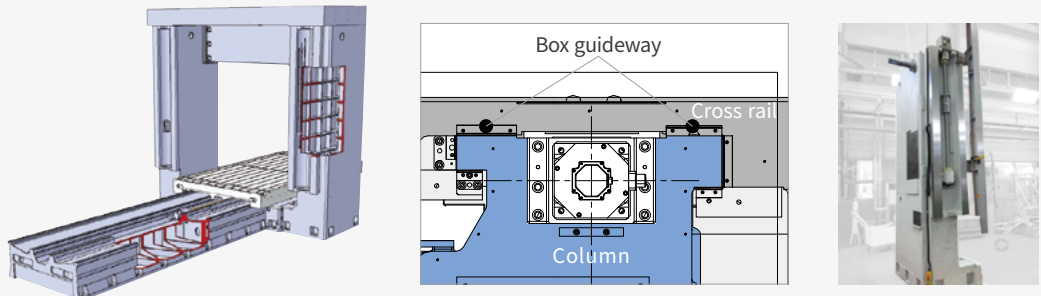
X/Y/Z-axis **10000** mm/min (393.7 ipm)

HIGH-RIGIDITY, HIGH-PRECISION STRUCTURE

Designed for large work pieces, the machine enables long-term, heavy-duty cutting with stable machining accuracy.

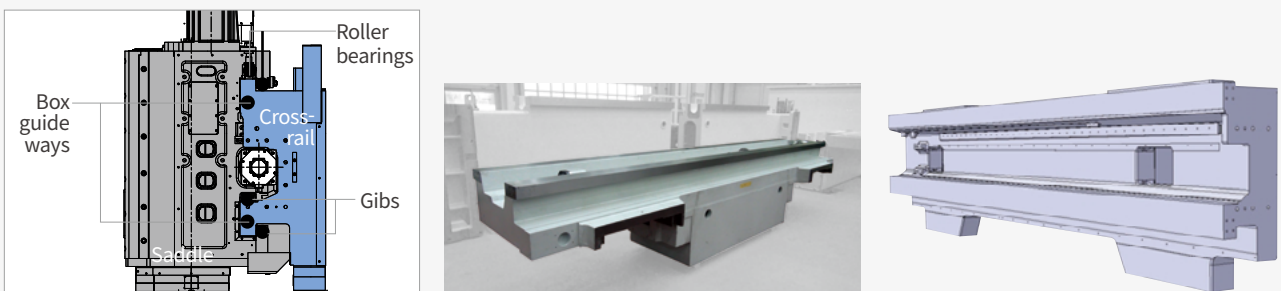
Bed and Column Structure

- The structure of the DCM series minimizes the effects of vibration on workpieces under loads produced by both vertical and horizontal cutting during machining of 5 faces. Symmetrical structure design and the application of effective compensation reduces thermal displacement during machining.
- The bed is made of an M-type cast structure excellent for vibration absorption to ensure a high level of machining accuracy.
- The column provides extremely high rigidity thanks to its square-structured latticed-rib casting, which is excellent for vibration damping, and wide box guideways that are heat-treated and precision-ground. The integrated column design provides a high degree of machining accuracy at all heights from the machine table, from heavy duty cutting to high precision finishing.



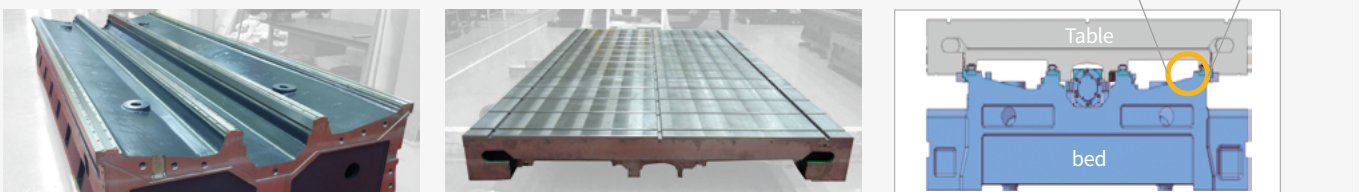
Cross-rail Structure

- The guide-structure of the cross-rail supports the kinetic load of the saddle and ram spindle to maintain a high degree of accuracy for every type of work from heavy-duty cutting to finish cutting. In addition, the hybrid-type structure combined with roller bearings and gibs enables smooth traveling.
- The cast structure optimized for vibration damping, and the wide box guideway heat-treated and precision-ground are composed of highly rigid, square, sliding surfaces.



Bed and Table Structure

- The bed supports traveling motion with four rows of heat-treated, precision-ground guideways.
- A roller bearing pack for heavy-duty cutting and slide bearings for effective vibration damping are equipped at the bottom of the table to ensure a high level of cutting accuracy.



SPINDLE INFORMATION

High speed, High accuracy built in type universal head

Max. spindle speed

15000 {30000 OPTION} r/min

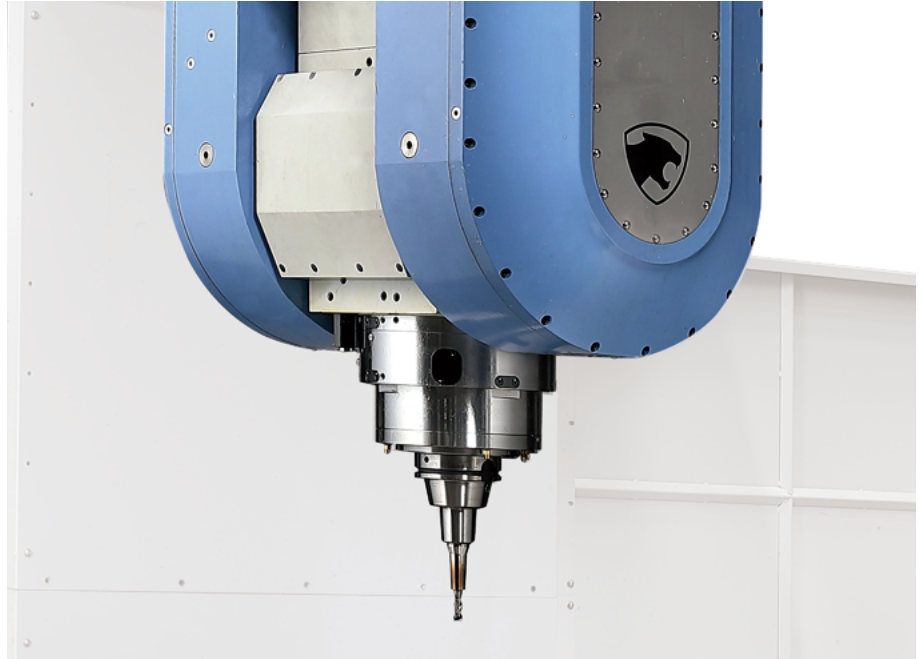
Max. power

45.9/34 {82.4/58 OPTION} kW
(61.6/45.6 {110.5/77.8 OPTION} Hp)

Max. torque

146 {53.5 OPTION} N·m
(107.7 {39.5 OPTION} ft-lbs)

- B axis 0.001° Continuous
- C axis 0.001° Continuous



RAM HEAD

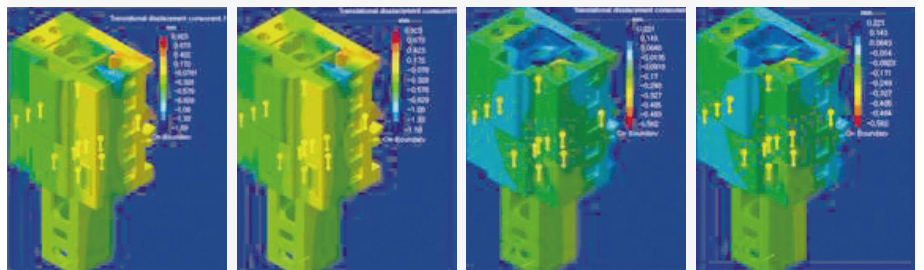
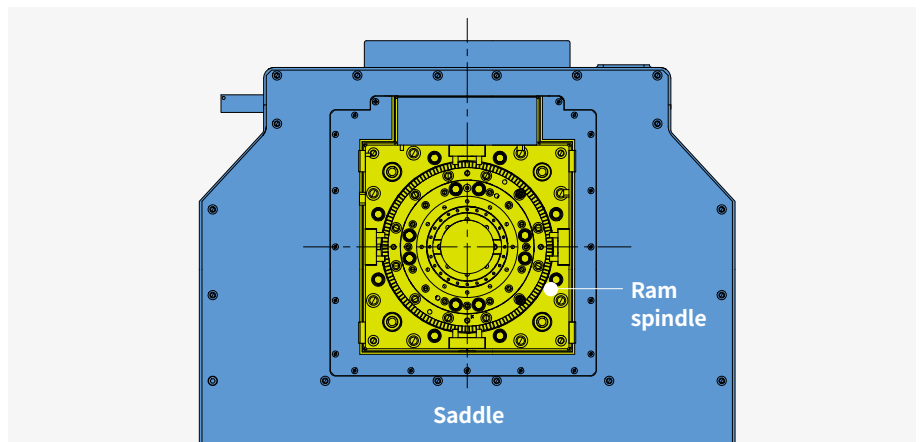
The highly-rigid, square-type box guideway ram has a cross section of 380 x 380mm (14.96 x 14.96 inch), which is the biggest in its class. This helps optimize the heavy-duty machining of both vertical and horizontal applications.

Ram size

380 x 380 mm
(15.0 inch x 15.0 inch)

Stress analysis of ram spindle unit

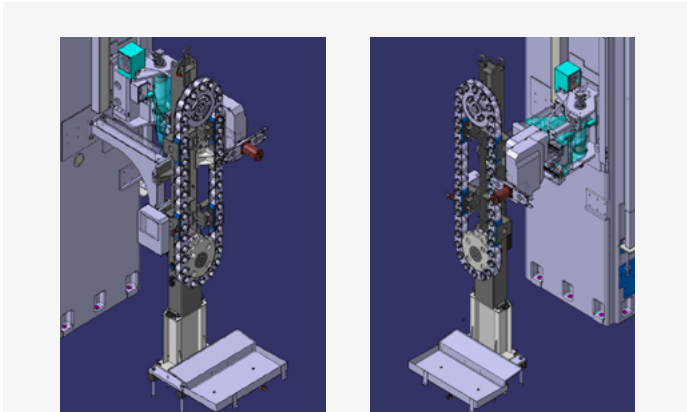
The ram spindle unit, through using stress analysis techniques, has been designed to deliver high-performance under any load.



AUTOMATIC TOOL CHANGER

Automatic tool changer

Servo motor and hydraulic driven ATC have high reliability and minimize equipment downtime.



Tool taper	HSK-A100 / HSK-A63
Max. No. of tools	40 / 60 EA
Max. tool weight	20kg(HSK-A100) / 8 kg(HSK-A63)
Max. tool diameter	80 mm (3.1 inch) [near pot empty : 150 mm (5.9 inch)]
Max. tool length	300 mm (11.8 inch)
Tool changing time (T-T)	5.5 sec

Automatic tool measurement OPTION

TS27R

The length of tool set up in the spindle is measured automatically, and a specific tool's offset data is entered automatically.

High accuracy

To maintain and manage precision performance, various functions are provided as standard.

High-speed, high-precision contouring control

- AICC 1000 block + Machining condition selection function
- {Data Server : 1GB, 2GB, 4GB}

Verification sample VASE

R1 applied R10 applied

Cutting condition selection function

Cutting condition	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Quality	Normal								Excellent	
Tool life	Long		←————→						Normal	
Application	High-speed roughing						High-precision finishing			

• Use the R code in the program to change the cutting conditions by up to 10 steps: improved productivity (high-speed roughing, high-precision finishing).
 • Various servo-related NC parameters such as acceleration and deceleration, time constants and maximum cutting feed rates can be set automatically.

X/Y/Z-axis linear scale feedback system

The linear scale feedback system provides high positioning accuracy in the X, Y, Z, and W axes.

X/Y/Z-axis ballscrew shaft cooling OPTION

The heat generated in the ballscrew is removed by a high-efficiency cooler to minimize any thermal deformation. For fast removal of frictional heat, a hollow ballscrew shaft, allowing cooled oil to flow through it, is used.

STANDARD | OPTIONAL SPECIFICATIONS

A range of options is available to suit individual requirements.


Division	Description		DCM-U series
Spindle	Universal head 15000r/min	45.9/34 kW	●
	Universal head 30000r/min	90/78.5 kW	○
ATC	Tool magazine	40 tools	●
		60 tools	○
Rotary table	PACKAGE #1 : ONLY WIRING		○
	PACKAGE #2 : HYD. & CONTROL READY		○
	PACKAGE #3 : FULL OPT.		○
High column	NONE		●
	+350mm		○
Coolant	Coolant Tank	900L(27 SERIES) / 1000L(32 SERIES) / 2000L(37 SERIES) / 2000L(42 SERIES) 1100L(27 SERIES) / 1200L(32 SERIES)	●
	FLOOD Coolant	2.5kW	○
	Coolant gun		○
	Coolant level switch:	Sensing level_High/Low	○
	Oil skimmer	BELT TYPE	○
	TSC / cyclone filter	2.0 Mpa	●
		3.0 Mpa	○
Chip disposal	Lift-up chip conveyor	HINGED PLATE	●
		Scrapper type with Drum filter	○
	2 side chip conveyor	HINGED PLATE	●
	Belows cover	W-axis upper side	●
		X/Y/W-axis lower side	●
	Slide cover	SEMI GUARD(ADD REAR TOP COVER)	●
		Rotating (380L)	○
	Chip bucket	Lift type (380L)	○
			○
Precision machining option	Spindle Bearing Housing Cooling		●
	Linear scale	X/Y/Z/W axis	●
	BZ sensor for CS contouring control		●
	Water Chiller for U-head cooling		●
	DIKC (DN Intelligent Kinematic Compensation)	DIKC S/W	●
		Datum Ball(D25)	●
	AICC 1000 block		●
	Data Server : 1GB, 2GB, 4GB		○
Measurement & automation	Automatic tool length measurement	TS27R_RENISHAW	○
		NC4_RENISHAW	○
		MASTER TOOL	○
	Automatic workpiece measurement	RMP600_RENISHAW	●
		CALIBRATION BLOCK	●
Auto power on		○	
Auto power off		●	
Accessories	Electric cabinet extra light		○
	Air conditioner for electric box		○
	Installation goods	Leveling block and anchoring bolt	●
	Work light	LED lamps : 4EA	●
	Operator call lamp		●
Easy convenient functions	Tool management		○
	Work load balance active control		●
	Cutting load monitoring		●
	Periodic check function		●
	Control box (PENDANT TYPE)	COUNTER BALANCING TYPE	●
		STAND TYPE	○
		GANTRY TYPE	○
	MPG	PORTABLE TYPE 1-MPG	●
MPG WITH LCD DISPLAY		○	
PORTABLE TYPE 3-MPG		○	
HMOP(Handy Machine Operator's Panel)		○	
Installation type	UNDER GROUND	FL-950 INSTALL (TABLE TOP_FL0)	●
	GROUND	FLO INSTALL (TABLE TOP_FL+950)	○
Customized special option	Mist collector		○
	Water soluble Coolant Chiller**		○

* Please contact DN Solutions for detailed specification information.

● Standard ○ Optional X Not applicable

* When using a semi-synthetic type or synthetic type, contact our sales representative or service center in advance.

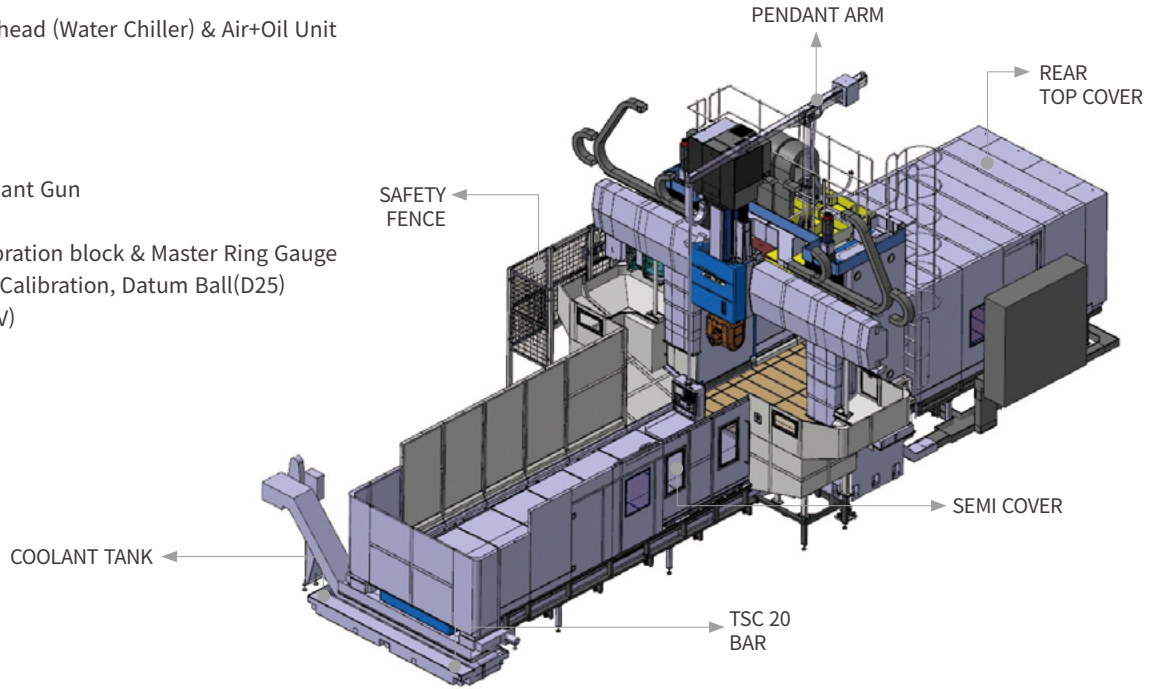
** Technical consultation is mandatory for the chilling of non-water soluble coolant

 Fire Safety | There is a high risk of fire when using non-water-soluble cutting fluids, processing flammable materials, neglecting the controlled and careful use of coolants and modifying the machine without the consent of the manufacturer. Always check the SAFETY GUIDELINES carefully before using the machine.

PERIPHERAL EQUIPMENT

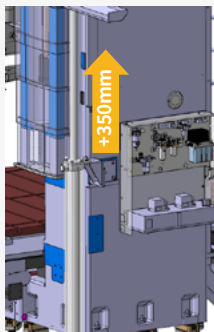
The following items are applied as standard to ensure precision, easy chip disposal, better environment for DCM Universal series

- ❶ Cooling unit for Universal head (Water Chiller) & Air+Oil Unit
- ❷ REAR TOP COVER
- ❸ SEMI COVER
- ❹ ATC & Magazine
- ❺ Linear Scale
- ❻ Flood Coolant / TSC / Coolant Gun
- ❼ Lift Up Chip Conveyor
- ❽ RMP600 Part Probe & Calibration block & Master Ring Gauge
- ❾ DIKC with Datum Ball Self Calibration, Datum Ball(D25)
- ❿ Transformer (Down to 220V)



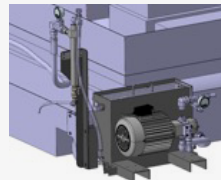
HIGH Column_+1050mm

- HIGH COLUMN_+700- Standard
- TABLE TO SPINDLE NOZE +350



TSC

- 2.0 MPa (1.5 kW)



- 7.0 Mpa_cyclone filter (7.5 kW)

OPTION



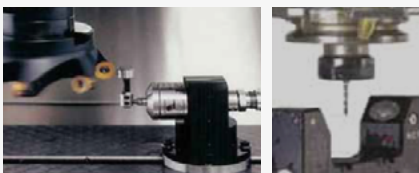
Air Dryer

- Maker : SMC
- Specs: IDF6E
- Capacity(m³/min) : 0.75(50Hz), 0.82(60Hz)



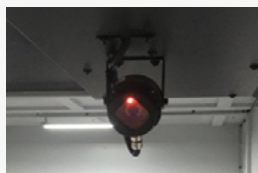
Automatic Tool Length Measurement System

- Renishaw → TS27R
- Renishaw → NC4 (Contactless)



Automatic Workpiece Measurement System

- Renishaw → RMP600 (Standard)
- Heidenhain → TS460 / SE660 OPTION



ATC MAGAZINE (HSK A63/A100)

- 40T
- 60T



FANUC 31iB5 PLUS

Fanuc 31i Plus maximizes customer productivity and convenience.

15" Touch screen + New OP

DN Solutions Fanuc 31iB/B5 Plus' operation panel enhances operating convenience by incorporating common-design buttons and layout. It features a Qwerty keyboard for fast and easy data input and operation.

FANUC 31iB5 PLUS

- 15-inch color display
- Intuitive and user-friendly design

USB and PCMCIA card QWERTY keyboard

- EZ-Guide i standard
- Ergonomic operator panel
- 4MB Memory
- Hot keys
- Enhance AICC BLOCK
- Touch pen provided as standard



iHMI touchscreen

iHMI provides an intuitive interface that uses a touchscreen for quick and easy operation.

Range of applications

Providing various applications related to planning, machining, improvement and utility, for customer convenience.



NUMERIC CONTROL SPECIFICATIONS

FANUC

Item	Specifications		F31i-B5 PLUS	
			DCM -U series 6 (X,Y,Z,W,B,C)	
Controlled axis	Controlled axes			
	Simultaneously controlled axes		5 axes	
	Additional controlled Axis		○	
Data input/output	data server		●(1GB)	
	Memory card input/output		●	
	USB memory input/output		●	
	Large capacity memory(2GB) ^{*2)}	Available Option only with 15" Touch LCD (iHMI Only) ^{*2)}	○	
Interface function	Embedded Ethernet		●	
	Fast Ethernet		○	
	Enhanced Embedded Ethernet function		●	
Operation	DNC operation	Included in RS232C interface.	●	
	DNC operation with memory card		●	
Program input	Workpiece coordinate system	G52 - G59	●	
	Addition of workpiece coordinate system	G54.1 P1 X 48 (48 pairs)	●	
	Tool number command		T4 digits	
Feed function	Tilted working plane indexing command	G68.2 TWP	●	
	AI contour control II	G5.1 Q_, 1000 Blocks ^{*1)}	●	
Operation Guidance Function	High smooth TCP		●	
	EZ Guidei (Conversational Programming Solution)		●	
	iHMI with Machining Cycle	Only with 15" Touch LCD standard ^{*2)}	●	
Setting and display	EZ Operation package		●	
	CNC screen dual display function		●	
Network	FANUC MTConnect		⊕	
	FANUC OPC UA		⊕	
Others	Display unit	15" color LCD with Touch Panel	●	
	Part program storage size & Number of registerable programs		10240M(4MB)_1000 programs	●
			20480M(8MB)_1000 programs	○
			2560M(1MB)_2000 programs	○
			5120M(2MB)_4000 programs	○
			10240M(4MB)_4000 programs	○
		20480M(8MB)_4000 programs	○	

*1) The number of look-ahead blocks may be changed or limited depending on the peripheral device or the configuration of the internal NC system.

*2) Available Option only with Fanuc i plus iHMI

● Standard ○ Optional X Not applicable ⊕ Available
Network: FANUC MTConnect and FANUC OPC UA available.

CONVENIENT MACHINING

Work load counter control

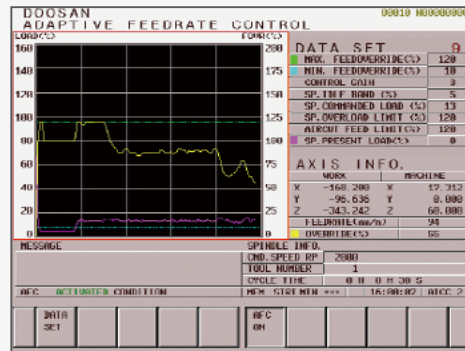
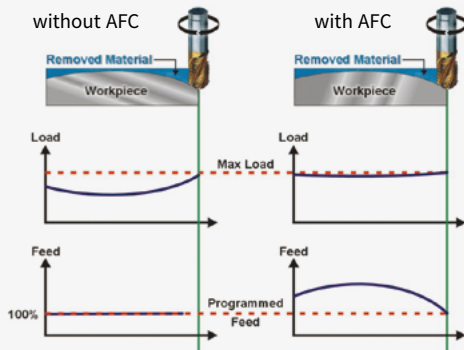
By selecting the appropriate M-Code according to the weight of the workpiece, the machine automatically decides the most effective and efficient moving pattern of the table.



M-Code	Weight of work piece	DCM 2740U	DCM 2750U	DCM 2760U	DCM 3250U	DCM 3260U
M380 A1	5 tons(11023.0 lb) or less	●	●	●	●	●
M380 A2	10 tons(22045.9 lb) or less	●	●	●	●	●
M380 A3	15 tons(33068.9 lb) or less	●	●	●	●	●
M380 A4	20 tons(44091.8 lb) or less	●	●	●	●	●

Adaptive feedrate control(AFC)

If tool overload is detected during operation, the feed rate is controlled to prevent the tool from being damaged.



Process monitoring function and manual operation screen

In-process monitoring minimizes the risk of damage to the workpiece during cutting operations.

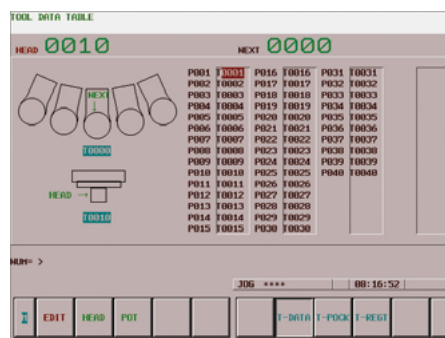
Tool load monitoring

During cutting operations, abnormal loads caused by wear and tear of the tool are detected, and an alarm is triggered to prevent further damage from occurring.

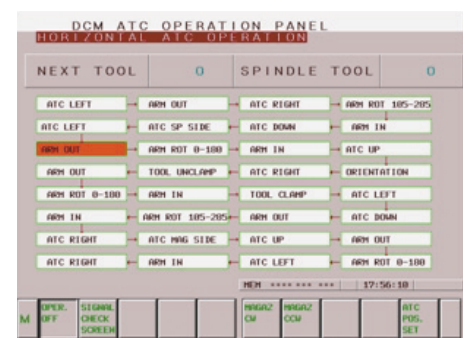


Tool management OPTION

This function controls information on the tools in the tool magazine pots.



ATC manual operation screen



POWER | TORQUE

15000 r/min

SPEED

15000 r/min

POWER

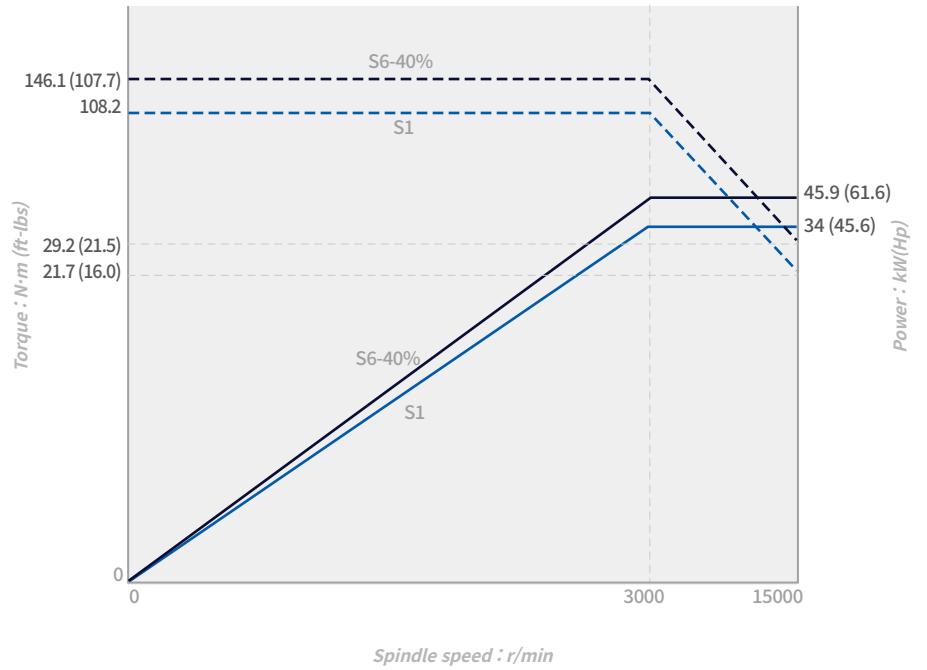
45.9/34 kW (61.6/45.6 Hp)

TORQUE

146 N·m (107.7 ft-lbs)

TOOL

HSK-A100



30000 r/min OPTION

SPEED

30000 r/min

POWER

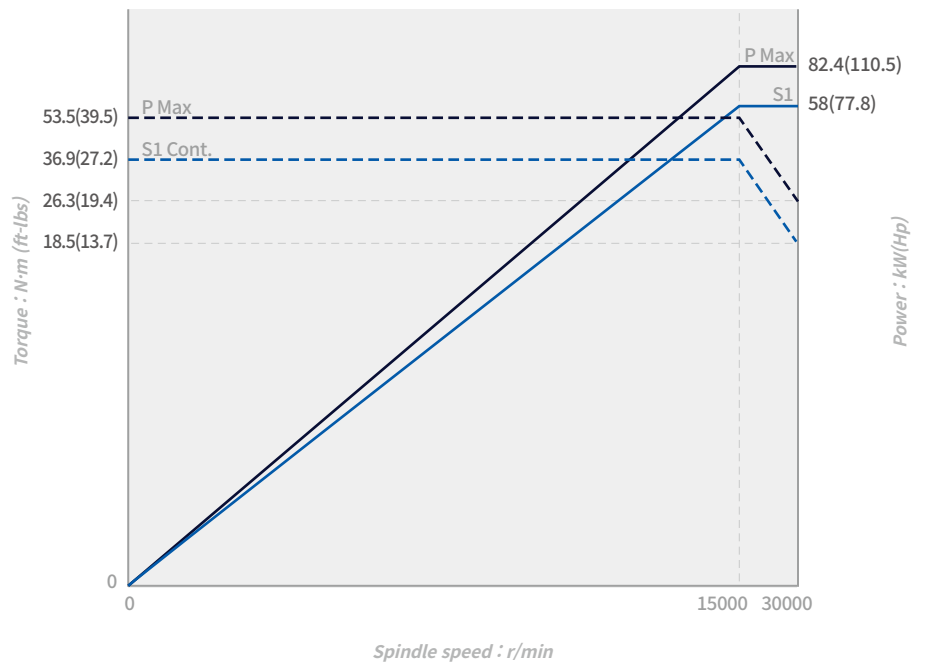
82.4/58 kW (110.5/77.5 Hp)

TORQUE

53.5 N·m (39.5 ft-lbs)

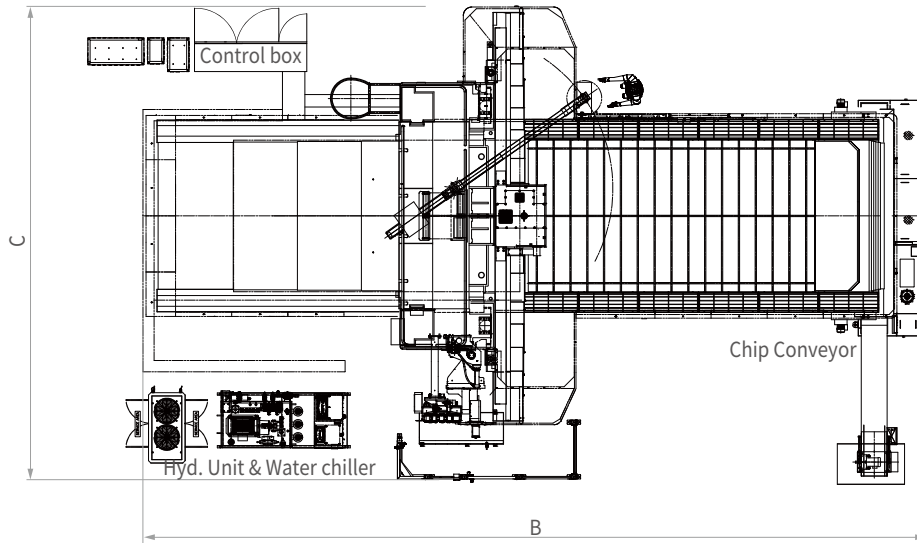
TOOL

HSK-A63



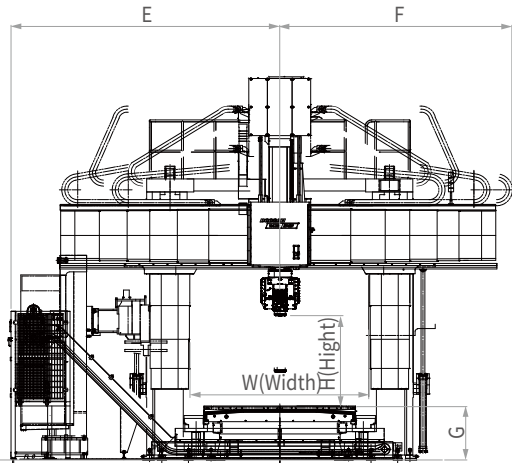
DIMENSIONS

TOP

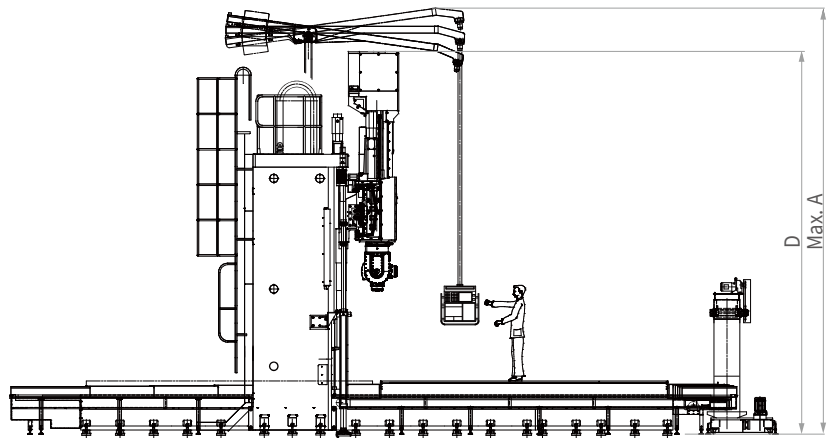


Units : mm (inch)

FRONT



SIDE



		A	B	C	D	E	F	G	H	W
DCM2740U	Z1000	7700 (303.1)	12590 (495.7)	8150 (320.9)	6850 (269.7)	3710 (146.1)	3610 (142.1)	950 (37.4)	1610 {1670} (63.4 {65.7})	2700 (106.3)
DCM2750U	Z1000	7700 (303.1)	14590 (574.4)	8150 (320.9)	6850 (269.7)	3710 (146.1)	3610 (142.1)	950 (37.4)	1610 {1670} (63.4 {65.7})	2700 (106.3)
DCM2760U	Z1000	7700 (303.1)	16040 (631.5)	8150 (320.9)	6850 (269.7)	3710 (146.1)	3610 (142.1)	950 (37.4)	1610 {1670} (63.4 {65.7})	2700 (106.3)
DCM2780U	Z1000	7700 (303.1)	19970 (786.2)	8150 (320.9)	6850 (269.7)	3710 (146.1)	3610 (142.1)	950 (37.4)	1610 {1670} (63.4 {65.7})	2700 (106.3)
DCM3250U	Z1000	7700 (303.1)	14590 (574.4)	8650 (340.6)	6850 (269.7)	3960 (155.9)	3860 (152.0)	950 (37.4)	1610 {1670} (63.4 {65.7})	3200 (126.0)
DCM3260U	Z1000	7700 (303.1)	16240 (639.4)	8650 (340.6)	6850 (269.7)	3960 (155.9)	3860 (152.0)	950 (37.4)	1610 {1670} (63.4 {65.7})	3200 (126.0)
DCM3280U	Z1000	7700 (303.1)	19900 (783.5)	8650 (340.6)	6850 (269.7)	3960 (155.9)	3860 (152.0)	950 (37.4)	1610 {1670} (63.4 {65.7})	3200 (126.0)
DCM3780U	Z1000	8080 (318.1)	24670 (971.3)	9220 (363.0)	7105 (279.7)	4210 (165.7)	4160 (163.8)	950 (37.4)	1610 {1670} (63.4 {65.7})	3700 (145.7)
DCM37100U	Z1000	8080 (318.1)	24670 (971.3)	9220 (363.0)	7105 (279.7)	4210 (165.7)	4160 (163.8)	950 (37.4)	1610 {1670} (63.4 {65.7})	3700 (145.7)
DCM4280U	Z1000	8080 (318.1)	20915 (823.4)	10100 (397.6)	7105 (279.7)	4800 (189.0)	4800 (189.0)	950 (37.4)	1610 {1670} (63.4 {65.7})	4200 (165.4)

※ The dimensions above are the standard type for each model.

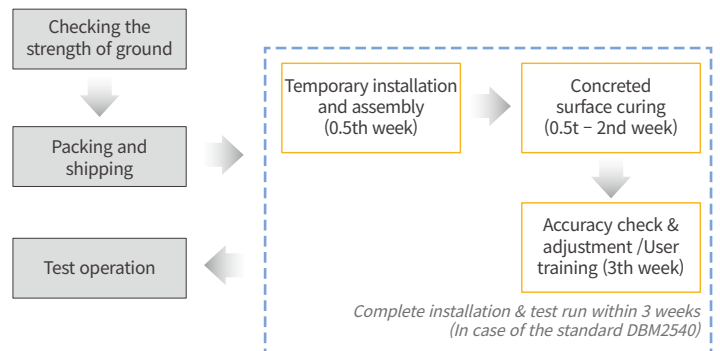
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Installation precautions

1. Test for bearing capacity of soil should be taken more than four areas. (In particular, places for bed and column where the loads are concentrated must be tested.)
2. Basically, the bearing capacity of soil should exceed the values determined by DN Solutions. (Test for bearing capacity of soil should follow DN Solutions's standards.)
3. Our engineering team may be available even during the foundation work at customer's request.
4. Please comply with our company's installation guideline, such as ground condition and anchoring, in order to achieve the maximum precision and performance of the machine.

Installation & test run

On-site installation and commissioning will be conducted according to a '5-week' schedule. [Excluding the concreted surface curing period (3rd week)]



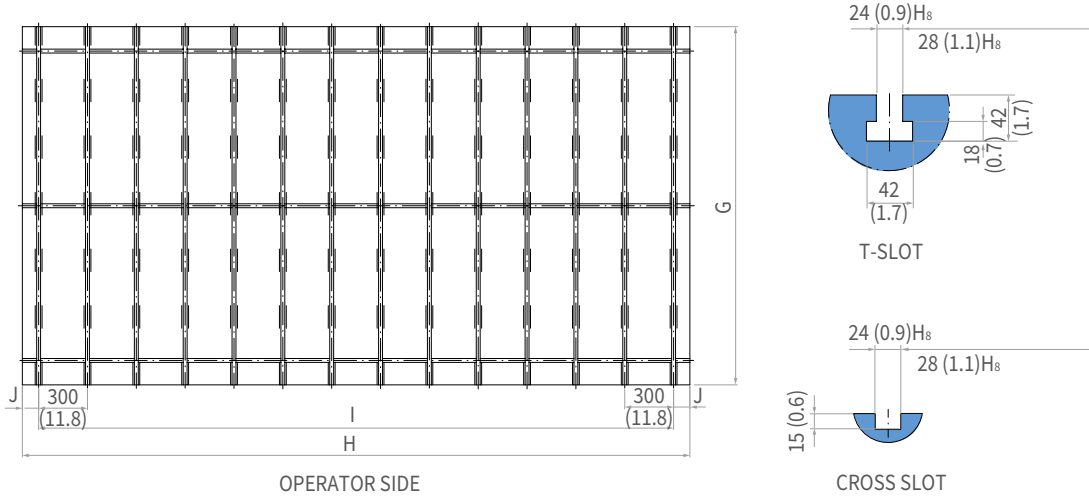
* The installation plan may vary according to the size of the machine, optional devices, and the conditions and environment of the site.

Complete installation & test run within 3 weeks (In case of the standard DBM2540)

WORK AREA AND TABLE DIMENSIONS

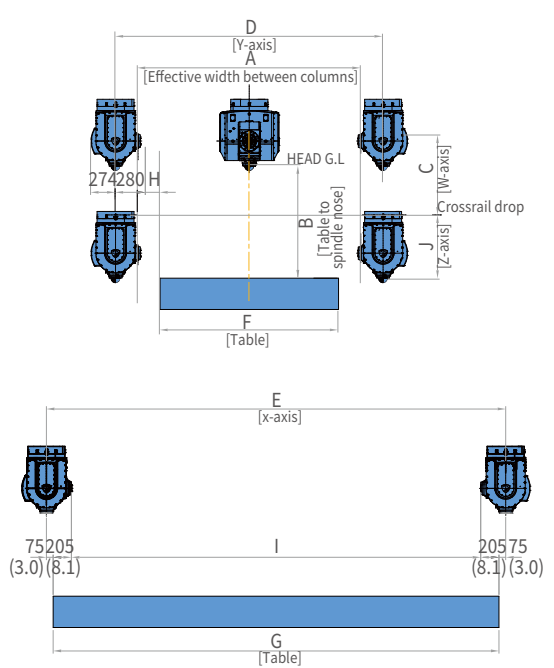
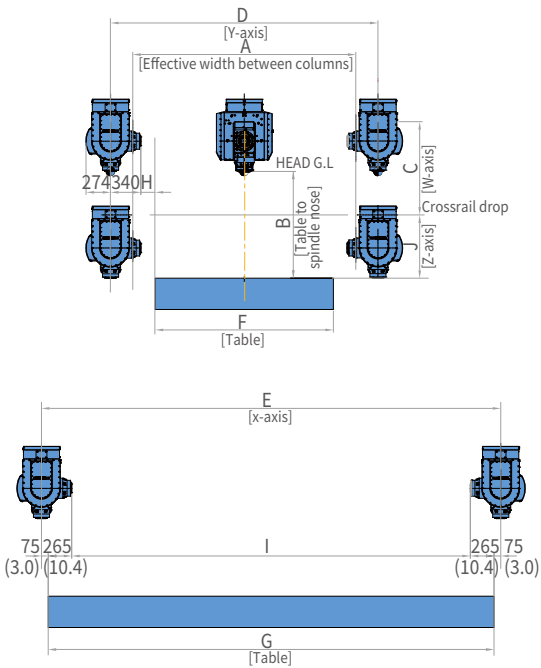
TABLE

Units : mm (inch)



15K HEAD

30K HEAD



MODEL	TABLE TYPE	A	B	C	D	E	F	G	H	I	J
DCM2740U	22 x 41	2700 (106.3)	1610 {1670} (63.4 {65.7})	1100 (43.3)	3200 (126.0)	4250 (165.4)	2200 (86.6)	4100 (161.4)	160 {220} (6.3 {8.7})	3570 {3690} (140.6 {145.3})	1000 (39.4)
DCM2750U	22 x 51	2700 (106.3)	1610 {1670} (63.4 {65.7})	1100 (43.3)	3200 (126.0)	5250 (206.7)	2200 (86.6)	5100 (200.8)	160 {220} (6.3 {8.7})	4570 {4690} (179.9 {184.6})	1000 (39.4)
DCM2760U	22 x 61	2700 (106.3)	1610 {1670} (63.4 {65.7})	1100 (43.3)	3200 (126.0)	6250 (246.1)	2200 (86.6)	6100 (240.2)	160 {220} (6.3 {8.7})	5570 {5690} (219.3 {224.0})	1000 (39.4)
DCM2780U	22 x 81	2700 (106.3)	1610 {1670} (63.4 {65.7})	1100 (43.3)	3200 (126.0)	8250 (324.8)	2200 (86.6)	8100 (318.9)	160 {220} (6.3 {8.7})	7570 {7690} (298.0 {302.8})	1000 (39.4)
DCM3250U	27 x 51	3200 (126.0)	1610 {1670} (63.4 {65.7})	1100 (43.3)	3700 (145.7)	5250 (206.7)	2700 (106.3)	5100 (200.8)	160 {220} (6.3 {8.7})	4570 {4690} (179.9 {184.6})	1000 (39.4)
DCM3260U	27 x 61	3200 (126.0)	1610 {1670} (63.4 {65.7})	1100 (43.3)	3700 (145.7)	6250 (246.1)	2700 (106.3)	6100 (240.2)	160 {220} (6.3 {8.7})	5570 {5690} (219.3 {224.0})	1000 (39.4)
DCM3280U	27 x 81	3200 (126.0)	1610 {1670} (63.4 {65.7})	1100 (43.3)	3700 (145.7)	8250 (324.8)	2700 (106.3)	8100 (318.9)	160 {220} (6.3 {8.7})	7570 {7690} (298.0 {302.8})	1000 (39.4)
DCM3780U	32 x 81	3700 (145.7)	1610 {1670} (63.4 {65.7})	1400 (55.1)	4200 (165.4)	8250 (324.8)	3200 (126.0)	8100 (318.9)	260 {320} (10.2 {12.6})	7570 {7690} (298.0 {302.8})	1000 (39.4)
DCM37100U	32 x 101	3700 (145.7)	1610 {1670} (63.4 {65.7})	1400 (55.1)	4200 (165.4)	10250 (403.5)	3200 (126.0)	10100 (397.6)	260 {320} (10.2 {12.6})	9570 {9690} (376.8 {381.5})	1000 (39.4)
DCM4280U	35 x 81	4200 (165.4)	1610 {1670} (63.4 {65.7})	1400 (55.1)	5000 (196.9)	8250 (324.8)	3500 (137.8)	8100 (318.9)	410 {470} (16.1 {18.5})	7570 {7690} (298.0 {302.8})	1000 (39.4)
			15K(30K)						15K(30K)	15K(30K)	

MACHINE SPECIFICATIONS

Item	Unit	DCM 2740U	DCM 2750U	DCM 2760U	DCM 2780U	DCM 3250U	DCM 3260U	DCM 3280U	DCM 3780U	DCM 37100U	DCM 4280U		
Travel	X-axis Travel (Table Longitudinal)	mm (inch)	4250 (167.3)	5250 (206.7)	6250 (246.1)	8250 (324.8)	5250 (206.7)	6250 (246.1)	8250 (324.8)	8250 (324.8)	10250 (403.5)	8250 (324.8)	
	Y-axis Travel (Spindle Head Cross)	mm (inch)	3200 (126.0)				3700 (145.7)			4200 (165.4)		5000 (196.9)	
	Z-axis Travel (Ram Vertical)	mm (inch)	1000 (39.4)										
	W-axis Travel (Vertical Movement of Crossrail)	mm (inch)	1100 (43.3) {1450 (57.1)}							1400 (55.1)			
	Effective width between columns	mm (inch)	2700 (106.3)				3200 (126.0)			3700 (145.7)		4200 (165.4)	
	Table to spindle nose	mm (inch)	1610 (1670) {1960 (2020)} (63.4 (65.7) {77.2 (79.5)})										
Feedrate	Rapid traverse (X / Y / Z / W)	m/min (ipm)	16 / 20* / 15 / 3 (629.9 / 787.4* / 190.6 / 118.1)									16/18 / 15/3 (629.9 / 708.7 / 190.6 / 118.1)	
	Max. cutting feedrate (X / Y / Z)	mm/min (ipm)	10000 / 10000 / 10000 (393.7 / 393.7 / 393.7)										
Table	Table Size (Width x Length)	mm (inch)	2200 x 4100 (86.6 x 161.4)	2200 x 5100 (86.6 x 200.8)	2200 x 6100 (86.6 x 240.2)	2200 x 8100 (86.6 x 318.9)	2700 x 5100 (106.3 x 200.8)	2700 x 6100 (106.3 x 240.2)	2700 x 8100 (106.3 x 318.9)	3200 x 8100 (126.0 x 318.9)	3200 x 10100 (126.0 x 397.6)	3500 x 8100 (137.8 x 318.9)	
	Load Capacity	kg (lb)	20000 (44091.8)	25000 (55114.8)	30000 (66137.7)	40000 (88183.6)	33000 (72751.5)	39000 (85979.0)	45000 (99206.6)				
	T-Slot	mm (inch)	24H8 {28H8} (0.9 {1.1H8})										
Spindle (U-head)	Ram size	mm (inch)	380 x 380 (15.0 x 15.0)										
	Max. spindle speed	r/min	15000 {30000}										
	Tool taper	-	HSK-A100 {HSK-A63}										
	Spindle drive motor (S6-40%/Cont.{P max/Cont.})	kW (Hp)	45.9/34{82.4/58} (64.6/45.6{110.5/77.8})										
	Max. spindle torque	N·m (ft·lbs)	146{53.5} (107.7{39.5})										
	Rotation angle	B axis	deg	±110									
		C axis	deg	±22									
Rotation speed	B axis	r/min	20										
	C axis	r/min	20										
ATC	Tool storage capacity	ea	40 {60}										
	Max. tool diameter (adjacent pot empty)	mm (inch)	80 (150) (3.1 (5.9))										
	Max. tool length	mm (inch)	300 (11.8)										
	Max. tool weight	kg (lb)	20{8} (44.1{17.6})										
	Max. tool moment	N·m (ft·lbs)	22{5.88} (16.2{4.3})										
Machine size	Machine height	mm (inch)	7700 {8050} (303.1 {316.9})							8080 {8430} (318.1 {331.9})			
	Floor space	mm (inch)	8150 X12590 (320.9 X495.7)	8150 X14590 (320.9 X574.4)	8150 X16040 (320.9 X631.5)	8150 X19970 (320.9 X786.2)	8650 X14590 (340.6 X574.4)	8650 X16240 (340.6 X639.4)	8650 X19900 (340.6 X783.5)	9220 X19920 (363.0 X784.3)	9220 X24670 (363.0 X971.3)	10100 X20915 (397.6 X823.4)	
	Machine weight	kg (lb)	65000 (143298.4)	68000 (149912.1)	71000 (156525.9)	77000 (169753.4)	82000 (180776.4)	86000 (189594.7)	94000 (207231.5)	112000 (246914.1)	120000 (264550.8)	130000 (286596.7)	

*DCM 3250U / 3260U / 3780U / 37100U / 4280U model, the rapid traverse is reduced to 18m/min(708.7ipm) or less in range of Y axis travel tip 250mm(9.84inch) for the stable deceleration.

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