

DCM series

Double Column Machine

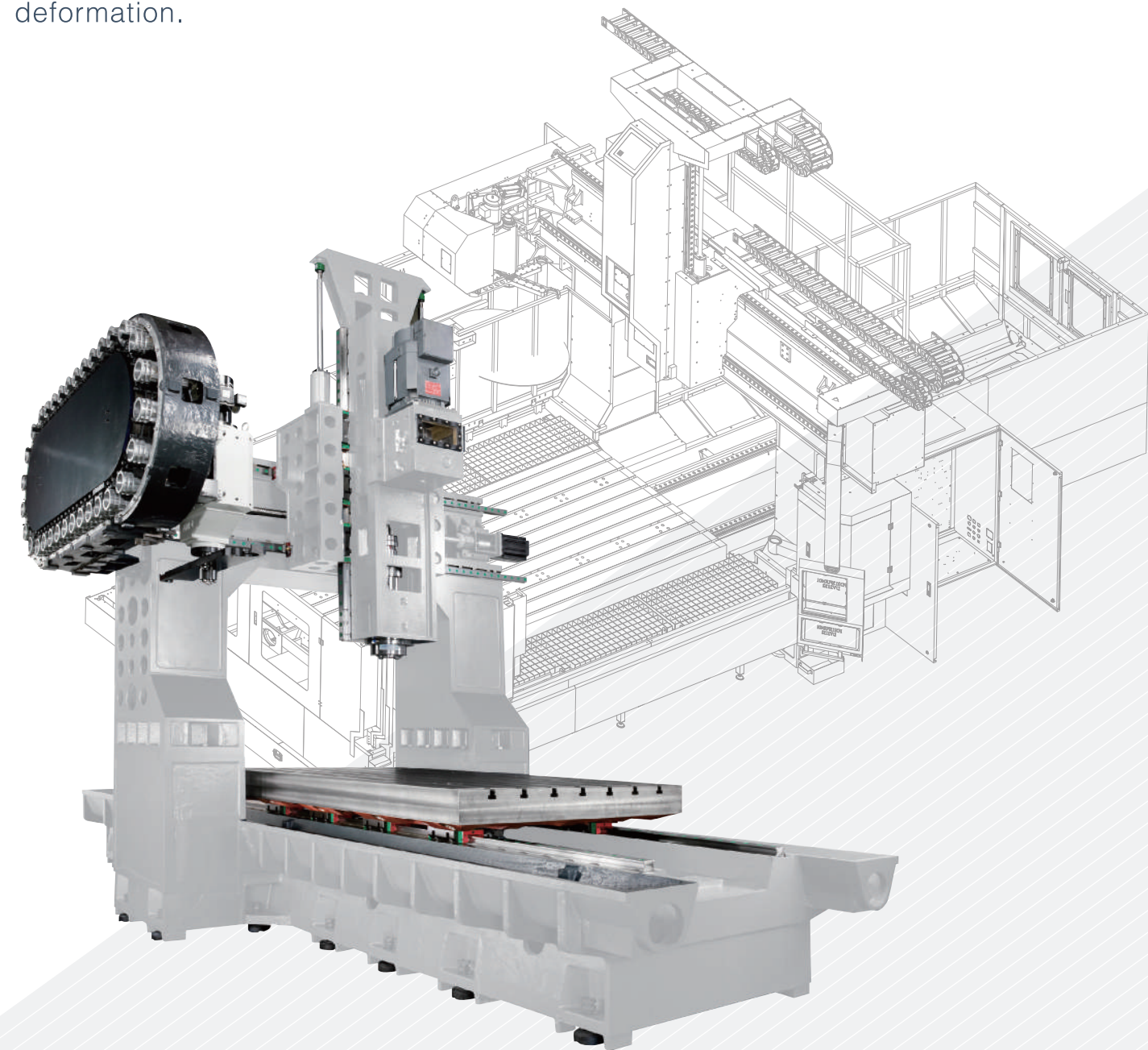
DCM series

Double Column Machine

- One-piece box-type construction for the base and column ensures high rigidity and stability.
- Equipped with BT-50, 8000RPM direct-drive spindle and high/low speed gearbox for high speed, precision, and high torque at low speed.
- Optional coolant-through spindle system for efficient cooling of workpiece and tool, extending tool life and improving accuracy.
- It supports large workpieces up to 1700mm wide, 4000mm long, and 900mm high.
- Symmetrical box-type spindle head design combined with gearbox delivers excellent heavy cutting capacity.



- All major structural parts are manufactured from high quality cast iron with tempering treated to relieve stress, ensuring maxi-murn material stability without deformation.
- Box type structural parts are rib reinforced to increase structural strength and rigidity.
- Extra heavy base complete support of table and resists heavy load without deformation.



MACHINE FEATURES



Hydraulic System

- For Z axis moving
- Making Z axis moving more smooth and stable.



- Perpendicular linear guide way arrangement.
- High damping coefficient, especially on axial and radial directions.



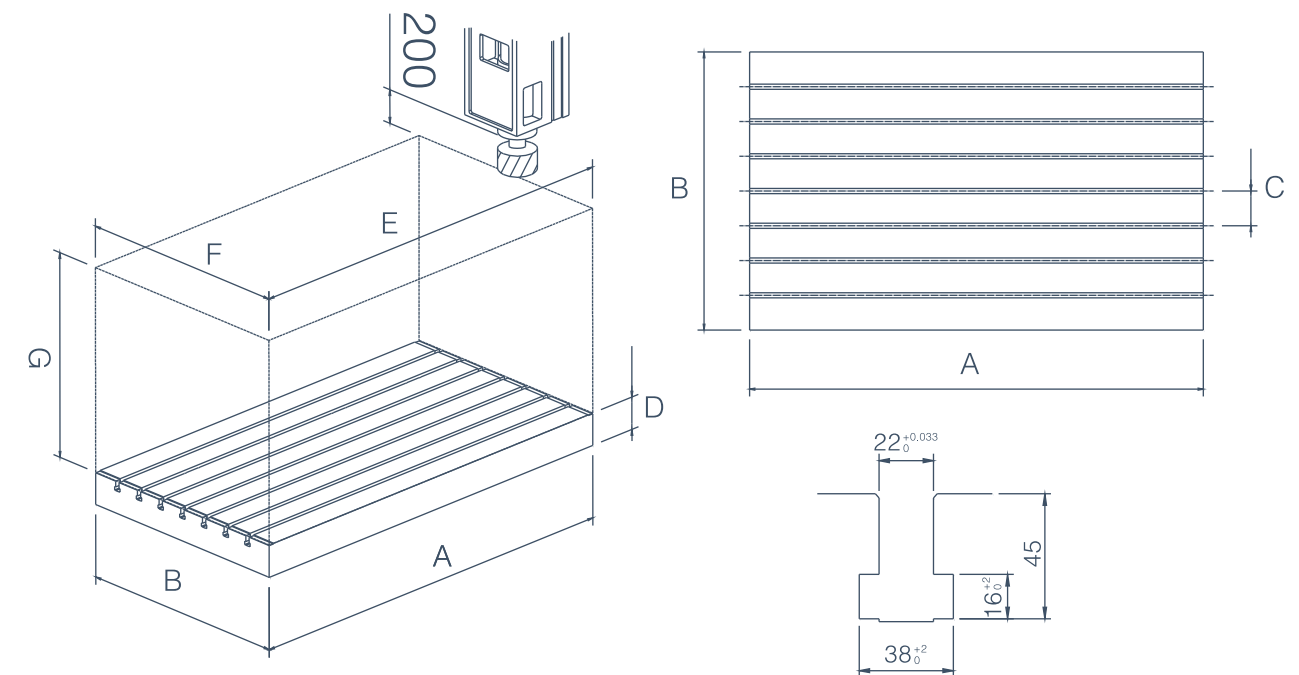
Gear Head (2 step)

- The spindle running is transmitted through a gear both making the machine excellent for heavy cutting application
- All gears and bearings in the gear box are oil-bath lubricated.



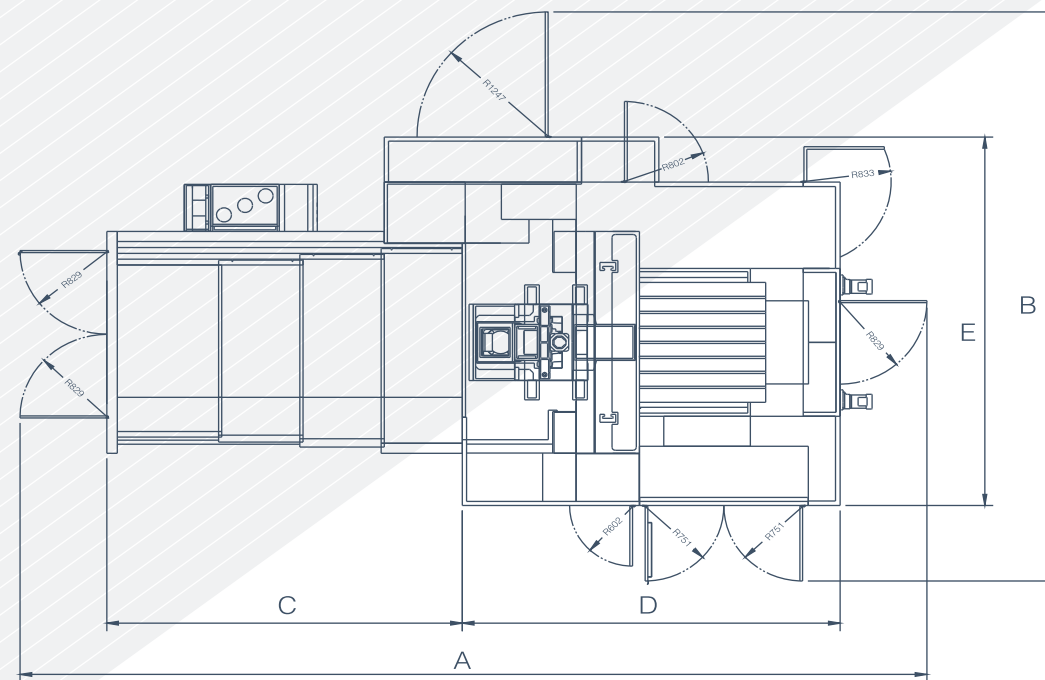
- Automatic changing head
- 45-degree universal milling head
- High RPM 90-degree milling head
- Universal milling head

WORKING RANGE

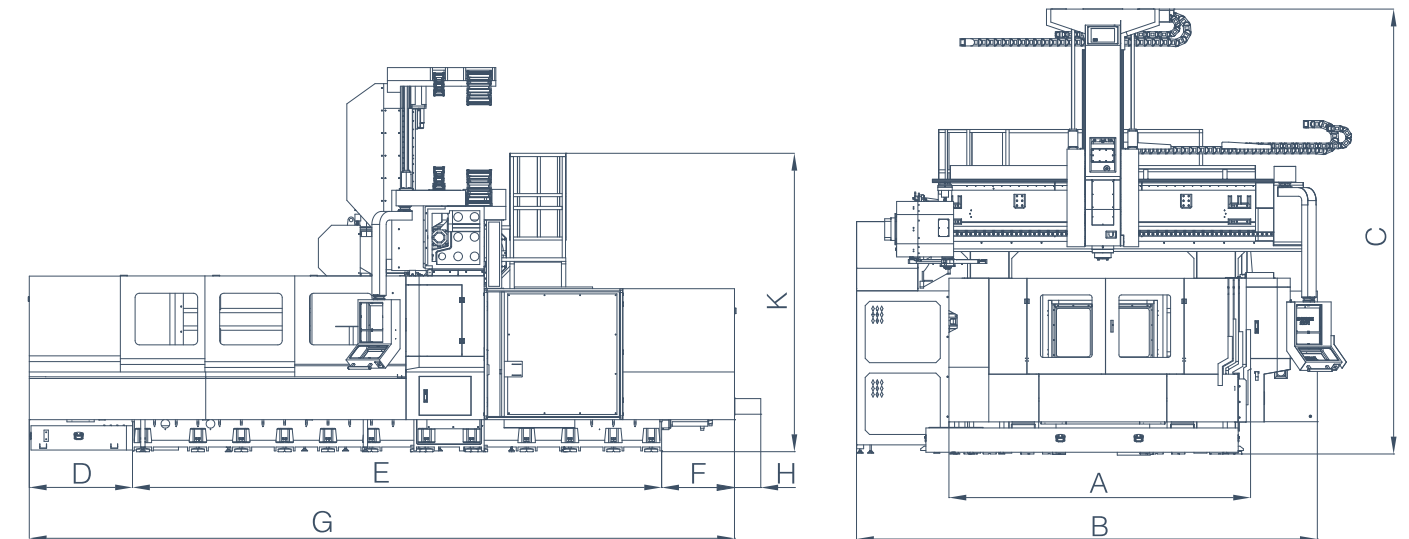


MODEL	A	B	C	D	E	F	E
DCM1417	1700	1200	150	150	1700	1200	900
DCM1422	2200	1200	150	150	2200	1200	900
DCM1432	3200	1200	150	150	3200	1200	900
DCM1442	4200	1200	150	150	4200	1200	900
DCM1722	2200	1500	150	150	2200	1500	900
DCM1732	3200	1500	150	150	3200	1500	900
DCM1742	4200	1500	150	150	4200	1500	900
DCM1922/2122	2200	1700	150	150	2200	1700	900
DCM1932/2132	3200	1700	150	150	3200	1700	900
DCM1942/2142	4200	1700	150	150	4200	1700	900

DIMENSIONAL DARWINGS

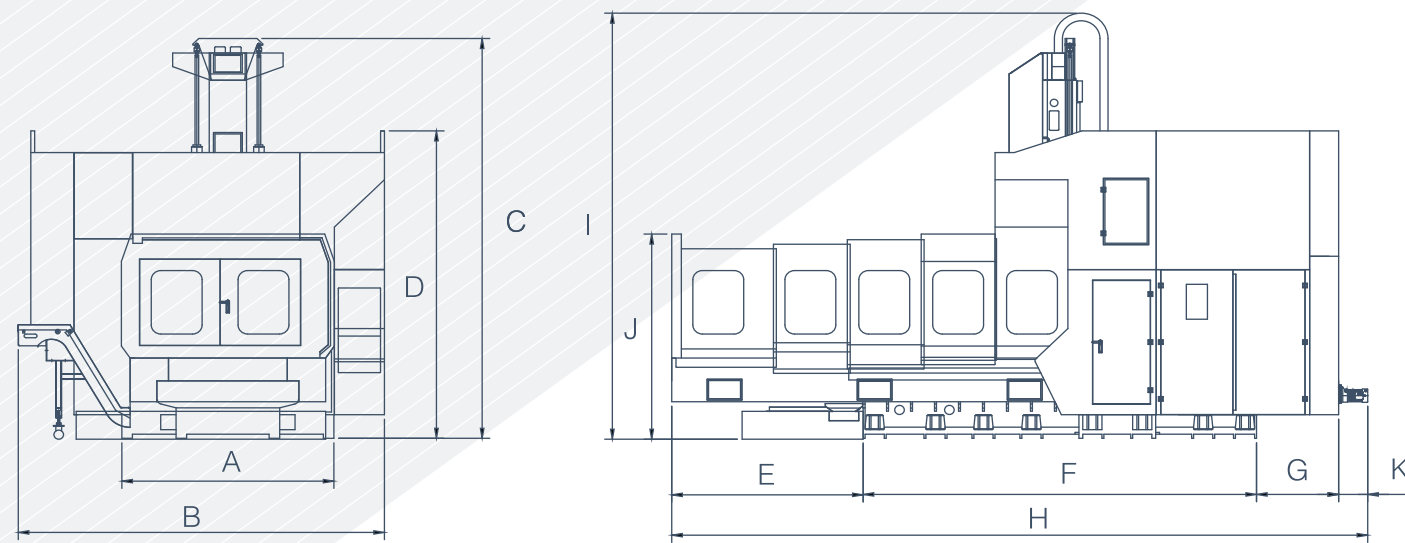


MODEL	A	B	C	D	E
DCM1417	8600	5700	3370	3580	3685
DCM1422	8600	5700	3370	3580	3685
DCM1432	10600	5700	4460	4840	3685
DCM1442	1300	5700	5520	6130	3685
DCM1722	7260	5310	2990	2700	5150
DCM1732	9300	5310	3500	4290	5150
DCM1742	11480	5310	4770	5170	5150
DCM1922	7260	5310	2990	2700	5150
DCM1932	9300	5310	3500	4290	5150
DCM1942	11480	5310	4770	5170	5150
DCM2122	7260	5510	2990	2700	5350
DCM2132	9300	5510	3500	4290	5350
DCM2142	11480	5510	4770	5170	5350



MODEL	A	B	C	D	E	F	G	H	J	K
DCM1722	3430	5120	4440	1260	4100	820	6490	303	2030	3440
DCM1732	3430	5120	4440	1185	6100	835	8840	303	2030	3440
DCM1742	3430	5120	4440	1110	8100	950	10480	303	2030	3440
DCM1922	3430	5120	4440	1260	4100	820	64908	303	2030	3440
DCM1932	3430	5120	4440	1185	6100	835	8440	303	2030	3440
DCM1942	3430	5120	4440	1110	8100	950	10480	303	2030	3440
DCM2122	3430	5320	4440	1260	4100	820	6490	303	2030	3440
DCM2132	3430	5320	4440	1185	6100	835	8440	303	2030	3440
DCM2142	3430	5320	4440	1110	8100	950	10480	303	2030	3440

DIMENSIONAL DARWINGS

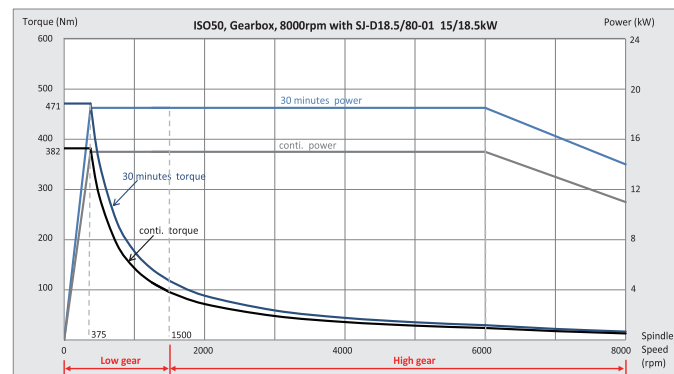


MODEL	A	B	C	D	E	F	G	H	I	J	K
DCM1417	2210	3820	4440	3390	1995	4100	860	720	4700	2270	303
DCM1422	2210	3820	4440	3390	1995	4100	860	7250	4700	2270	303
DCM1432	2210	3820	4440	3390	1995	6100	860	9600	4700	2270	303
DCM1442	2210	3820	4440	3390	1995	8100	860	11950	4700	2270	303

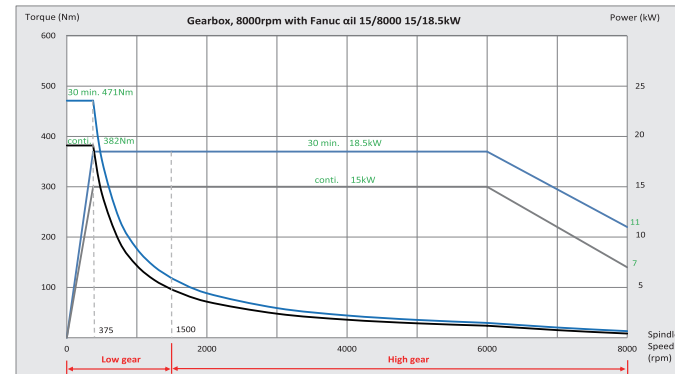
SPINDEL OUTPUT

Spindle Motor

SJ-D18.5(15kW,8000rpm)

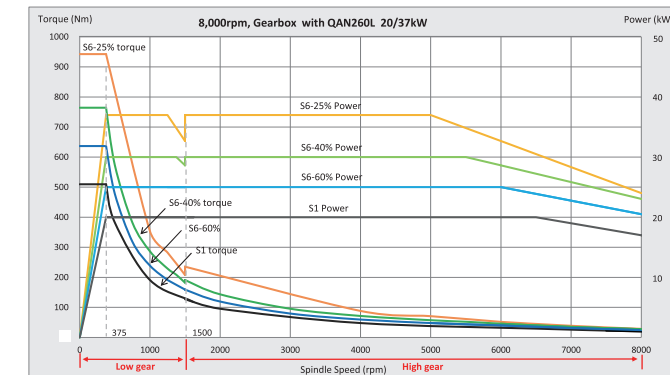


Fanuc-ail-15(15kW,8000rpm)

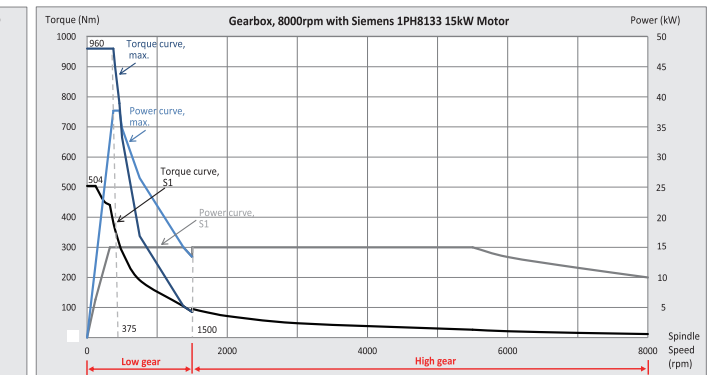


SPINDEL OUTPUT

QAN260L (20kw,8000rpm)



Siemens8 133 (15kw,8000rpm)



SPECIFICATION

		14 series			
Model		1417	1422	1432	1442
Travel					
Travel ranges(X*Y*Z)	mm	1700x1400x900	2200x1400x900	3200x1400x900	4200x1400x900
Spindle nose to table surface	mm	200~1100 (optional 300~1400 with Z stroke 1100)			
Spindle center to column	mm	404			
Distance between column	mm	1400			
Table					
Table size	mm	1700x1200	2200x1200	3200x1200	4200x1200
T-slot(width*distance*number)	mm	22x150x7			
Max. table load	ksg	5000	5000	5000	5000
Spindle					
Tool shank & pull stud		ISO50			
Spindle inner diameter	mm	Ø100			
Spindle speed Gear	rpm	8000			
Draw bar force	kgf	1800			
Main motor (con/30min kW)	kW	15/18.5			
Axis servo motor					
Rapid feed rate (X/Y/Z)	m/min	20/20/20	16/20/20	16/20/20	12/20/20
Feed rate (X/Y/Z)	nn/min	10000			
Mitsubishi kW	kW	HF703 7.0			
Fanuc kW	kW	a30/3000i 7.0			
Siemens kW	kW	1FK7105 8.2			
Fagor kW	kW	FXM75.20 7.0			
Heidenhain kW	kW	QSY190D 9.6			
Auto tool changer					
ATC type		Disk/Chain			
Cam type		Arm			
Tool selection (Bi-direction)		Random			
Tool storage capacity	pcs	24/32			
Max. tool diameter	mm	Ø115/Ø127 (Ø160/Ø250)			
Max. tool length	mm	350			
Max. tool weight	kg	20			
Miscellaneous					
Air requirement	kg/cm2	6			
Voltage		220			
Power requirement	KVA	50			
Coolant tank capacity	L	900			
Machine weight	kgs	15500	16000	17000	18000
Machine height	mm	4440 (optional 5100 with Z stroke 1100)			
Floor space	L*Wmm	5800x4150	6090x4150	8130x4150	10310x4150

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SPECIFICATION

		17 series			19 series		
Model		1722	1732	1742	1922	1932	1942
Travel							
Travel ranges(X*Y*Z)	mm	2200x1700x900	3200x 1700x900	4200x1700x900	2200x1900x900	3200x1900x900	4200x1900x900
Spindle nose to table surface	mm	200~1100 (optional 300~1400 with Z stroke 1100)			200~1100 (optional 300~1400 with Z strake 1100)		
Spindle center to column	mm	404			404		
Distance between column	mm	1900			1900		
Table							
Table size	mm	2200x1500	3200x1500	4200x1500	2200x1700	3200x1700	4200x1700
T-slot(width*distance*number)	mm	22x150x9			22x150x11		
Max. table load	ksg	8000	10000	12000	8000	10000	12000
Spindle							
Tool shank & pull stud		ISO50			ISO50		
Spindle inner diameter	mm	Ø100			Ø100		
Spindle speed Gear	rpm	8000			8000		
Draw bar force	kgf	1800			1800		
Main motor (con/30min kW)	kW	15/18.5			15/18.5		
Axis servo motor							
Rapid feed rate (X/Y/Z)	m/min	16/16/20	12/16/20	12/16/20	12/16/20	12/16/20	10/16/20
Feed rate (X/Y/Z)	nn/min	10000			10000		
Mitsubishi kW	kW	HF703 7.0			HF703 7.0		
Fanuc kW	kW	a30/3000i 7.0			a30/3000i 7.0		
Siemens kW	kW	1FK7105 8.2			1FK7105 8.2		
Fagor kW	kW	FXM75.20 7.0			FXM75.20 7.0		
Heidenhain kW	kW	QSY190D 9.6			QSY190D 9.6		
Auto tool changer							
ATC type		Disk/Chain			Disk/Chain		
Cam type		Arm			Am		
Tool selection (Bi-direction)		Random			Random		
Tool storage capacity	pcs	24/32			24/32		
Max. tool diameter	mm	Ø115 / Ø127 (Ø160/Ø250)			Ø115/Ø127 (Ø160/Ø250)		
Max. tool length	mm	350			350		
Max. tool weight	kg	20			20		
Miscellaneous							
Air requirement	kg/cm2	6			6		
Voltage		220			220		
Power requirement	KVA	50			50		
Coolant tank capacity	L	900			900		
Machine weight	kgs	21000	22500	24000	22000	23500	25000
Machine height	mm	4440 (optional 5100 with Z stroke 1100)			4440 (optional 5100 with Z stroke 1100)		
Floor space	L*Wmm	6490x5120	8440x5120	10480x5120	6490x51200	8440x51200	10480x5120

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SPECIFICATION

		21 series		
Model		2122	2132	2142
Travel				
Travel ranges(X*Y*Z)	mm	2200x2100x900	3200x2100x900	4200x2100x900
Spindle nose to table surface	mm	200~1100 (optional 300~1400 with Z stroke 1100)		
Spindle center to column	mm	404		
Distance between column	mm	2100		
Table				
Table size	mm	2200x1700	3200x1700	4200x1700
T-slot(width*distance*number)	mm	22x150x11		
Max. table load	ksg	8000	10000	12000
Spindle				
Tool shank & pull stud		ISO50		
Spindle inner diameter	mm	Ø100		
Spindle speed Gear	rpm	8000		
Draw bar force	kgf	1800		
Main motor (con/30min kW)	kW	15/18.5		
Axis servo motor				
Rapid feed rate (X/Y/Z)	m/min	12/16/20	10/16/20	12/16/20
Feed rate (X/Y/Z)	nn/min	10000		
Mitsubishi kW	kW	HF703 7.0		
Fanuc kW	kW	a30/3000i 7.0		
Siemens kW	kW	1FK7105 8.2		
Fagor kW	kW	FXM75.20 7.0		
Heidenhain kW	kW	QSY190D 9.6		
Auto tool changer				
ATC type		Disk/Chain		
Cam type		Arm		
Tool selection (Bi-direction)		Random		
Tool storage capacity	pcs	24/32		
Max. tool diameter	mm	Ø115/Ø127 (Ø160/Ø250)		
Max. tool length	mm	350		
Max. tool weight	kg	20		
Miscellaneous				
Air requirement	kg/cm2	6		
Voltage		220		
Power requirement	KVA	50		
Coolant tank capacity	L	900		
Machine weight	kgs	23500	24000	25500
Machine height	mm	4440 (optional 5100 with Z stroke 1100)		
Floor space	L*Wmm	6490x5320	8440x5320	10480x5320

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STANDARD ACCESSORIES:

- Air blast through spindle
- Air blast for workpiece (nose)
- X-axis telescopic cover
- Automatic lubrication system
- Working lamp
- Operation status light
- Screw type chip conveyors
- Chain type 32-tool ATC
- Gear head
- Cooling system
- Air gun/water gun
- MPG handwheel
- Air conditioner
- RS-232 interface
- Spindle oil cooler
- Tool box
- Chain type chip conveyor
- Z-axis pneumatic balance system
- Levelling bolts and pads
- Semi-full splash safety guard

OPTIONS:

- Transformer
- Full splash guard
- Coolant through spindle
- Linear scales
- Rotary table
- Adjusting tools and box
- Flushing device
- Foundation bolts
- Auto tool length measurement
- Auto workpiece measurement
- Manual universal head (90 degree)
- Auto universal head (90 degree)
- 21 series Y stroke 2600