



**YES! WE ARE HONOR!**

# CNC VERTICAL LATHE CNC VERTICAL TURNING CENTER

High precision. High efficiency. High durability. Perfection.

Heavy Duty Series

VL-66  
VL-86  
VL-100  
VL-125  
VL-160  
VL-200  
VL-250

*Professional!  
Heavy Duty!*

CE



ISO 9001:2000



 **HONOR SEIKI Co., Ltd.**



### VL-66C



Max. swing dia.: 850mm  
 Max. turning dia.: 760mm  
 Max. turning height: 650mm  
 Chuck dia.: 21 inch  
 Spindle speed: 5-700rpm  
 ATC:12 positions



### VL-66CM



Max. swing dia.: 850mm  
 Max. turning dia.: 760mm  
 Max. turning height: 650mm  
 Chuck dia.: 21 inch  
 Spindle speed: 5-700rpm  
 ATC:12 positions  
 Tool live spindle



### VL-86C



Max. swing dia.: 950mm  
 Max. turning dia.: 900mm  
 Max. turning height: 650mm  
 Chuck dia.: 24 inch  
 Spindle speed: 5-600rpm  
 ATC:12 positions



### VL-86CM



Max. swing dia.: 950mm  
 Max. turning dia.: 900mm  
 Max. turning height: 650mm  
 Chuck dia.: 24 inch  
 Spindle bearing dia.:330mm  
 Spindle speed: 5-600rpm  
 ATC:12 positions  
 Tool live spindle



### VL-100C



Max. swing dia.: 1200mm  
 Max. turning dia.: 1100mm  
 Max. turning height: 650mm  
 Table dia.:1000mm  
 Spindle speed: 3-400rpm  
 ATC:12 positions



### VL-100CM



Max. swing dia.: 1200mm  
 Max. turning dia.: 1100mm  
 Max. turning height: 650mm  
 Table dia.:1000mm  
 Spindle speed: 3-400rpm  
 ATC:12 positions  
 Tool live spindle

## VL-125C

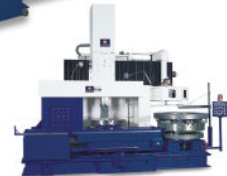


Max. swing dia.: 1600mm  
Max. turning dia.: 1600mm  
Max. turning height: 1250mm  
Table dia.: 1250mm  
Spindle speed: 3-300rpm  
ATC: 12/16 positions

## VL-125CM



Max. swing dia.: 1600mm  
Max. turning dia.: 1600mm  
Max. turning height: 1250mm  
Table dia.: 1250mm  
Spindle speed: 3-300rpm  
ATC: 16 positions  
Tool live spindle



Auto Pallet Changer available

## VL-160C



Max. swing dia.: 2000mm  
Max. turning dia.: 2000mm  
Max. turning height: 1250mm  
Table dia.: 1600mm  
Spindle speed: 3-250rpm  
ATC: 12/16 positions

## VL-160CM



Max. swing dia.: 2000mm  
Max. turning dia.: 2000mm  
Max. turning height: 1250mm  
Table dia.: 1600mm  
Spindle speed: 250rpm  
ATC: 16 positions  
Tool live spindle

## VL-200C / 200CM / 250C / 250CM

### VL-200C

Max. swing dia.: 2500mm  
Max. turning dia.: 2500mm  
Max. turning height: 1600mm  
Table dia.: 2000mm  
Spindle speed: 3-200rpm  
ATC: 12/16 positions

### VL-250C

Max. swing dia.: 3000mm  
Max. turning dia.: 3000mm  
Max. turning height: 1600mm  
Table dia.: 2500mm  
Spindle speed: 3-160rpm  
ATC: 12/16 positions



### VL-200CM

Max. swing dia.: 2500mm  
Max. turning dia.: 2500mm  
Max. turning height: 1600mm  
Table dia.: 2000mm  
Spindle speed: 3-200rpm  
ATC: 16 positions  
Tool live spindle

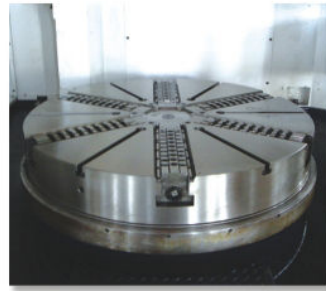
### VL-250CM

Max. swing dia.: 3000mm  
Max. turning dia.: 3000mm  
Max. turning height: 1600mm  
Table dia.: 2500mm  
Spindle speed: 3-160rpm  
ATC: 16 positions  
Tool live spindle

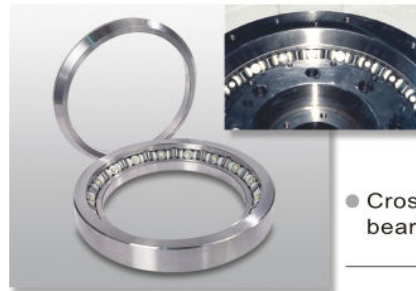




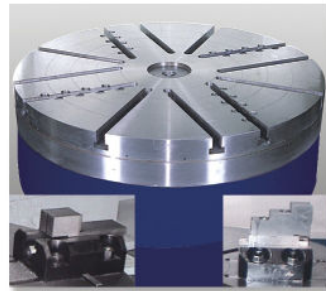
■ **VL-66, VL-86**



● Hydraulic chuck (Optional)



● Crossed roller bearing.

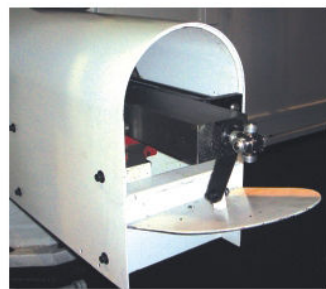


● 4-jaw manual table.

■ **VL-100**



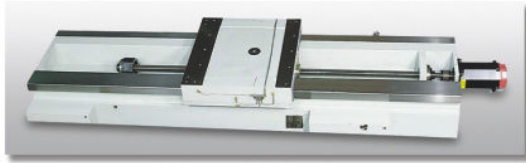
● Gear box.



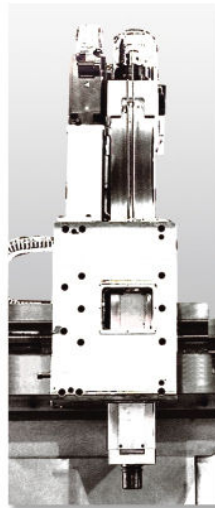
● Tool presetter. (Optional)



**VL-66 VL-86 VL-100 VL-125 VL-160 VL-200 VL-250 Heavy duty series**



● Cross rail (X Axis).



● RAM type (Z Axis).



● C-type ATC.  
● 12 Position.



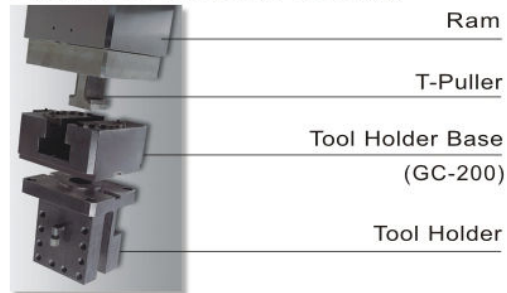
● M-type ATC.  
● 16 Position.



● Control panel.

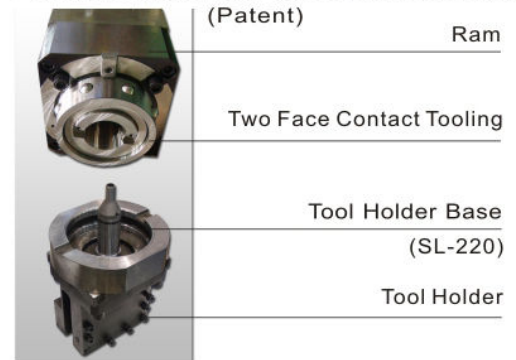
**Heavy duty tool assembly for turning**

● Model: GC-200 (Gear Coupling)



● Rigid tool system with hydraulic T-puller clamping with curve gear coupling.

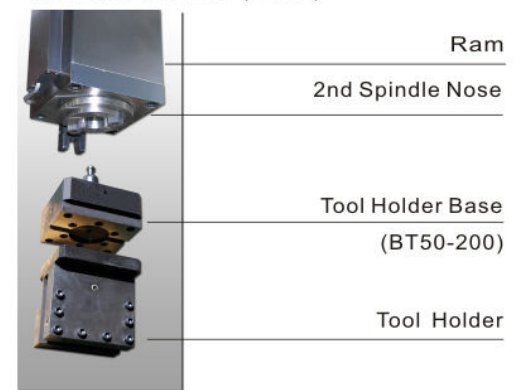
● Model: SL-220 (Two Face Contact Tooling) (Patent)



● Model: RG-250 (Gear Coupling)



● Model: BT50-200 (BT50)





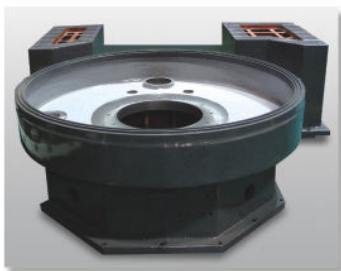
■ **VL-125, VL-160, VL-200, VL-250 Series**

■ **Heavy duty turning example**

- Workpiece diameter:  $\varnothing 785$ (45kw)
- Material: AISI 1045(S45C)
- Turning depth: 10mm
- Cutting feed: 1mm/rev.
- Turning speed: 130m/min
- Turning capacity:  $1300\text{cm}^3/\text{min}$ , 10.21kgs/min



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



- One-piece big machine base with built-in gearbox and spindle.



- Roller gear driver.



- Cross-rail ensures parallelism and stability by positioning lock with clamping.





Tool holder base  
(BT50-200)

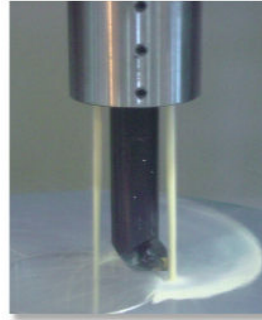
Tool holder



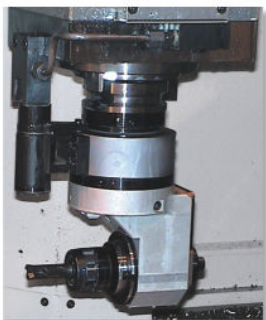
● Boring 1.  
(Optional).



● Live tooling.



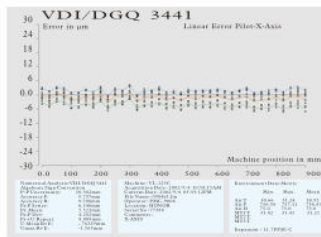
● Boring 2.  
(Optional).



● Angle tool holder  
(optional).



● Work piece probe  
(Optional).



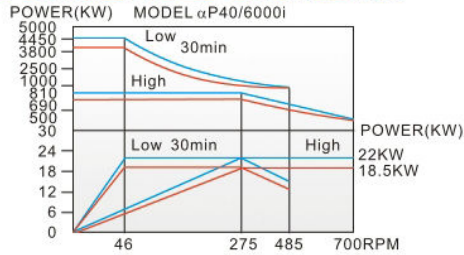
● Laser probe to offer good accuracy.



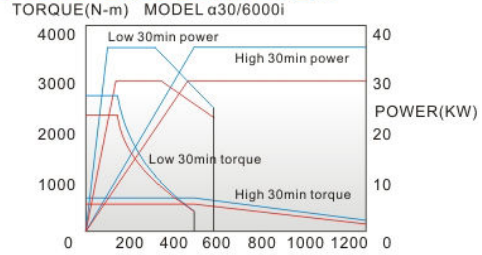
# VL-66 VL-86 VL-100 VL-125 VL-160 VL-200 VL-250 Series

## Table-speed, torque, output chart

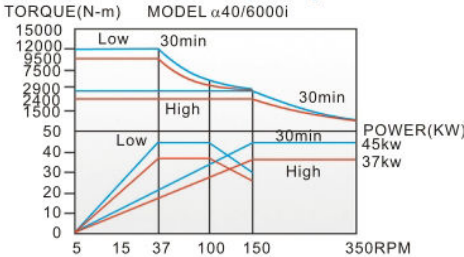
### VL-66, 86 series 22/18.5kw, 2steps



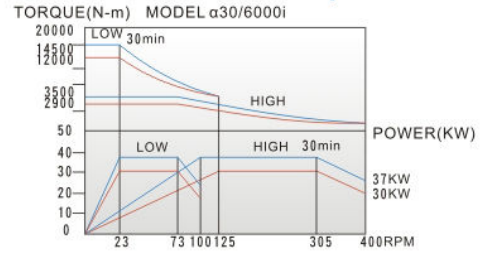
### VL-86 series 30/37kw, 2steps



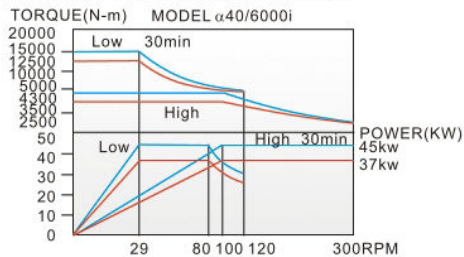
### VL-100 series 30/37kw, 2steps



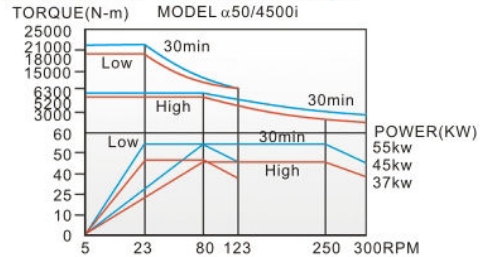
### VL-100 series 37/45kw, 2steps



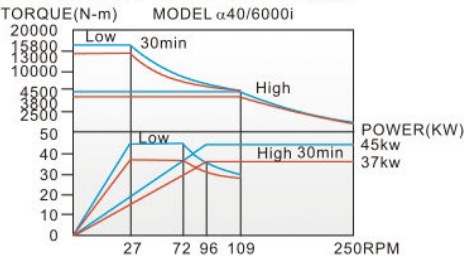
### VL-125 series 37/45kw, 2steps



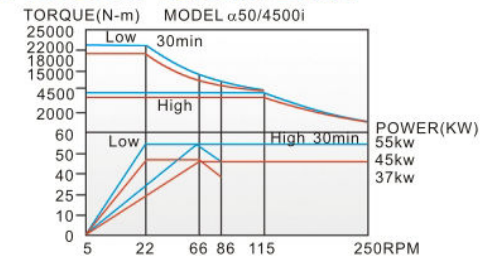
### VL-125 series 45/55kw, 2steps



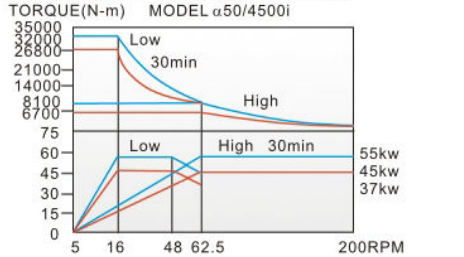
### VL-160 series 37/45kw, 2steps



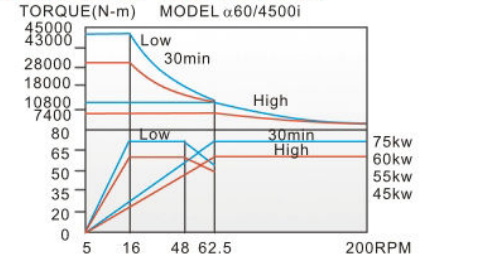
### VL-160 series 45/55kw, 2steps



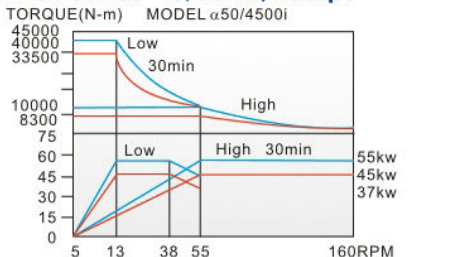
### VL-200 series 45/55kw, 2steps



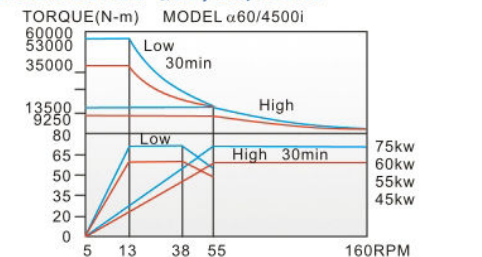
### VL-200 series α60, 60/75kw



### VL-250 series 45/55kw, 2steps



### VL-250 series α60, 60/75kw



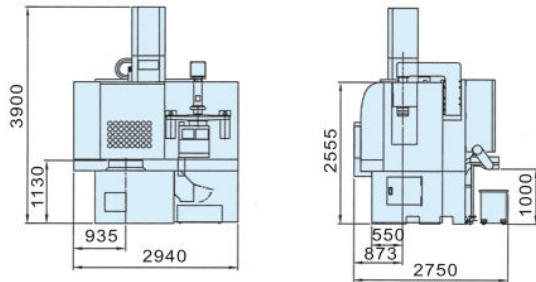




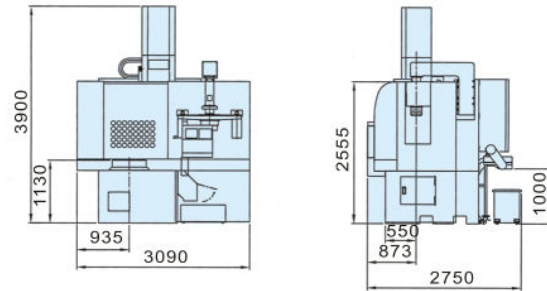
# Machine dimensions

(Unit: mm)

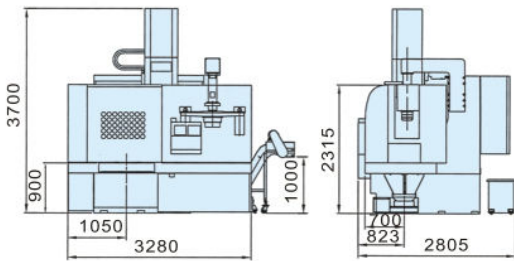
## VL-66C, 66CM Series



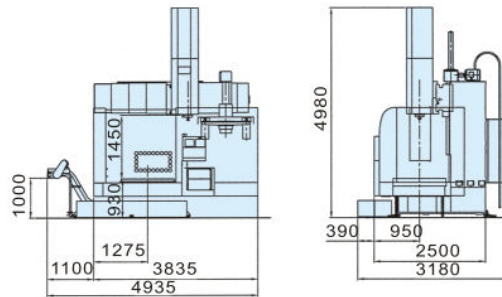
## VL-86C, 86CM Series



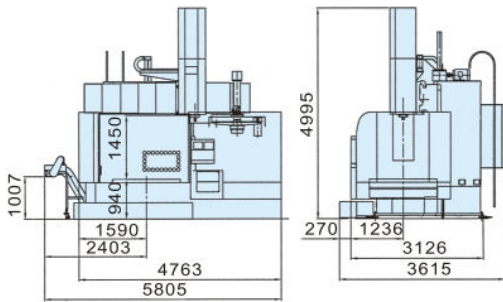
## VL-100 Series



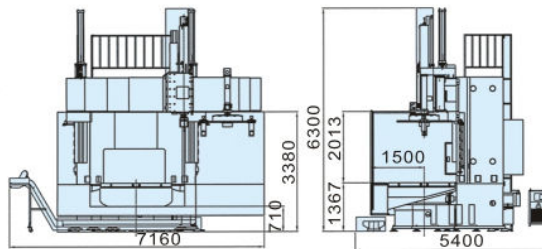
## VL-125 Series



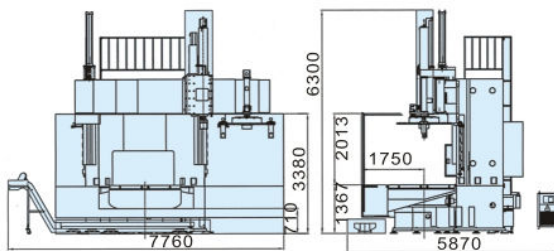
## VL-160 Series



## VL-200 Series



## VL-250 Series



## M type

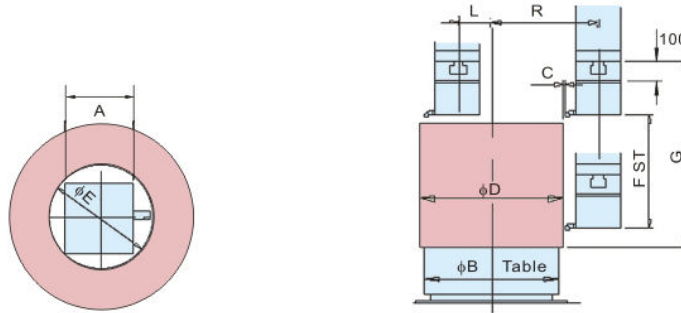




## Working area and tool interference

(Unit: mm)

VL-66  
 VL-86  
 VL-100  
 VL-125  
 VL-160  
 VL-200  
 VL-250



MODEL	A	$\phi B$	C	$\phi D$	$\phi E$	F	G	R	L
VL-66	200	610	5	800	300	600	925	480	100
VL-86	200	800	200	900	300	600	925	800	100
VL-100	200	1000	15	1100	300	600	925(500-1100)	700	100
VL-125	220	1250	5	1600	330	900	650-1450	950	200
VL-160	220	1600	100	1800	330	900	650-1450	1150	200
VL-200	250	2000	5	2400	360	1200	835-1835	1350	300
VL-250	250	2500	5	3000	360	1200	835-1835	1650	300

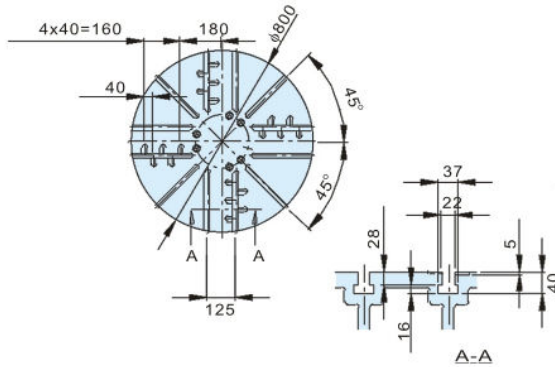


## Table, Jaw-chuck, Workpiece dimensions

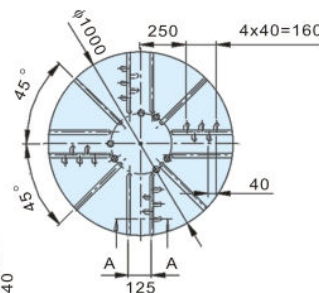
(Unit: mm)

### Table

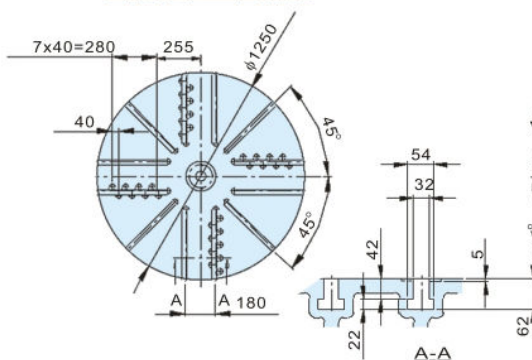
#### VL-86 Series



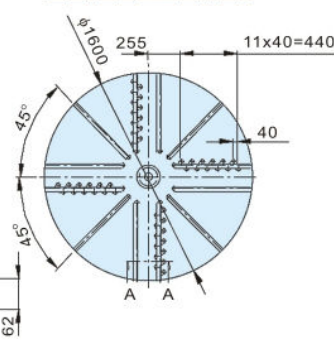
#### VL-100 Series



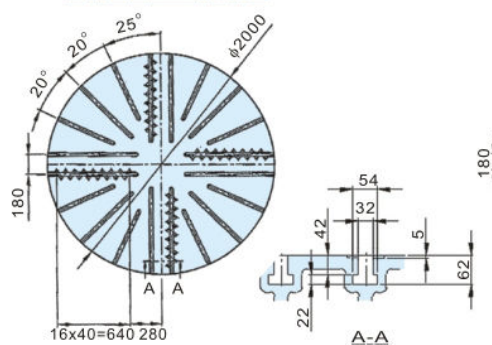
#### VL-125 Series



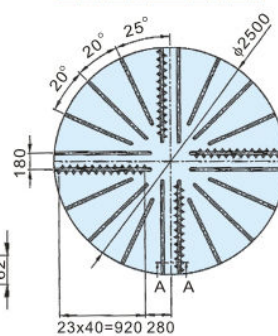
#### VL-160 Series



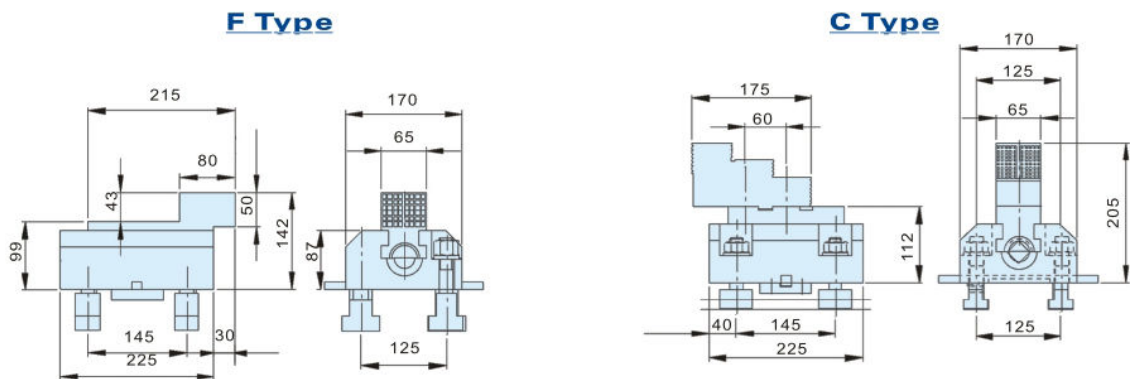
#### VL-200 Series



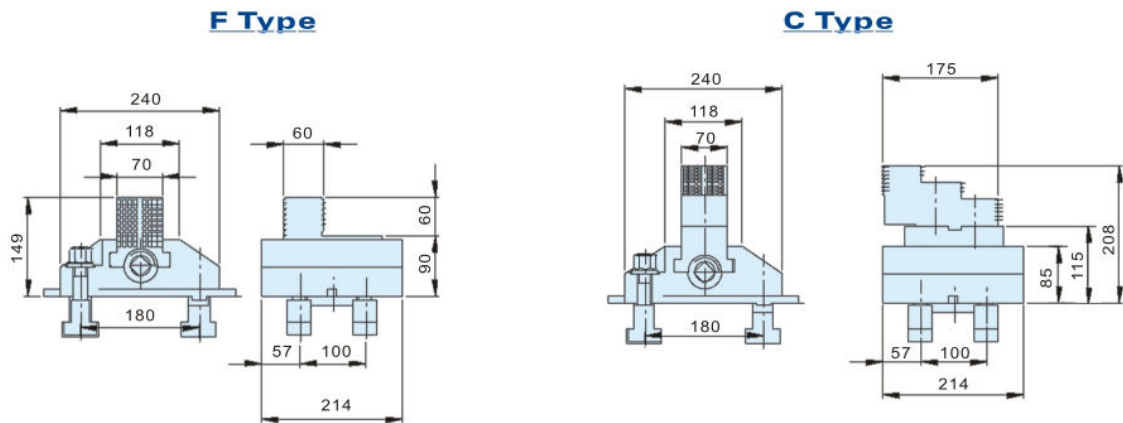
#### VL-250 Series



**VL-86, VL-100 Series 4-jaw manual chuck**

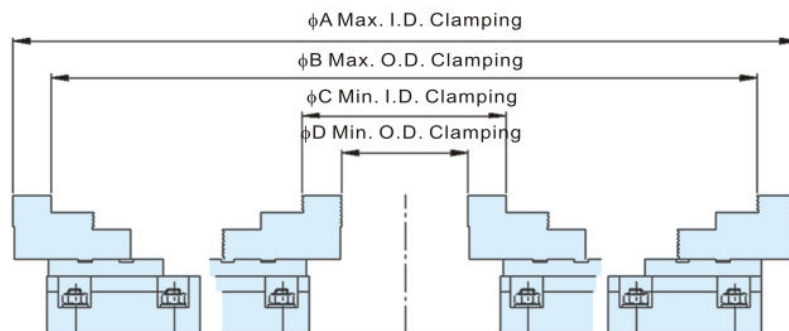


**VL-125, VL-160, VL-200, VL-250 Series 4-jaw manual chuck**



**Workpiece clamping**

- VL-86**
- VL-100**
- VL-125**
- VL-160**
- VL-200**
- VL-250**



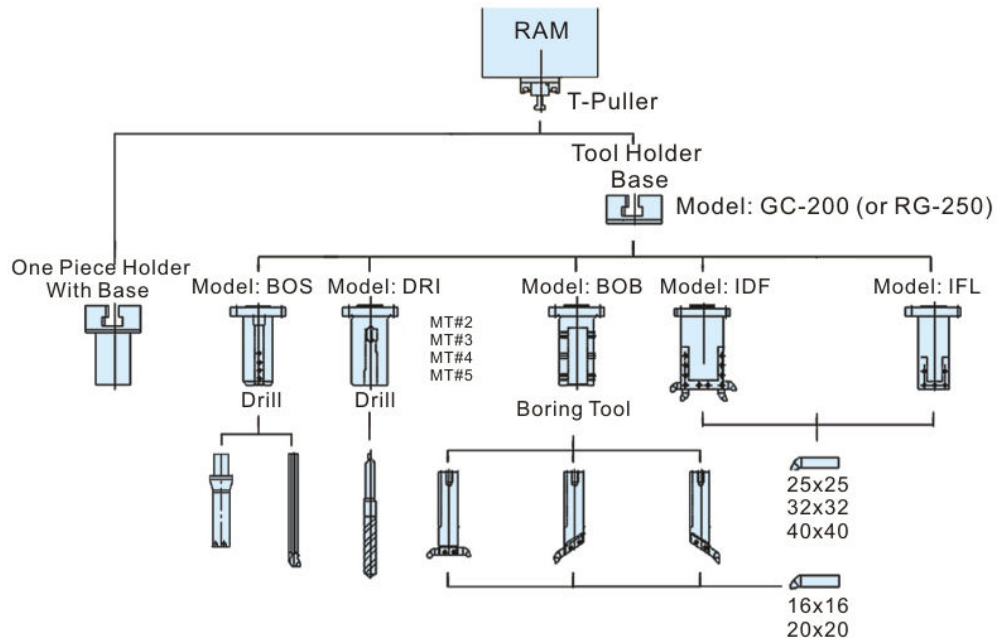
MODEL	A	B	C	D
VL-86	1050	900	160	50
VL-100	1200	1040	300	190
VL-125	1450	1320	360	250
VL-160	1720	1600	410	300
VL-200	2120	2000	410	300
VL-250	2600	2500	410	300





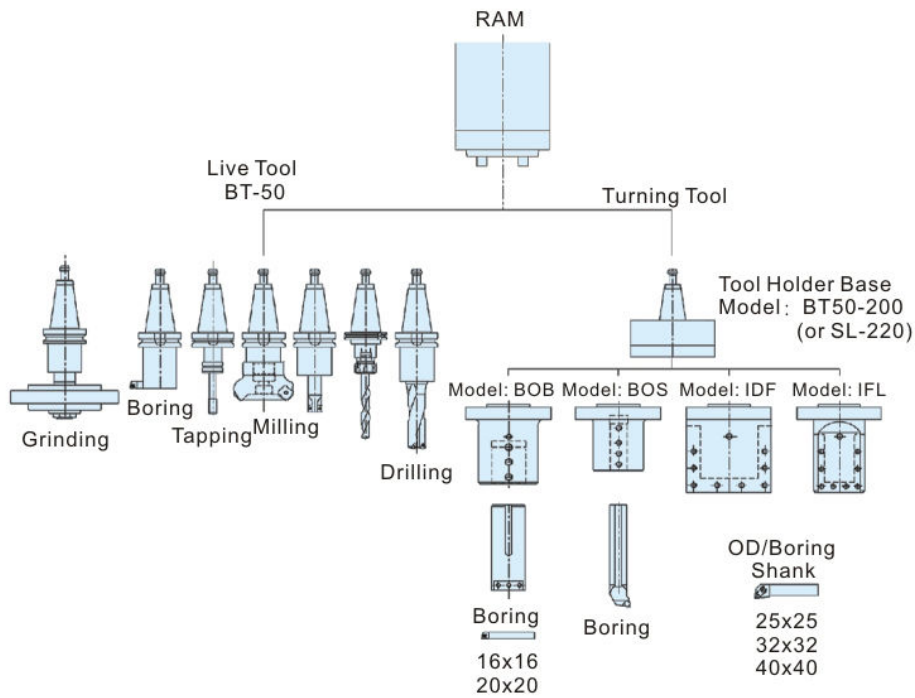
## C-type ATC tooling system

(Unit: mm)



## M-type ATC tooling system

(Unit: mm)

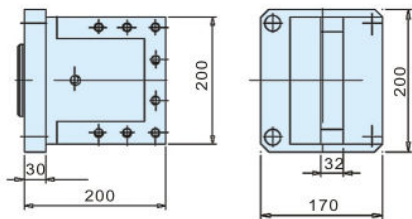




## Tool holder model and dimension (C-type)

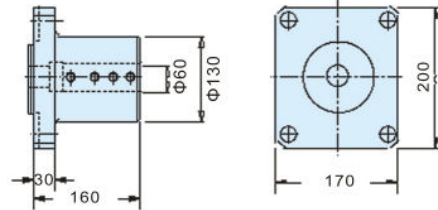
(Unit: mm)

### ■ O.D./Facing tool holder



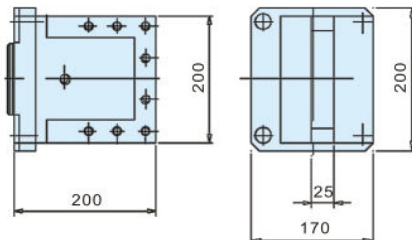
Model: IDF32-200-200

### ■ Boring/Drilling tool holder



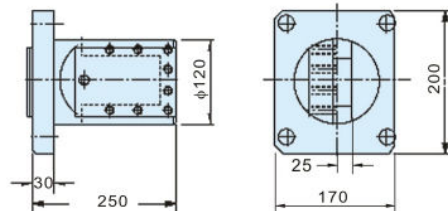
Model: BOS60-130-160

### ■ O.D./Facing tool holder



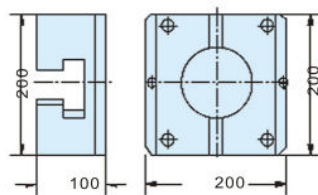
Model: IDF25-200-200

### ■ Boring tool holder



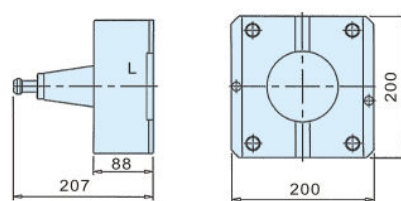
Model: IFL25-120-250

### ■ Tool holder base (Gear Coupling Type) (for Ram section 220□)



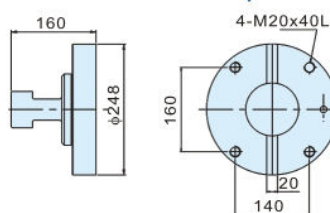
Model: GC-200

### ■ Tool holder base (BT50-200) (for Ram section 220□, 250□)



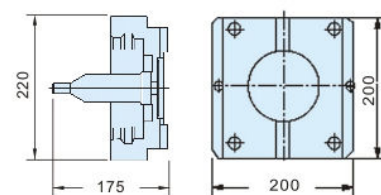
Model: BT50-200

### ■ Tool holder base (Gear Coupling Type) (for Ram section 250□)



Model: RG-250

### ■ Tool holder base (Two face contact tooling) (for Ram section 220□, 250□)



Model: SL-220

## Specifications (Heavy duty series)

Model / Description		Unit	VL-66C	VL-66CM	VL-86C	VL-86CM
Capacity	Max. swing diameter	mm	850		950	
	Max. turning diameter	mm	760		900	
	Distance from ram to table	mm	925		925	
	Max. turning height	mm	650		650	
	Max. workpiece weight	kg	1500		2000	
Spindle	Table diameter	mm	610		800	
	Range of table speed	rpm	5-700		5-600	
	Change gear speed		2-step	-	2-step	-
	Spindle nose	mm	A2-11		A2-11	
	Tool live spindle speed	rpm	-	50-2250	-	50-2250
ATC	ATC(Automatic Tool Change)	-	12		12	
	Tool size	mm	□ 25, □ 32		□ 25, □ 32	
	Cross-section of ram	mm	200x200	220x220	200x200	220x220
Feed	Rapid rate (X-Axis)	m/mm	10		10	
	Rapid rate (Z-Axis)	m/mm	10		10	
	Horizontal travel (X-Axis)	mm	-100+650		-100+800	
	Vertical travel (Z-Axis)	mm	600		600	
	Cutting feed rate	mm/rev	0.001-500		0.001-500	
	Feed override	%	0-150		0-150	
	Cross-rail travel	mm	Fixed		Fixed	
<b>CNC Controller Syetem</b>			Fanuc 0i-T	Fanuc 18i-T	Fanuc 0i-T	Fanuc 18i-T
Siemens			802D		802D	
Motor	Spindle motor (Cont. /30min)	kw	AC18.5/22	AC30/37	AC18.5/22	AC30/37
	Feed motor (X/Z axis)	kw	4.0/4.0		4.0/4.0	
	Live tool motor	kw	-	AC11/15	-	AC11/15
<b>Power requirement</b>		kva	40	55	40	55
Machine size	Floor space (LxW)	mm	2250x2700		2520x2800	
	Max. height (H)	mm	3900		3900	
	Net weight	kg	12500		13500	

\*The specifications are subject to change without notice.

## Standard accessories

- Complete splash guard.
- Hydraulic 3-jaw solid chuck & cylinder, size as spec. (for VL-66, VL-86 series)
- Hydarulic chuck soft jaw x 1 set.
- Foot switch for Hydraulic chuck.
- Hydraulic power unit.
- Table with manual 4-jaw chuck as spec.
- Protection door.
- Automatic lubrication system.
- Work light.
- Warning light (R/Y/G).
- Workpiece counter (CNC controller).
- Coolant system with tank.
- Coolant bed shower system.
- Heat exchanger for electrical cabinet.
- Service tool box & tool kits.
- Leveling bolts & seat pads.
- Chip conveyor. Hinge type.
- Chip trolley.
- Tool holder base x 5 pcs. (for C type)
- Spindle orientation.
- VL-100C, 100CM fixed type crossrail.
- Manual of operation & maintenance.
- Manual of electrical & hydraulic circuit diagram.
- Manual book for Fanuc.



VL-100C	VL-100CM	VL-125C	VL-125CM	VL-160C	VL-160CM	VL-200C	VL-200CM	VL-250C	VL-250CM
1200		1600		2000		2500		3000	
1100		1600		2000		2500		3000	
925(500-1100)		650-1450		650-1450		835-1835		835-1835	
650(800)		1250		1250		1600		1600	
3500		5000		8000		12000		15000	
1000		1250		1600		2000		2500	
3-400		3-300		3-250		3-200		3-160	
2-step		2-step		2-step		2-step		2-step	
-		-		-		-		-	
-	50-2250	-	50-2250	-	50-2250	-	50-2250	-	50-2250
12	12	12/16	16	12/16	16	12/16	16	12/16	16
□ 25, □ 32		□ 25, □ 32		□ 25, □ 32, □ 40		□ 25, □ 32, □ 40		□ 25, □ 32, □ 40	
200x200	220x220	220x220	220x220	220x220	220x220	250x250	250x250	250x250	250x250
10		10		10		10		10	
10		10		10		10		10	
-200+700		-200+950		-200+1150		-300+1350		-300+1650	
600		900		900		1200		1200	
0.001-500		0.001-500		0.001-500		0.001-500		0.001-500	
0-150		0-150		0-150		0-150		0-150	
Fixed(200x3 step)		800(200x4 step)		800(200x4 step)		1000(250x4 step)		1000(250x4 step)	
Fanuc 0i-T	Fanuc 18i-T	Fanuc 0i-T	Fanuc 18i-T	Fanuc 0i-T	Fanuc 18i-T	Fanuc 0i-T	Fanuc 18i-T	Fanuc 0i-T	Fanuc 18i-T
802D		802D		802D		802D		802D	
AC30/37		AC37/45		AC37/45		AC45/55		AC45/55	
4.0/4.0		7.0/7.0		7.0/7.0		7.0/7.0		7.0/7.0	
-	AC11/15	-	AC11/15	-	AC11/15	-	AC11/15	-	AC11/15
75	90	75	90	75	90	90	105	90	105
4050x2900		6200x4300		6500x4600		7200x5500		7900x6100	
3700		5200	5600	5200	5600	6300	6800	6300	6800
15500	16300	24500	25300	27500	28300	47000	49000	51000	53000

## Optional accessories

- Hydraulic chuck & cylinder, size selections.
- High power motor than spec.
- Air conditioner for electrical cabinet.
- Table with manual 4-jaw chuck as spec.  
(for VL-66, VL-86 series).
- Power transformer, external.
- Oil skimmer (Disk type).
- Toolholder base.
- Other tool holder & special tool holder.
- Tool presetter inside (Turning dia. is same as table).
- Linear encoder of X/Z axis.
- High & low pressure chucking.
- Lubricant chiller for spindle bearing & gear.
- Extend vertical travel (Z axis).
- Hard jaw for hydraulic chuck.
- High pressure coolant through tool holder.
- Dual gear box for tool live spindle.
- Chip conveyor, scraper type.
- VL-100C, 100CM crossrail travel (200x3 step).
- CNC controller 18i-T.
- Manual guide í.
- CE certificate.
- Tooling.
- Jig & fixture.
- Turnkey project.
- Siemens controller.



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