

High Precision / High Efficiency
High Durability / Perfection



• VL-300~600C/CM



• VL-160~600C/CM-2R



• VL-66~250C/CM



• PL-160~500CM



• VG-160CMG



• VL-46~100A/M/H



• HL-26/32AT



• VL-66KA2

• VG-120~250GN/GB



YES! WE ARE HONOR!



VL-125
VL-160
VL-200
VL-250

Heavy Duty Series

CNC Vertical Lathe / CNC Vertical Turning Center



HONOR SEIKI Co., Ltd.

www.honorseiki.com.tw



 **HONOR SEIKI Co., Ltd.**

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TEL: +886 7 975 9888 / FAX: +886 7 975 9999
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Agent:

- Honor Seiki continuous to develop quality machines to meet the highest standards in precision, efficiency and reliability.



With 30 years' experience in machine tool design and manufacturing, HONOR SEIKI is the most professional and largest machine tool maker in CNC Vertical Lathe, Vertical Turning Center and Gantry type Turning/Milling/Grinding Center in Taiwan. Honor Seiki brand is internationally recognized and sold over 50 countries with many repeated orders. Unlike others who over diversify, Honor Seiki focuses solely on vertical turning lathe, with an undivided aim to perfect our product line and bring about greatest customer satisfaction. We are very proud of providing our machines to many leading companies around the world. The industrials we provide include aerospace, automotive, railway, high speed rail, mining, oil and gas, wind power...etc. From outer space rockets to deep ocean submarines, all utilize Honor Seiki vertical lathe to maximize their machining potential. We are proud of our accomplishments in bringing accolades to Taiwan. Our business model is based on cooperation, lasting partnership and mutual benefits in order to best serve our clients and help them reap their greatest gain, with special emphasis on Quality, Efficiency, Accuracy, Honest and Responsibility. We always fulfill our promises to our customers. Honor Seiki LTD is your best partnership to prosper and grow your business.

Fields Of Application

Vertical Lathe & Vertical Turning Center

- Construction
- Automotive
- Aerospace
- Rail
- Boat
- Bearing
- Valve
- Mold
- Gear
- Machine tool
- Power plant
- Oil & gas
- Wind power



• Thousands Of Successful Turnkey

• Aerospace



• Aerospace



• Aerospace



• Aerospace



• Motor housing



• Motor housing



• Motor housing



• Elevator



• Papermaking



• Papermaking



• Textile machine



• Textile machine



• Steering wheel



• Steering wheel



• Power plant



• Power plant



• Rail



• Bearing



• Tire mold



• Valve



Machine Structure



• Stable column design

- One piece column with wide span.
- Box structure of column reduce vibration.

• Powerful tool clamping system



- GC clamping system



- BT-50 clamping system



- Solid Lock clamping system (U.S. patent of invention by HonorSeiki)



• Brilliant design of cross-rail

- Position lock with clamping to make sure its parallelism and stability.



• Thoughtful table bearing choice

- Bigger bearing for stronger rigidity and durability.
- Carbonized Gear.
- JIS Grade SCM440 Material.

• Strong design

- High-grade Meehanite casting with box in box structure.
- One piece big machine bed with built in gear box and table spindle.



■ Photo of VL-160CM

C-TYPE ATC

(Turning)



• GC-200 Curvic coupling (for VL-125 / VL-160)



• PC17T (Option) (Two Face Contact Tooling / Patent)



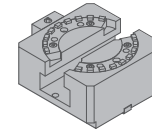
• PC22T (Option) (Two Face Contact Tooling / Patent)



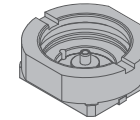
C-Type ATC Tool System

RAM □220X220
□250X250

Clamping Type



Model:GC-200



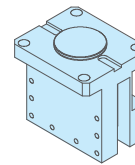
Model:SL-17T(□220/□250)



Model:SL-22T(□300)

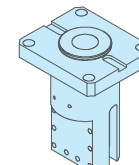
Tool holder Model

OD/Facing Tool



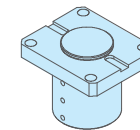
IDF25-200-200
IDF32-200-200
IDF32-240-200
IDF40-285-200

ID Tool



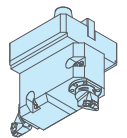
IFL25-120-250
IFL32-130-250
IFL25-160-200
IFL32-160-200

Boring Tool



BOS60-130-160

Capto



BDC6-220-200
FDC6-220-200
VHC6-220-200
HVC6-220-200

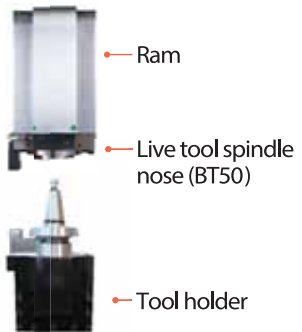
BDC6-250-200
FDC6-250-200
VHC6-250-200
HVC6-250-200

M-TYPE ATC (BT50)

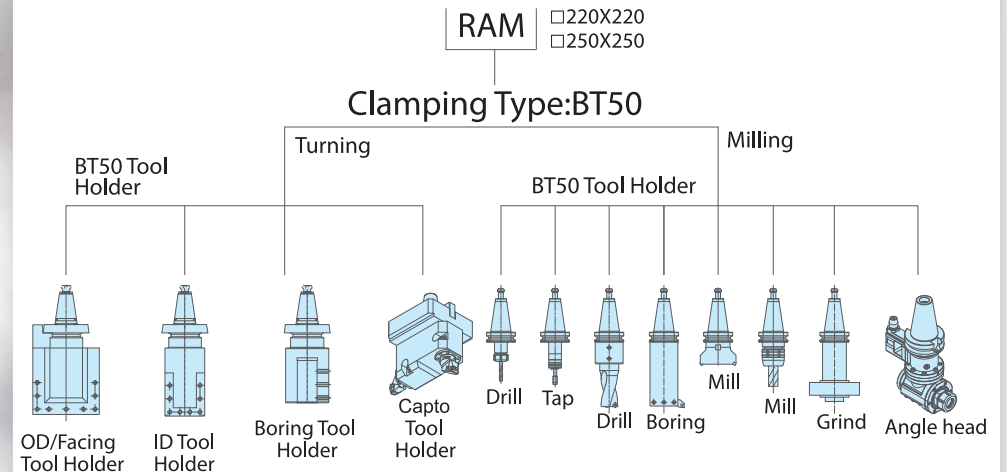
(Turning and milling)



• BT50-200 (BT50)



M-Type ATC Tool System

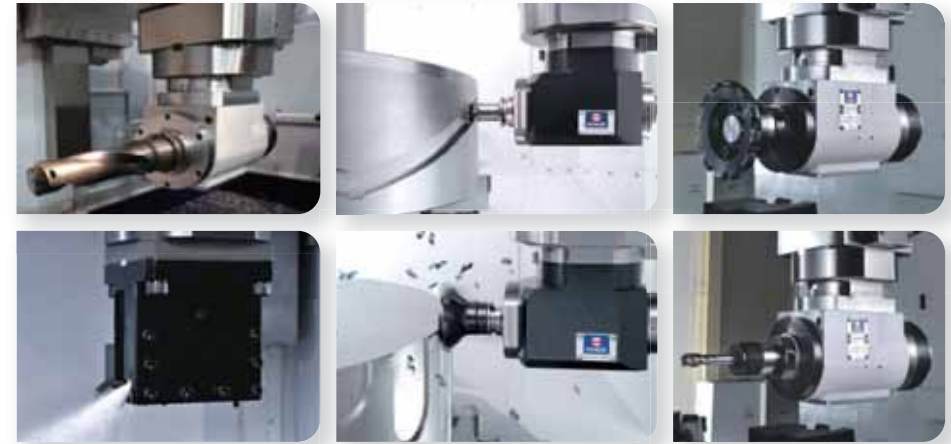
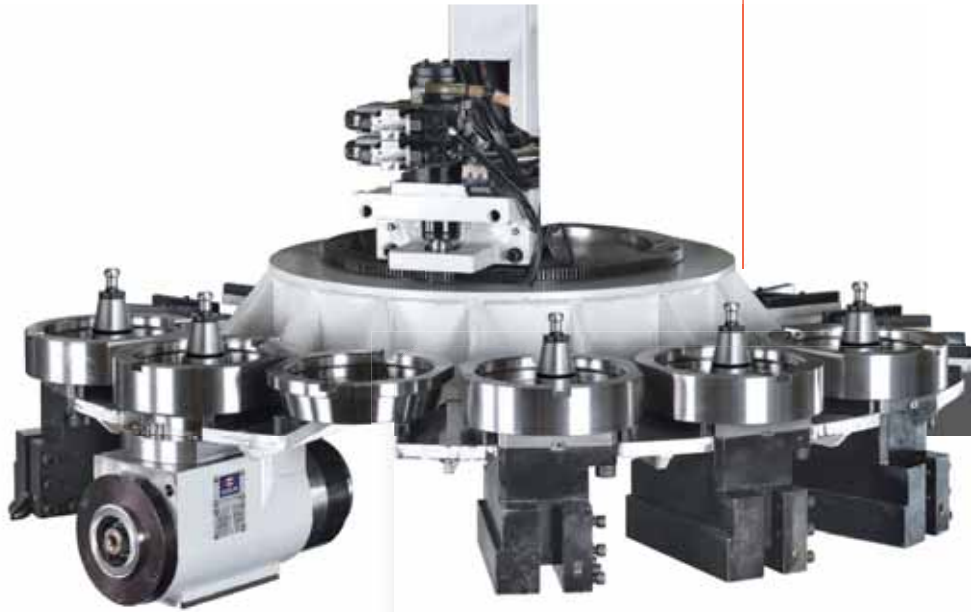


Material

Planet gear
(not including gear cutting)

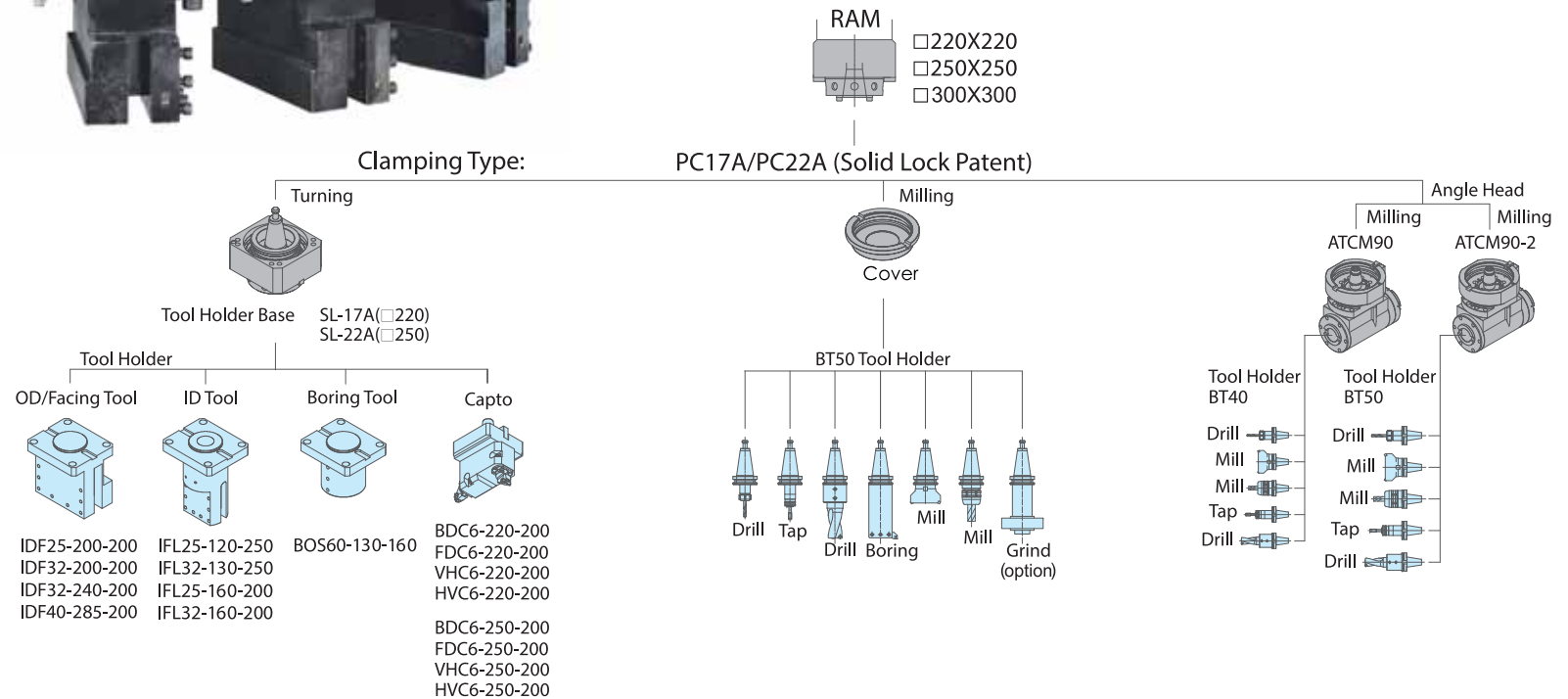
M-TYPE ATC (Solid Lock)

(Turning and milling)

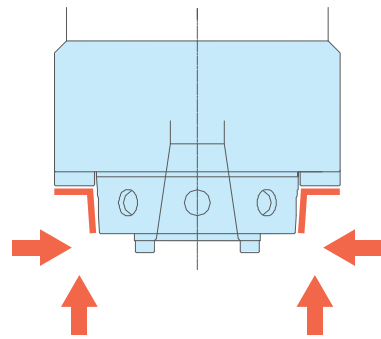


Solid-lock ATC Tool System(option)

PC17A / PC22A (Two Face Contact Tooling / Patent)

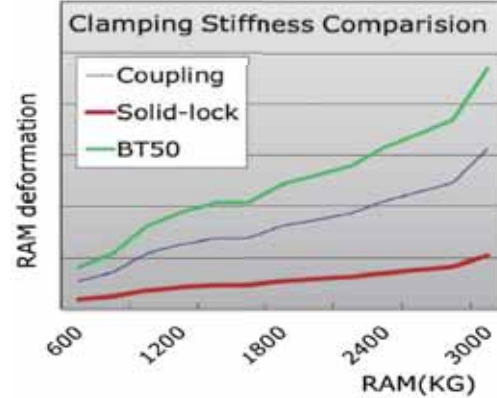


SOLID LOCK (Patent of the U.S, Taiwan and China)



Two face contact
ball clamping anti-vibration
Max. 8,000kg clamping force

• Honor Patent !

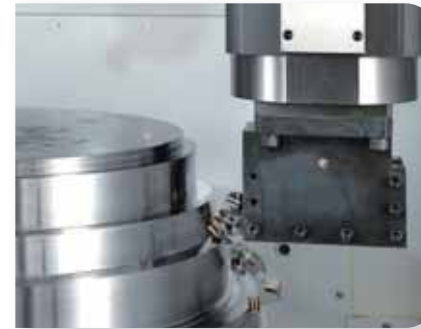


• Max. Clamping force : 8000 kg



■ Milling Capacity

Model	VL-160CM
Spindle motor	11/15 kW
Material	S45C
Milling cutters	Ø100x7
Cutting depth	4.5 mm
Feed rate	720 mm/min
Cutting speed	160 m/min
Material removable rate	320 cm ³ /min



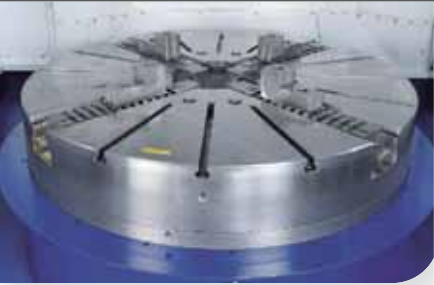
■ Turning Capacity

Model	VL-160CM
Spindle motor	60/75kW(OPTION)
Material	S45C
Cutting depth	13 mm
Feed rate	1.0 mm / rev
Cutting speed	130 m/min
Material removable rate	1690 cm ³ /min

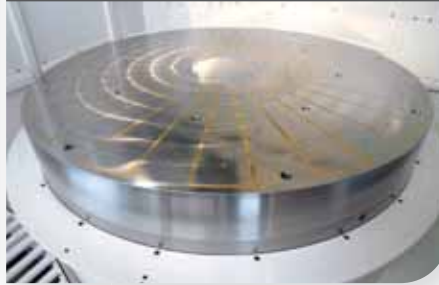


Option

• Hydraulic chuck



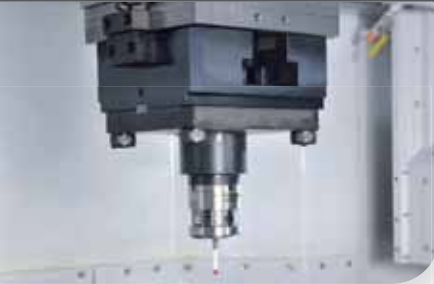
• Magnetic chuck



• Linear encoder



• Touch probe (workpiece inspection)



• Tool presetter



• Siemens controller



• Oil skimmer (disk)



• Air conditioner for electrical cabinet



• Spin window



• Paper type filter



• Oil mist collector



• Thermal compensation



• Grinding function



Option

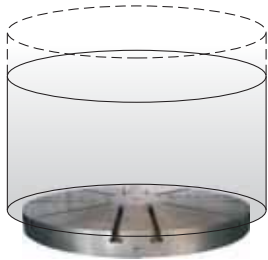
Z-axis travel



●: Standard / ○: Option Unit:mm

MODEL	□220	□250	□300
VL-125C VL-125CM	●900	○900 ○1200	----
VL-160C VL-160CM	●900	○900 ○1200 ○1500	----
VL-200C VL-200CM	----	●1200 ○1500	○1800
VL-250C VL-250CM	----	●1200 ○1500	○1800

Upgraded cross-rail travel



●: Standard / ○: Option Unit:mm

MODEL	Increase height	Space from table tool holder base end
VL-125C	400	1050~1850
VL-125CM	400	1035~1835
VL-160C	600	650~2050
VL-160CM	600	635~2035
VL-200C	500	785~2285
	750	785~2535
VL-200CM	500	785~2285
	750	785~2535
VL-250C	500	785~2285
	750	785~2535
VL-250CM	500	785~2285
	750	785~2535

40 ATC



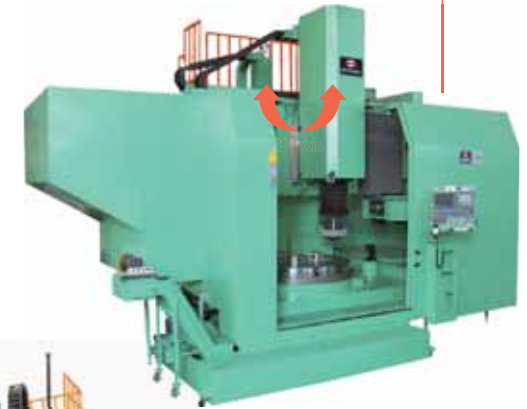
●: Standard / ○: Option

ATC tools	VL-xxx C (Turning)	VL-xxx CM (milling)
12	●	----
16	○	●
20	○	○
24	○	○
L24+R16	----	○
45	○	----
60	○	----

Dual ram



B axis



HB Series (Horizontal Ram)



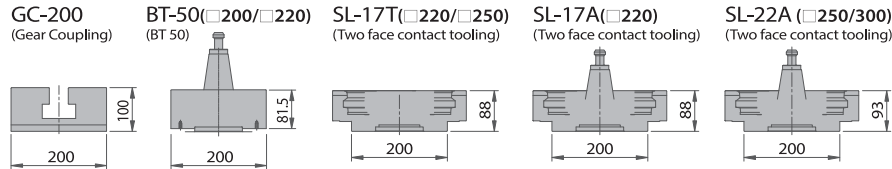
Auto pallet changer

Full enclosed splash guard



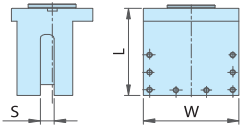
Tool Holder System

■ Tool holder base :



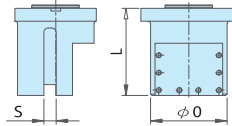
■ GC-200 / RG250 / SL-17T / SL-17A / SL-22A Tool holder :

O.D. / Facing tool holder



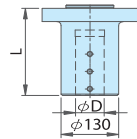
Model	L	S	W	RAM
IDF25-200-200	200	25	200	220
IDF32-200-200	200	32	200	220
IDF32-240-200	200	32	240	250
IDF40-285-200	200	40	285	300

I.D. / Facing tool holder



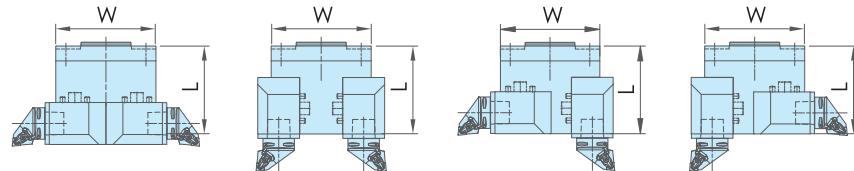
Model	L	S	phi 0
IFL25-120-250	250	25	120
IFL32-130-250	250	32	130
IFL25-160-200	200	25	160
IFL32-160-200	200	32	160

Boring tool holder



Model	L	phi D
BOS60-130-160	160	60

■ Capto Tool holder :



Model	L	W
BDC6-220-200	200	220
BDC6-250-200	200	250

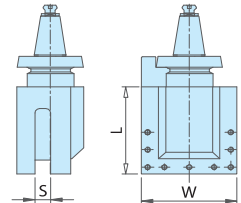
Model	L	W
FDC6-220-200	200	220
FDC6-250-200	200	250

Model	L	W
VHC6-220-200	200	220
VHC6-250-200	200	250

Model	L	W
HVC6-220-200	200	220
HVC6-250-200	200	250

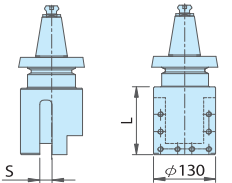
■ BT50 Tool holder (Option) :

O.D. / Facing tool holder



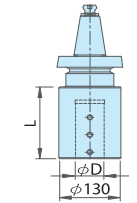
Model	L	S	W	RAM
BT50-IDF25-200-200	200	25	200	220
BT50-IDF32-200-200	200	32	200	220
BT50-IDF32-240-200	200	32	240	250

I.D. / Facing tool holder



Model	L	S
BT50-IFL25-130-200	200	25
BT50-IFL32-130-200	200	32

Boring tool holder



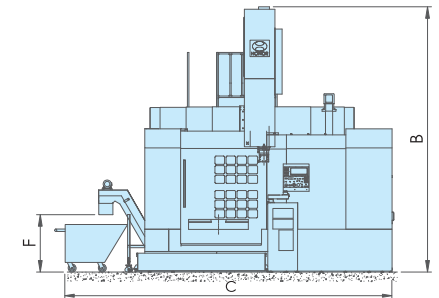
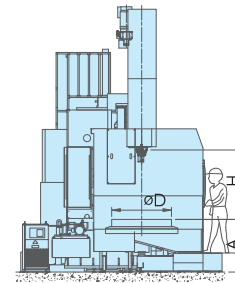
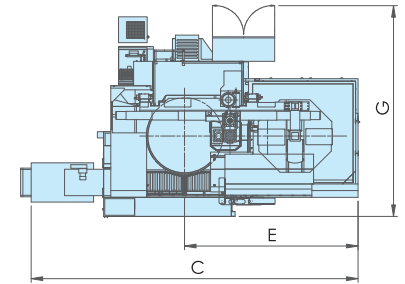
Model	L	phi D
BT50-BOS40-130-200	200	40
BT50-BOS50-130-200	200	50
BT50-BOS60-130-200	200	60

Machine Dimensions

■ VL-125/VL-160 series

(unit:mm)

	A	B	C	ØD	E	F	G	H
VL-125C	1100	5250	6480	Ø1250	3277	1200	4875	650~1450
VL-125CM	1100	5650	6850	Ø1250	3625	1200	4875	635~1435
VL-160C	1100	5250	7035	Ø1600	3500	1200	5175	650~1450
VL-160CM	1100	5650	7380	Ø1600	3825	1200	5175	635~1435



■ VL-200/VL-250 series

(unit:mm)

	A	B	C	ØD	E	F	G	H	I
VL-200C	1455	6635	7970	Ø2000	3960	1280	5532	785~1785	6030
VL-200CM	1455	6970	8400	Ø2000	4120	1280	5532	785~1785	6030
VL-250C	1455	6635	8295	Ø2500	3915	1280	5564	785~1785	6030
VL-250CM	1455	6970	8580	Ø2500	4200	1280	5564	785~1785	6030

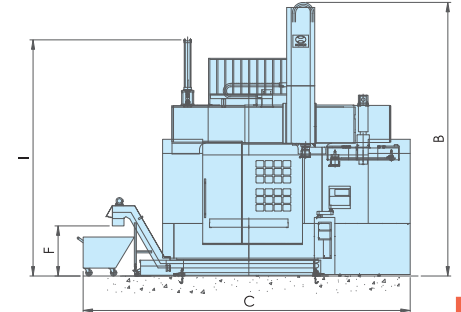
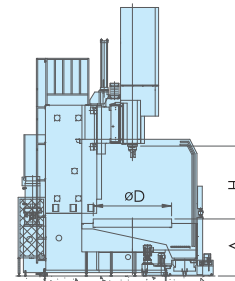
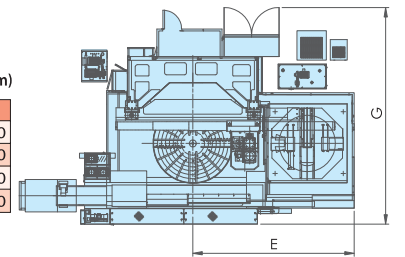
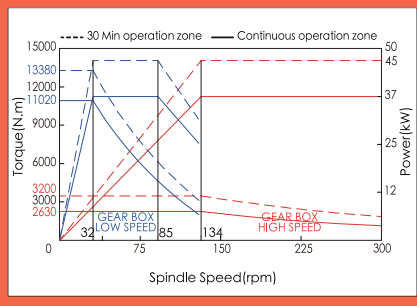
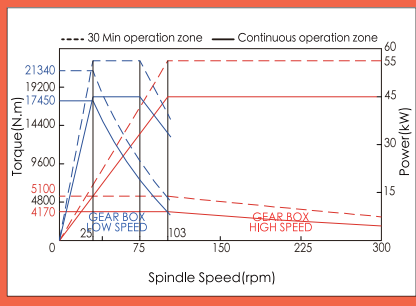


Table Speed, Torque Output Chart

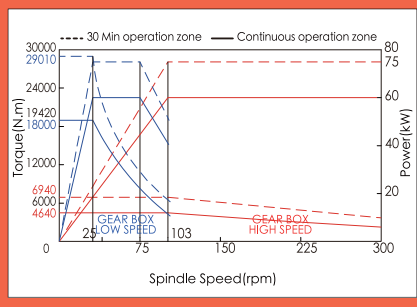
VL-125 Series 37/45kW, 2 steps



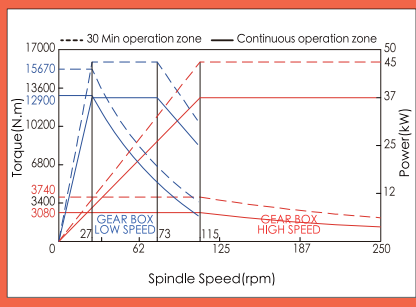
VL-125 Series 45/55kW, 2 steps (Option)



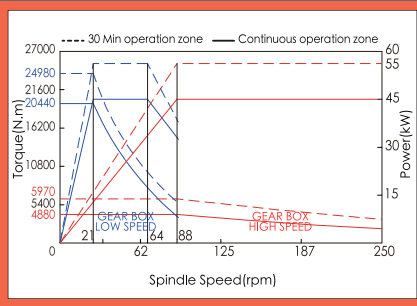
VL-125 Series 60/75kW, 2 steps (Option)



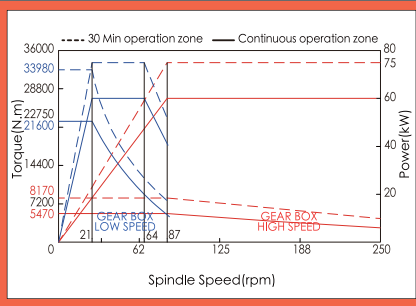
VL-160 Series 37/45kW, 2 steps



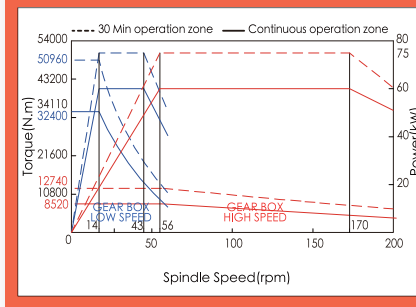
VL-160 Series 45/55kW, 2 steps (Option)



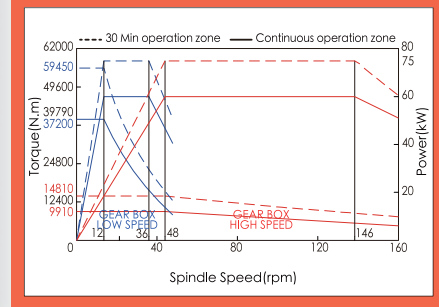
VL-160 Series 60/75kW, 2 steps (Option)



VL-200 Series 60/75kW, 2 steps

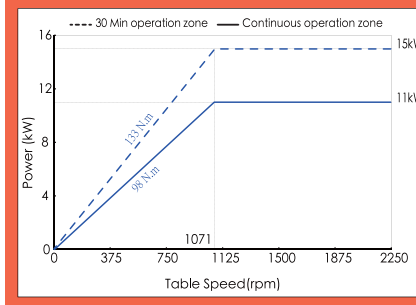


VL-250 Series 60/75kW, 2 steps

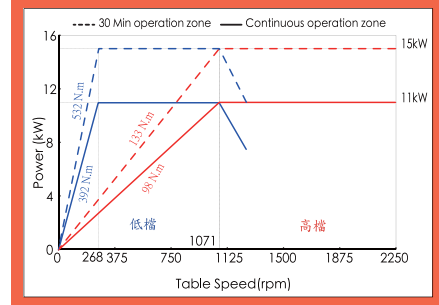


Live Tool Spindle Speed, Torque Output Chart

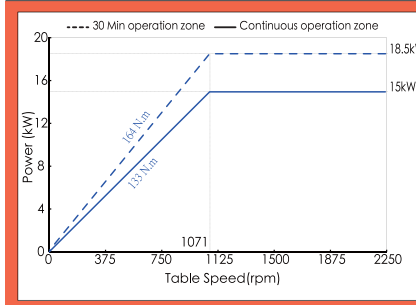
MODEL : $\alpha 12$ 11/15kW



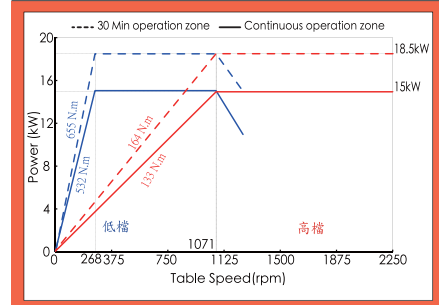
MODEL : $\alpha 12$ 11/15kW, 2 steps (Option)



MODEL : $\alpha 15$ 15/18.5kW

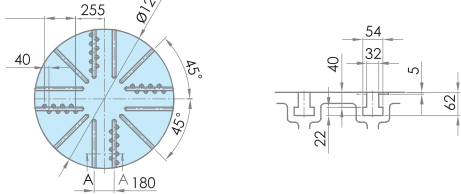


MODEL : $\alpha 15$ 15/18.5kW, 2 steps (Option)

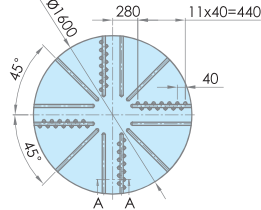


Manual Table Dimensions

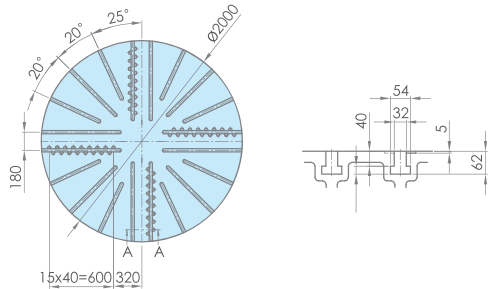
VL-125 Series



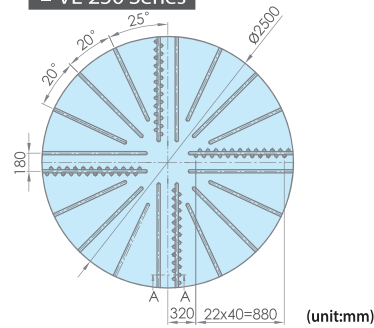
VL-160 Series



VL-200 Series

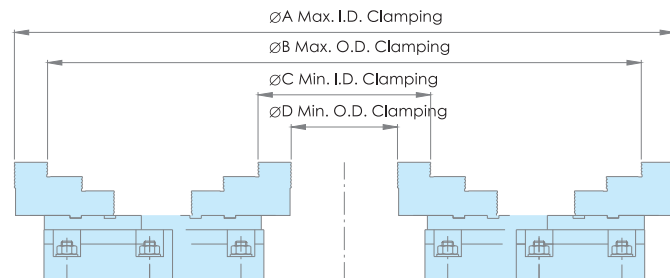


VL-250 Series



(unit:mm)

Workpiece Clamping

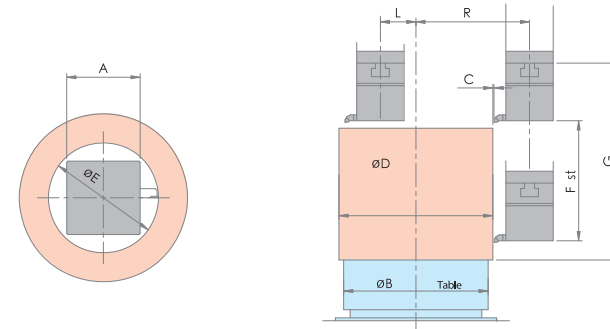


(unit:mm)

Model	A	B	C	D
VL-125	1340	1230	370	250
VL-160	1720	1600	420	300

Model	A	B	C	D
VL-200	2120	2000	750	530
VL-250	2500	2220	750	530

Working Area And Tool Interference



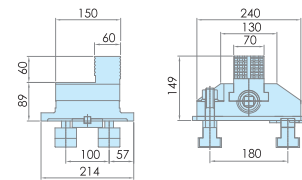
(unit:mm)

Model	A	$\varnothing B$	C	$\varnothing D$	$\varnothing E$	F	G	R	L
VL-125C	220	1250	20	1600	330	900	650~1450	950	200
VL-125CM	220	1250	20	1600	330	900	635~1435	950	200
VL-160C	220	1600	20	2000	330	900	650~1450	1150	200
VL-160CM	220	1600	20	2000	330	900	635~1435	1150	200
VL-200C	250	2000	40	2500	360	1200	785~1785	1450	300
VL-200CM	250	2000	40	2500	360	1200	785~1785	1450	300
VL-250C	250	2000	5	2970	360	1200	785~1785	1650	300
VL-250CM	250	2000	5	2970	360	1200	785~1785	1650	300

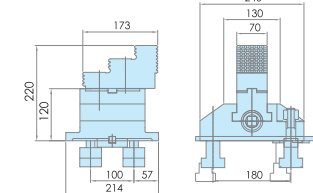
Jaws Dimensions

VL-125,VL-160 Series

F Type

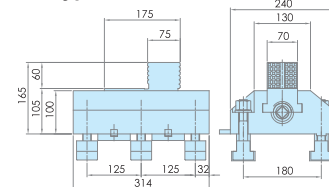


C Type (Standard)

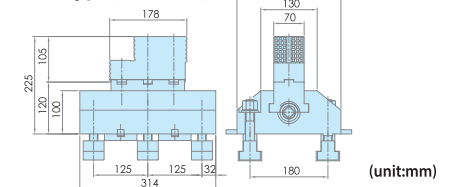


VL-200,VL-250 Series

F Type



C Type (Standard)



(unit:mm)

Machine Specifications

Model/Description		Unit	VL-125C	VL-125CM	VL-160C	VL-160CM	VL-200C	VL-200CM	VL-250C	VL-250CM
Capacity	Max. swing diameter	mm	1600 (63")		2000 (78")		2500 (98")		3000 (118")	
	Max. turning diameter	mm	1600 (63")		2000 (78")		2500 (98")		2970 (116")	
	Distance from tool holder base to table	mm	650-1450 (25"-57")	635-1435 (25"-56")	650-1450 (25"-57")	635-1435 (25"-56")	785-1785(31"-70")		785-1785(31"-70")	
	Max. turning height	mm	1200 (47")		1200 (47")		1480		1480	
	Max. workpiece weight	kg	5000		8000		12000		15000	
Spindle	Table diameter	mm	1250 (49")		1600 (63")		2000 (78")		2500 (98")	
	Range of table speed	rpm	3-300		3-250		5-200		5-160	
	Gear box		2-step		2-step		2-step		2-step	
	Live tool spindle speed	rpm	-	50-2250	-	50-2250	-	50-2250	-	50-2250
ATC	ATC(Automatic Tool Changer)		12	16	12	16	12	16	12	16
	Tool size	mm	□25, □32		□25, □32, □40		□25, □32, □40		□25, □32, □40	
	Cross-section of ram	mm	□220 (□250)		□220 (□250)		□250 (□300)		□250 (□300)	
Feed	Rapid rate (X-Axis)	m/min	10 (393")		10 (393")		10 (393")		10 (393")	
	Rapid rate (Z-Axis)	m/min	10 (393")		10 (393")		10 (393")		10 (393")	
	Horizontal travel(X-Axis)	mm	-200+950		-200+1150		-300+1450		-300+1650	
	Vertical travel (Z-Axis)	mm	900		900		1200		1200	
	Cutting feed rate	mm/min	0.001-5000		0.001-5000		0.001-5000		0.001-5000	
	Feed override	%	0-150		0-150		0-150		0-150	
	Cross-rail travel	mm	800(200x4 steps)		800(200x4 steps)		1000(250x4 steps)		1000(250x4 steps)	
Control system		Fanuc 0i-T		Fanuc 0i-T		Fanuc 0i-T		Fanuc 0i-T		
Motor	Spindle motor (Cont./30min)	kW	AC37/45		AC37/45		AC60/75		AC60/75	
	Feed motor(X/Z axis)	kW	7.0/7.0		7.0/7.0		5.5/5.5		5.5/5.5	
	Live tool motor	kW	-	AC11/15	-	AC11/15	-	AC11/15	-	AC11/15
	Power requirement	kVA	75	90	75	90	90	105	90	105
Machine size	Floor space(LxW)	mm	6500x4900	6900x4900	7100x5200	7400x5200	7600x5500		7800x6100	
	Max. height(H)	mm	5200	5650	5250	5650	6650	7000	6650	7000
	Net weight	kg	24500	25300	30600	31400	50000	51000	63000	64000

*The specifications are subject to change without notice.

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Standard accessories

- Complete splash guard.(Top open)
- Hydraulic power unit.
- Table with manual 4-jaw chuck as spec.
- Protection door.
- Automatic lubrication system.
- Working light.
- Warning light.(R/Y/G)
- Workpiece counter.(CNC controller)
- Coolant system with tank.
- Coolant bed wash down system.
- Heat exchanger for electrical cabinet.
- Hand tool sets with tool box.
- Leveling bolts & seat pads.
- Chip conveyor. (Hinge type)
- Chip trolley.
- Spindle orientation.
- Manual of operation & maintenance.
- Manual of electrical & hydraulic circuit diagram.

Optional accessories

- Hydraulic chuck & cylinder, size selections.
- Hard jaw for hydraulic chuck.
- Hydraulic chuck soft jaw.
- High & low pressure chucking.
- Air conditioner for electrical cabinet. (Standard for CM series)
- Power transformer.
- Oil skimmer.(Disk type)
- Tool holder base.
- Other tool holder & special tool holder.
- Tool presetter.
- Linear encoder of X/Z axis.
- Lubricant chiller for spindle bearing & gear.
- Extend vertical travel.(Z axis)
- Extend higher column.
- High pressure coolant through tool holder.
- Dual speed gear box for live tool spindle.
- Chip conveyor.(scraper type)
- Manual guide *i*.
- CE certificate.
- Tooling.
- Jig & fixture
- Turnkey project.
- Siemens controller.
- Grinding function

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