

**High Precision / High Efficiency**  
**High Durability / Perfection**



**YES! WE ARE HONOR!**



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

# Heavy Duty Series

**HONOR SEIKI Co., Ltd.**

No. 6, Sec. 2, Chungshan Rd., Hunei Dist., Kaohsiung City, 82942 Taiwan  
 TEL: +886 7 975 9888 / FAX: +886 7 975 9999  
 e-mail: honor@honorseiki.com.tw      http://www.honorseiki.com.tw



CNC Vertical Lathe / CNC Vertical Turning Center

**HONOR SEIKI Co., Ltd.**

[www.honorseiki.com.tw](http://www.honorseiki.com.tw)



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 build 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)



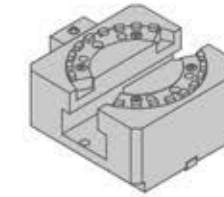
### • PC22T (Option) (Two Face Contact Tooling / Patent)



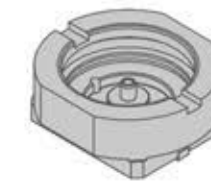
# C-Type ATC Tool System

RAM □220X220  
□250X250

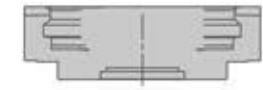
## Clamping Type



Model:GC-200



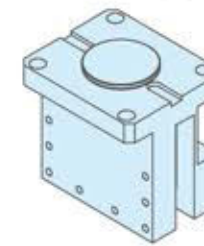
Model:SL-17T(□220/□250)



Model:SL-22T(□300)

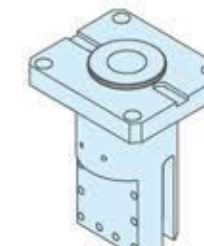
## Tool holder Model

### OD/Facing Tool



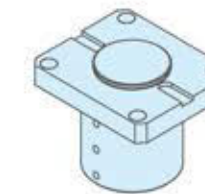
IDF25-200-200  
IDF32-200-200  
IDF32-240-200  
IDF40-285-200

### ID Tool



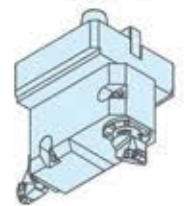
IFL25-120-250  
IFL32-130-250  
IFL25-160-200  
IFL32-160-200

### Boring Tool



BOS60-130-160

### Capto



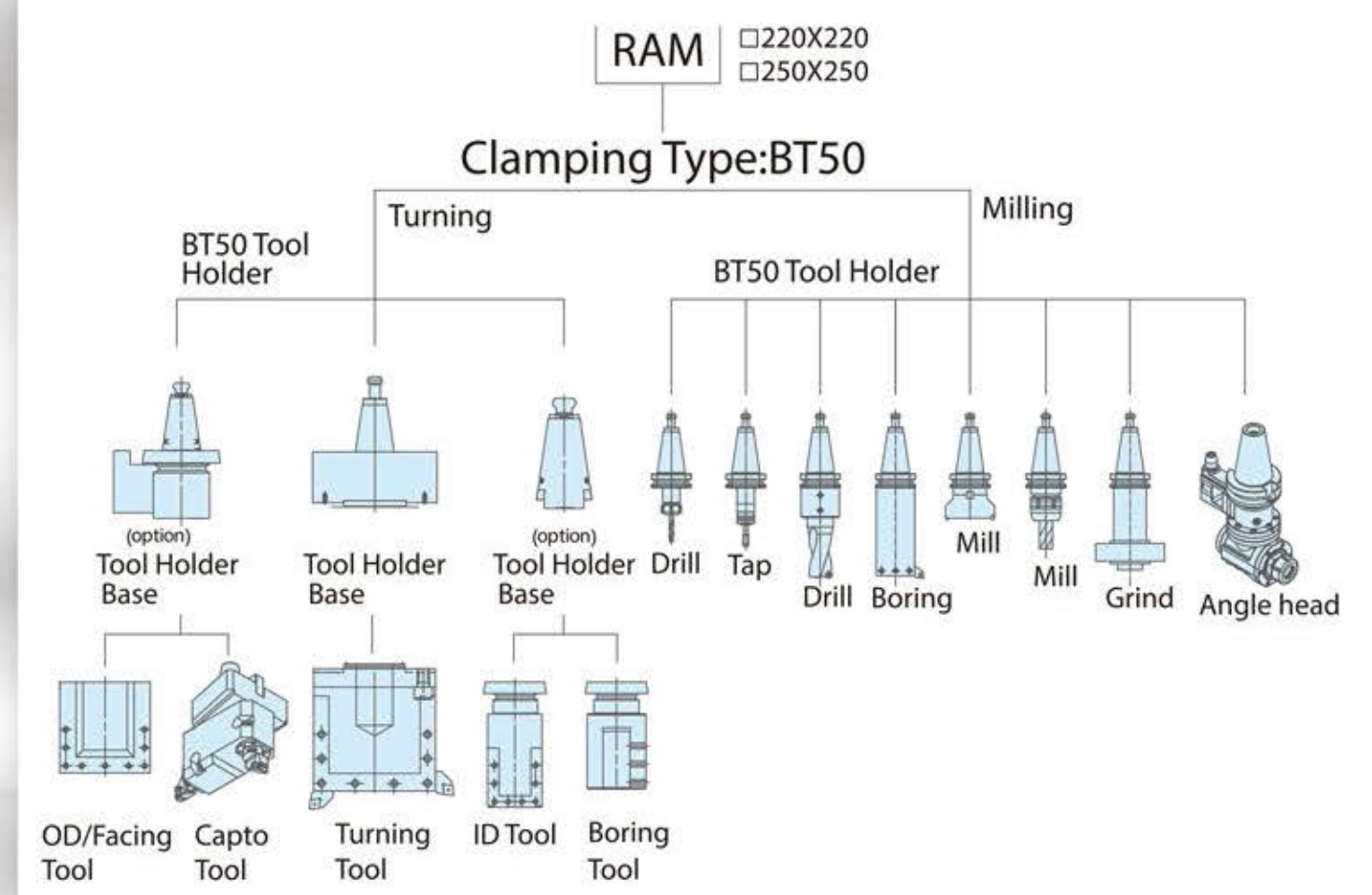
BDC6-220-200  
FDC6-220-200  
VHC6-220-200  
HVC6-220-200  
  
BDC6-250-200  
FDC6-250-200  
VHC6-250-200  
HVC6-250-200

# M-TYPE ATC (BT50)

(Turning and milling)



## M-Type ATC Tool System



### • BT50-200 (BT50)



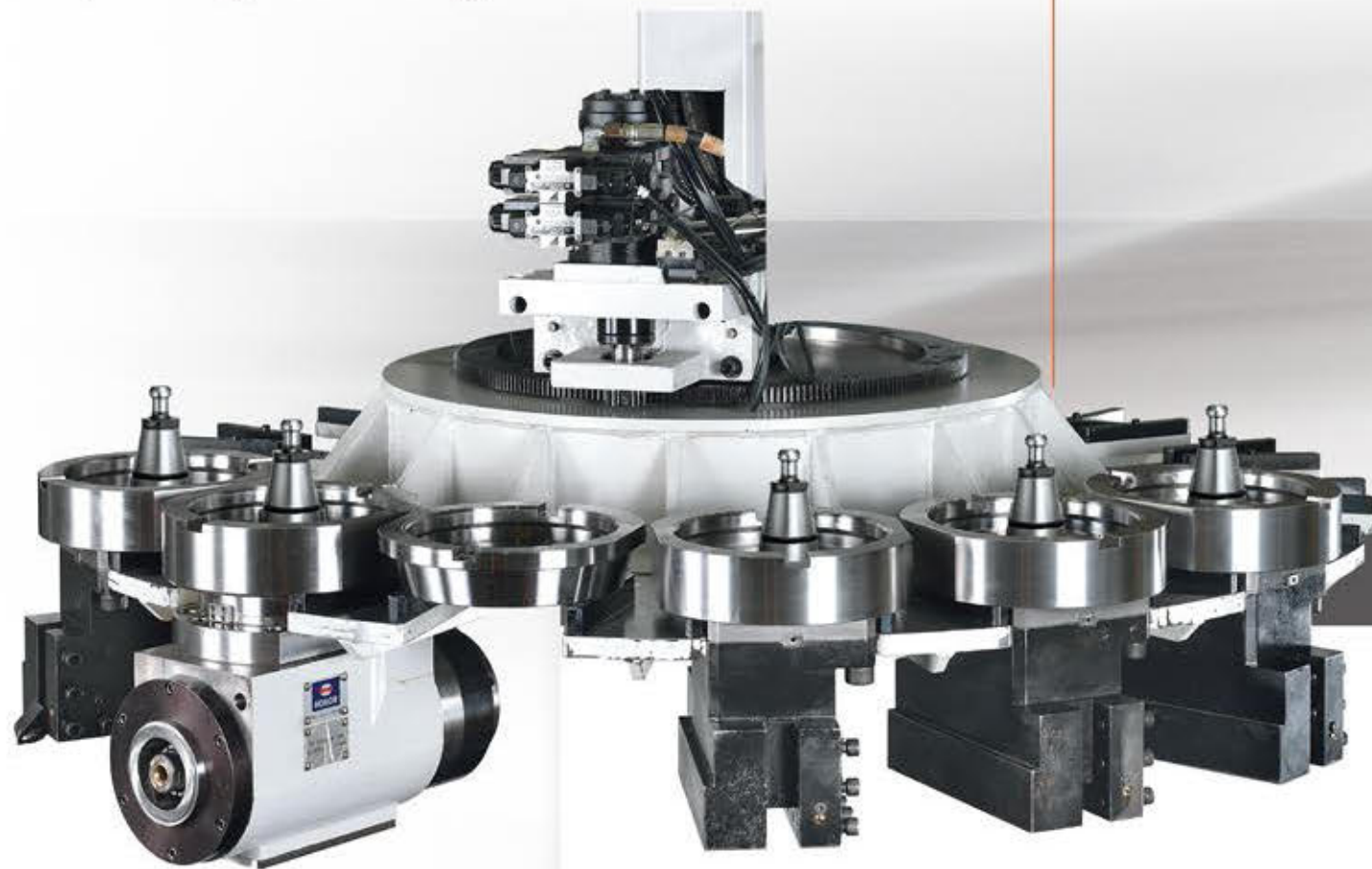
Material



Planet gear  
(not including gear cutting)

# M-TYPE ATC (Solid Lock)

(Turning and milling)



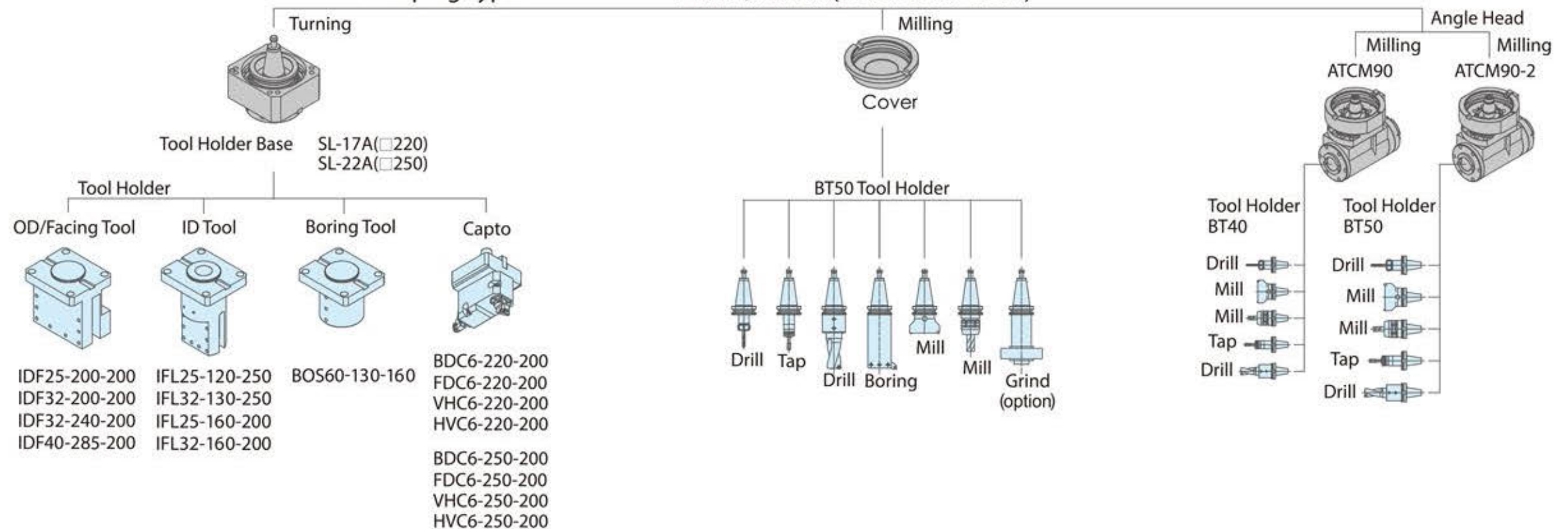
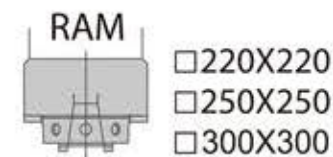
## Solid-lock ATC Tool System(option)

### • PC17A / PC22A (Two Face Contact Tooling / Patent)

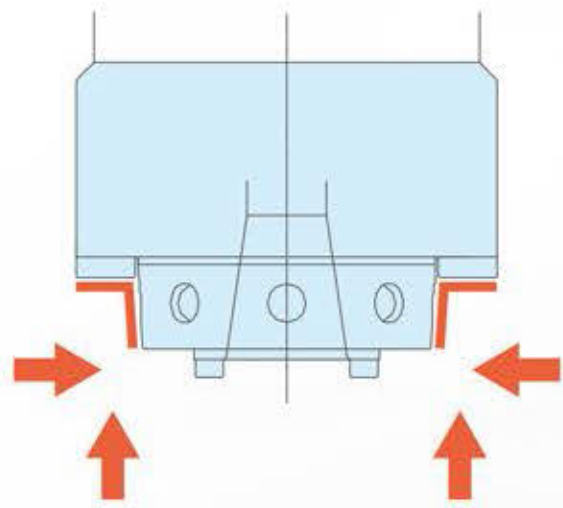


Clamping Type:

PC17A/PC22A (Solid Lock Patent)

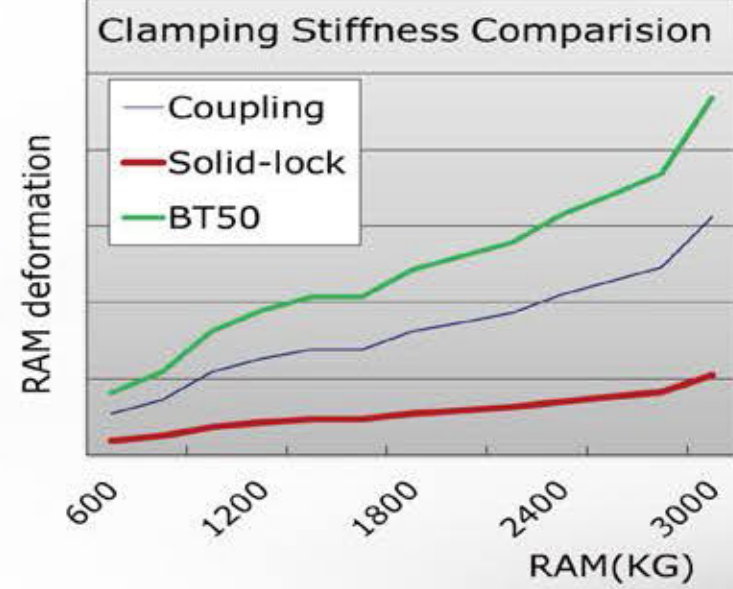


# SOLID LOCK (Patent of the U.S, Taiwan and China)



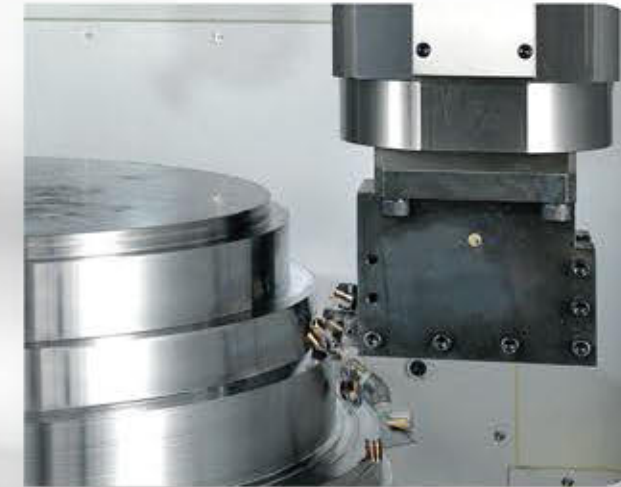
Two face contact  
ball clamping anti-vibration  
Max. 8,000kg clamping force

## • Honor Patent !



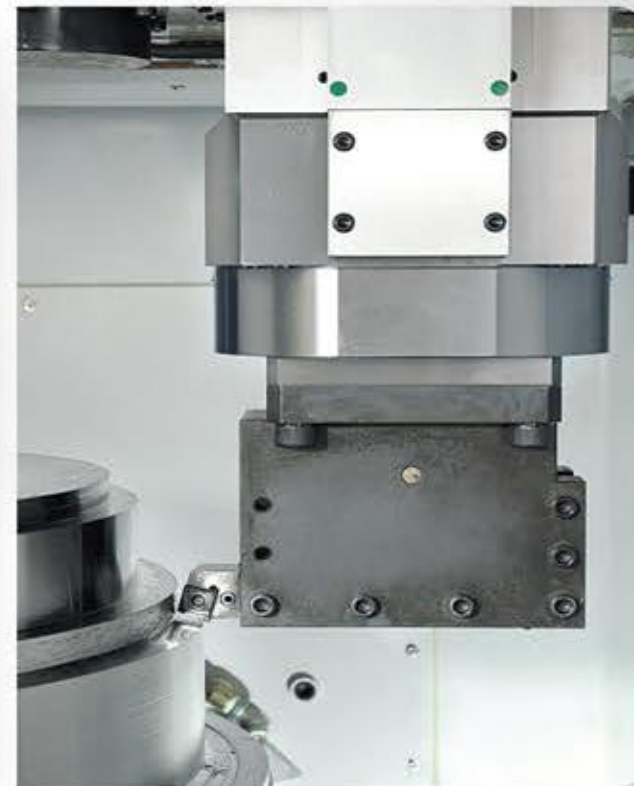
### ■ Milling Capacity

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 <sup>3</sup> /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 <sup>3</sup> /min



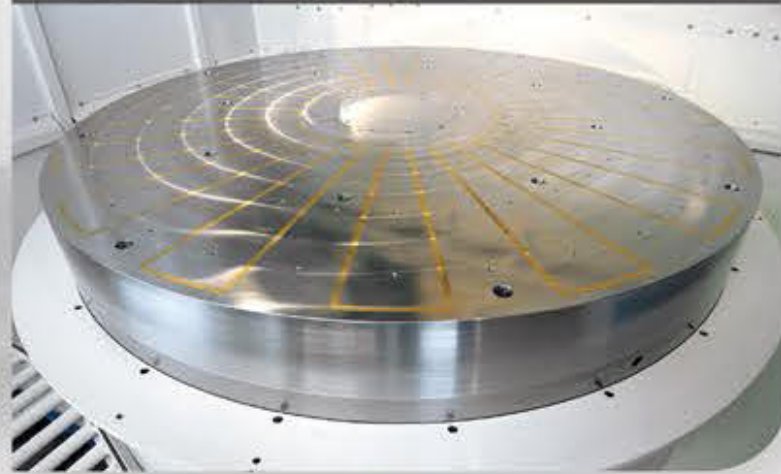


# Option

• 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

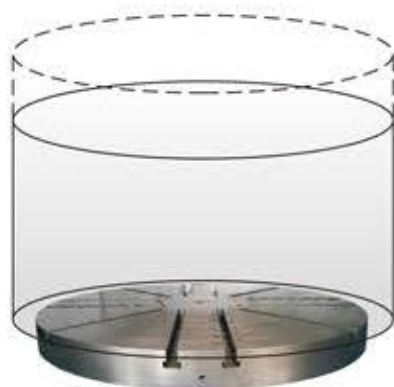
## Z-axis travel



●: 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 to ram end
VL-125C VL-125CM	400 600	650~1850 650~2050
VL-160C VL-160CM	600	650~2050
VL-200C	500 750	825~2325 825~2575
VL-200CM	500 750	860~2360 860~2610
VL-250C	500 750	825~2325 825~2575
VL-250CM	500 750	860~2360 860~2610

## 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



## Auto pallet changer

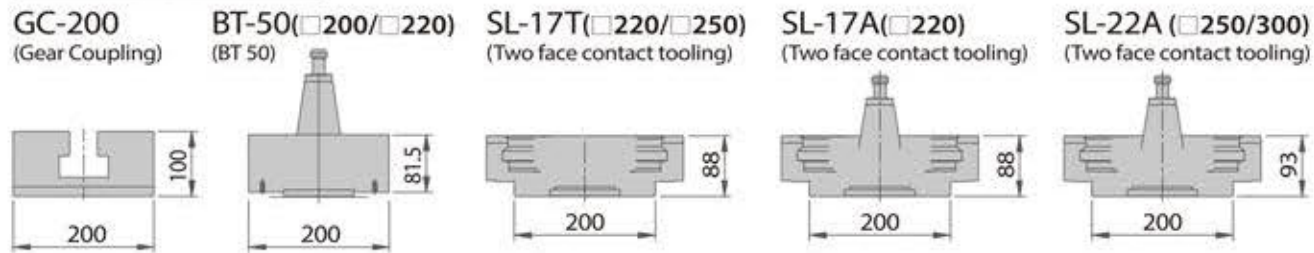


## Full enclosed splash guard

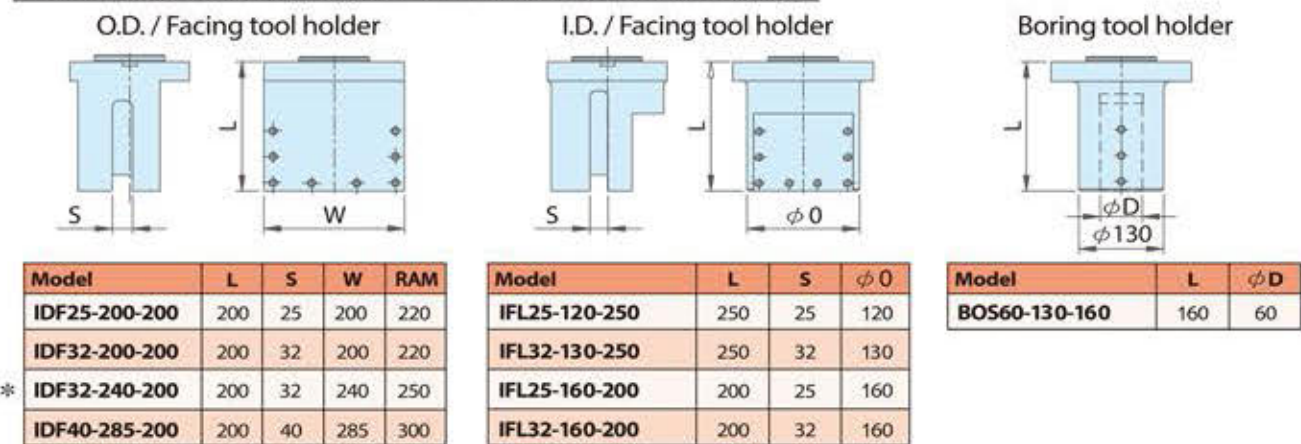


# Tool Holder System

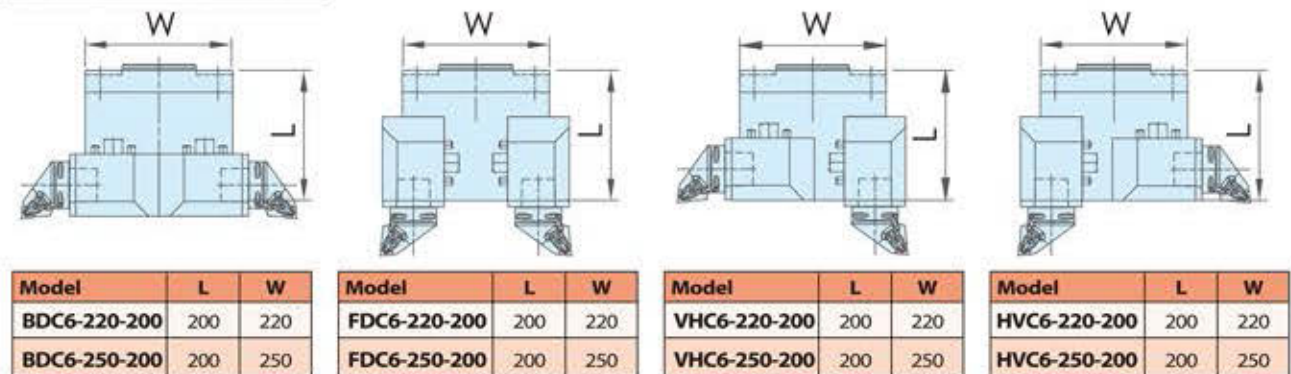
## Tool holder base :



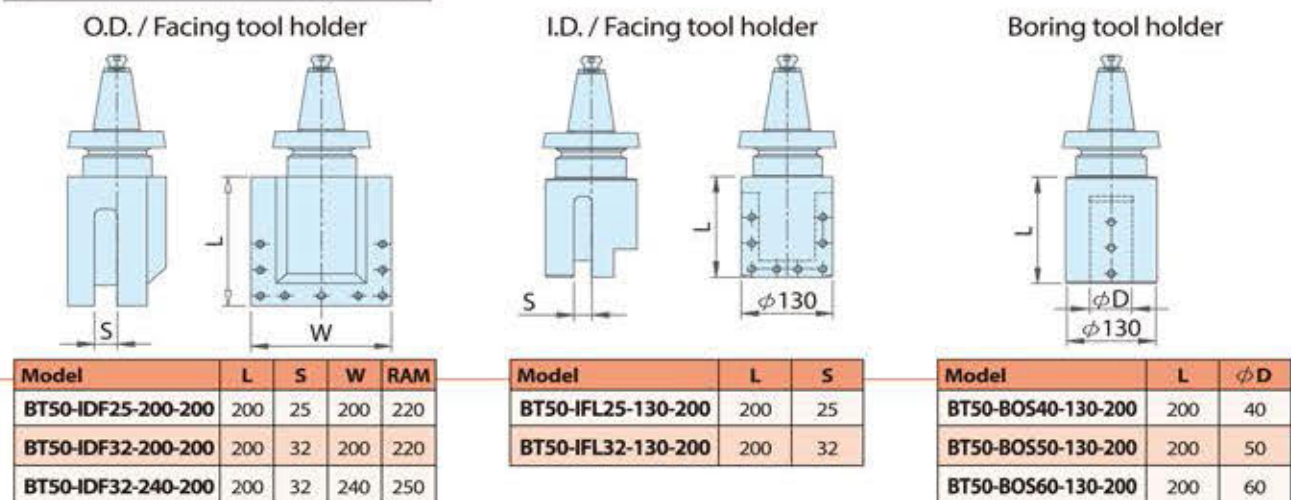
## GC-200 / RG250 / SL-17T / SL-17A / SL-22A Tool holder :



## Capto Tool holder :



## BT50 Tool holder (Option) :

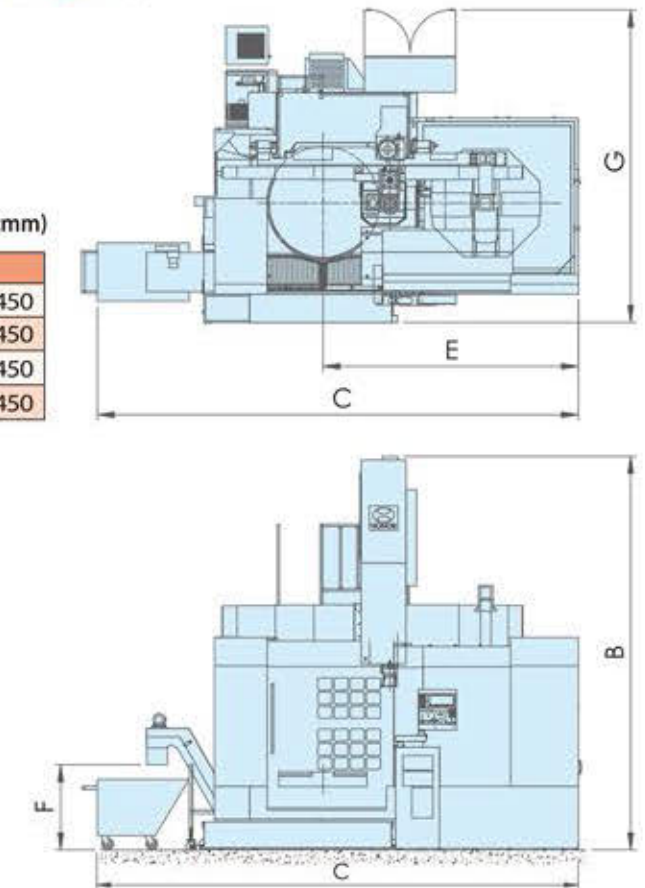
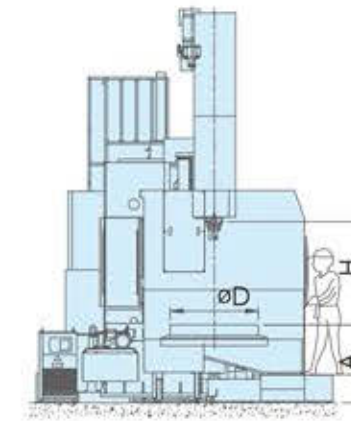


# Machine Dimensions

## VL-125/VL-160 series

(unit:mm)

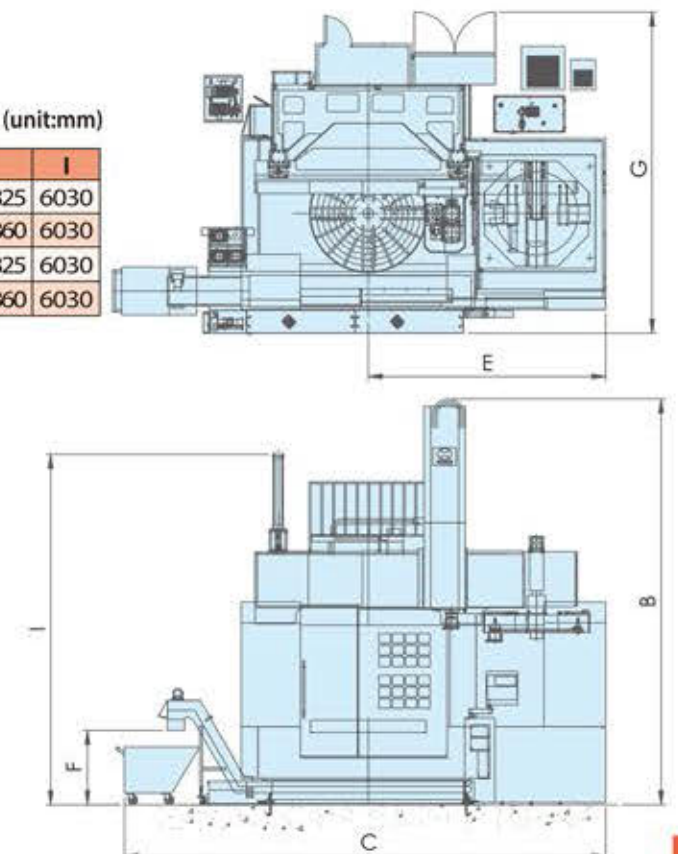
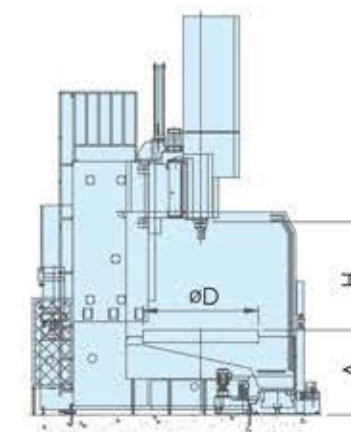
	A	B	C	∅D	E	F	G	H
VL-125C	1100	5250	6480	∅1250	3277	1200	4875	650~1450
VL-125CM	1100	5650	6850	∅1250	3625	1200	4875	650~1450
VL-160C	1100	5250	7035	∅1600	3500	1200	5175	650~1450
VL-160CM	1100	5650	7380	∅1600	3825	1200	5175	650~1450



## VL-200/VL-250 series

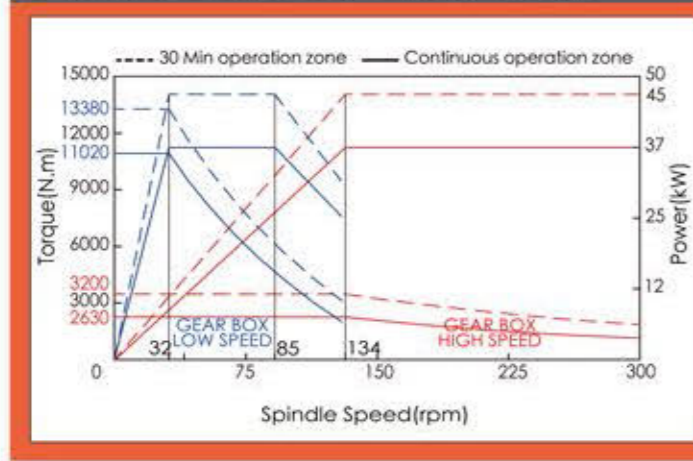
(unit:mm)

	A	B	C	∅D	E	F	G	H	I
VL-200C	1455	6635	7970	∅2000	3960	1280	5532	825~1825	6030
VL-200CM	1455	6970	8400	∅2000	4120	1280	5532	825~1860	6030
VL-250C	1455	6635	8295	∅2500	3915	1280	5564	825~1825	6030
VL-250CM	1455	6970	8580	∅2500	4200	1280	5564	825~1860	6030

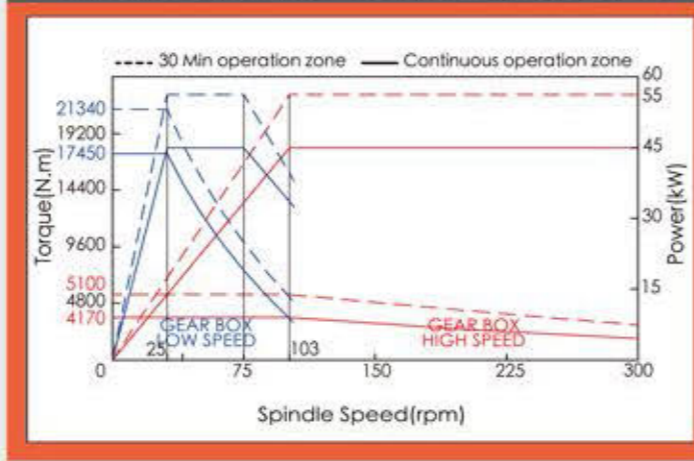


# Table Speed, Torque Output Chart

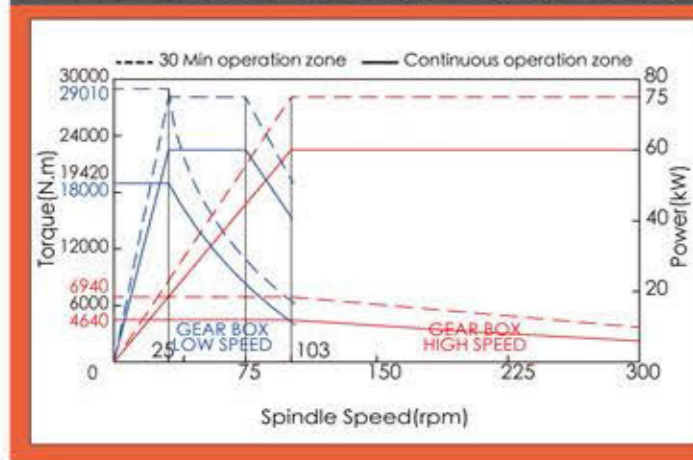
VL-125 Series 37/45kW, 2 steps



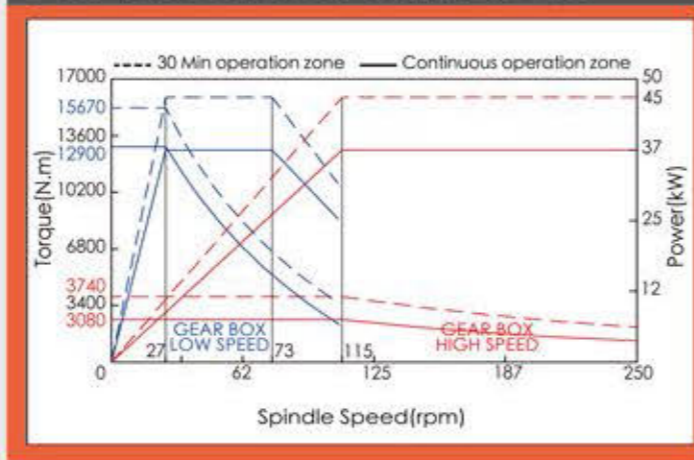
VL-125 Series 45/55kW, 2 steps (Option)



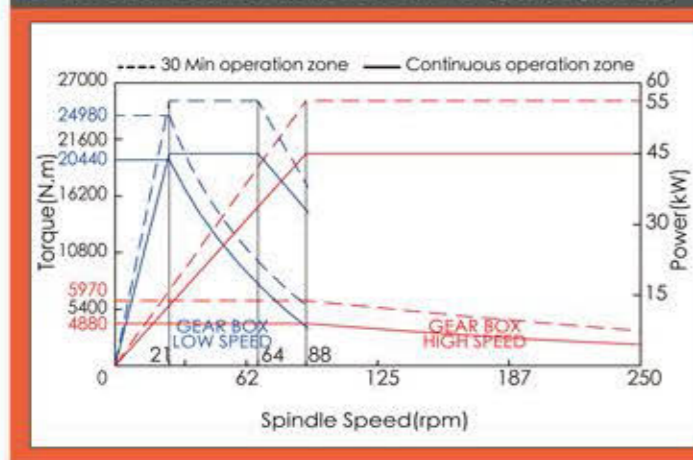
VL-125 Series 60/75kW, 2 steps (Option)



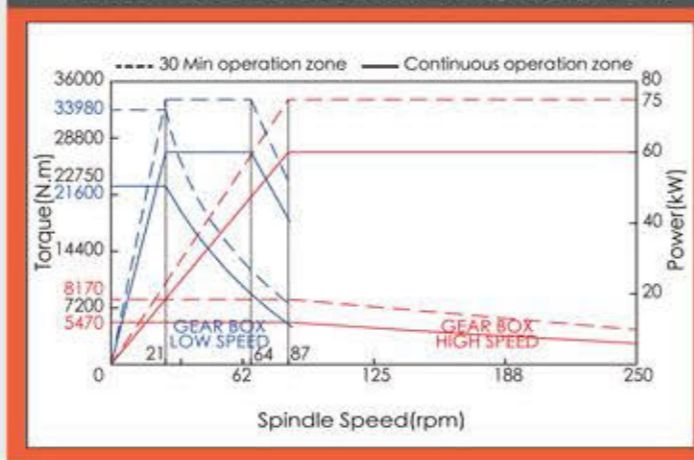
VL-160 Series 37/45kW, 2 steps



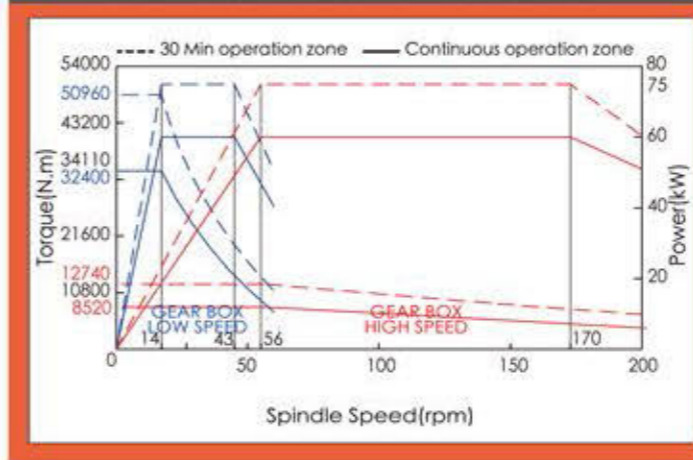
VL-160 Series 45/55kW, 2 steps (Option)



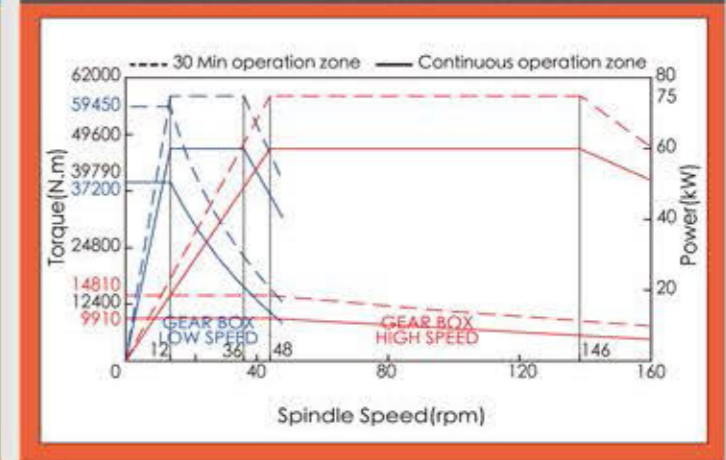
VL-160 Series 60/75kW, 2 steps (Option)



VL-200 Series 60/75kW, 2 steps

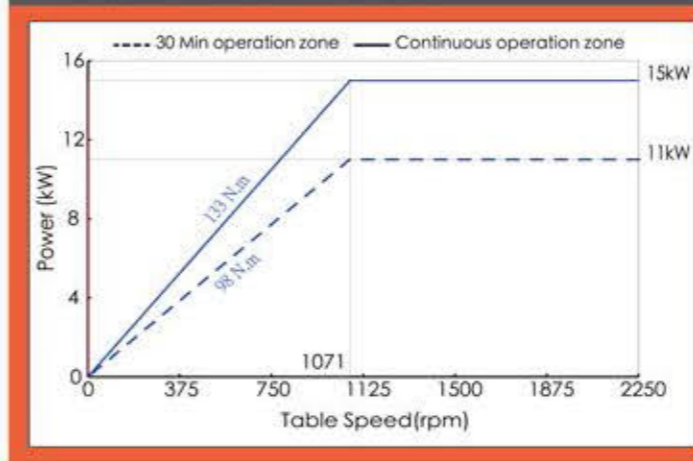


VL-250 Series 60/75kW, 2 steps

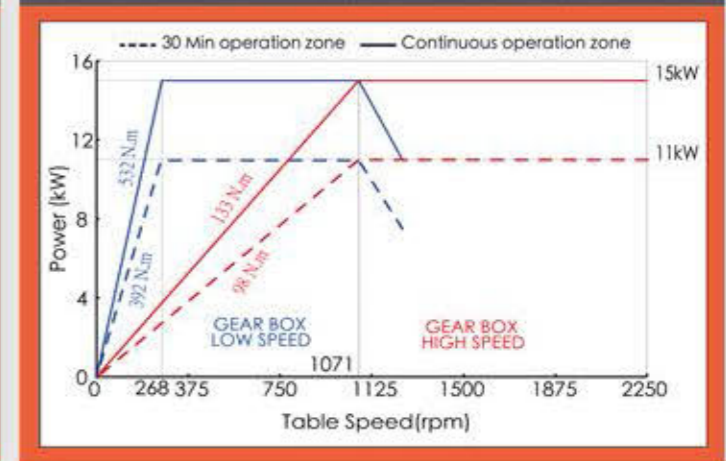


# Live Tool Spindle Speed, Torque Output Chart

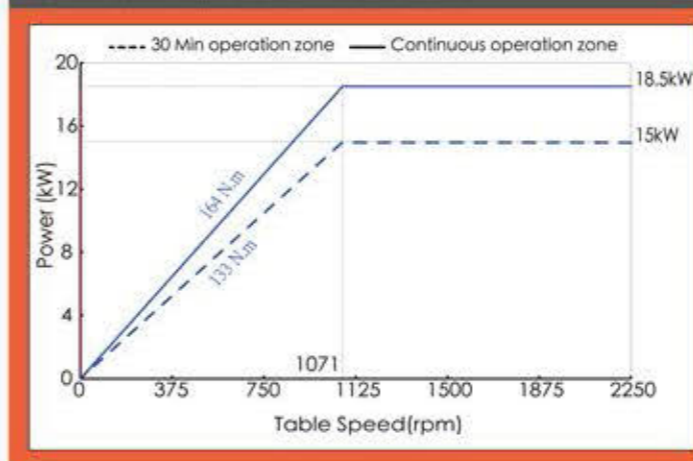
MODEL : α12 11/15kW



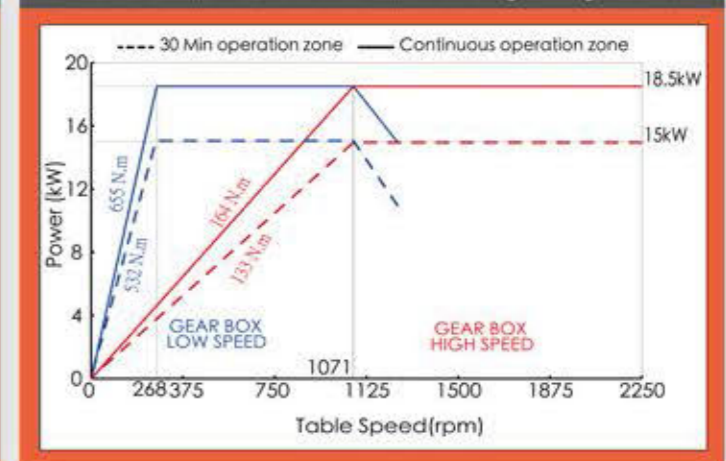
MODEL : α12 11/15kW, 2 steps (Option)



MODEL : α15 15/18.5kW

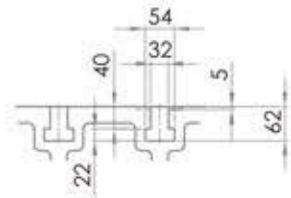
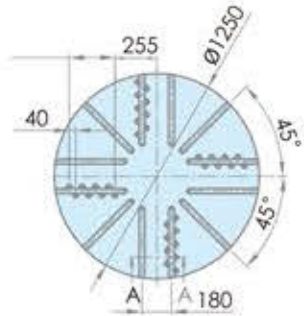


MODEL : α15 15/18.5kW, 2 steps (Option)

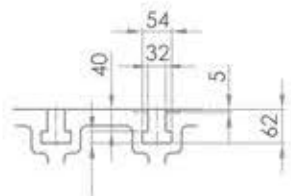
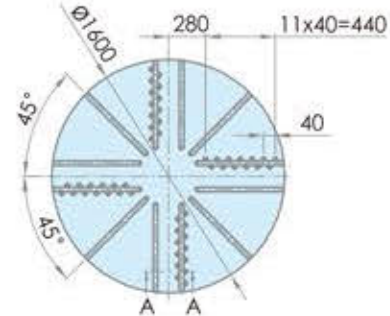


# Manual Table Dimensions

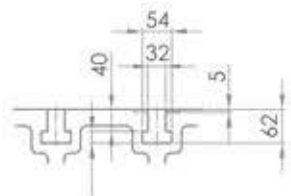
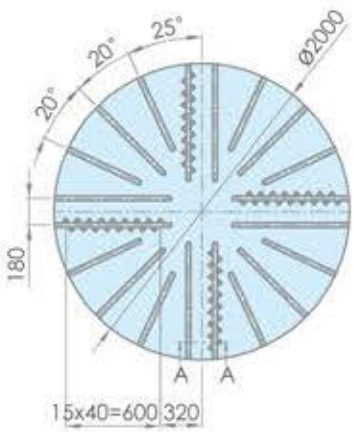
## VL-125 Series



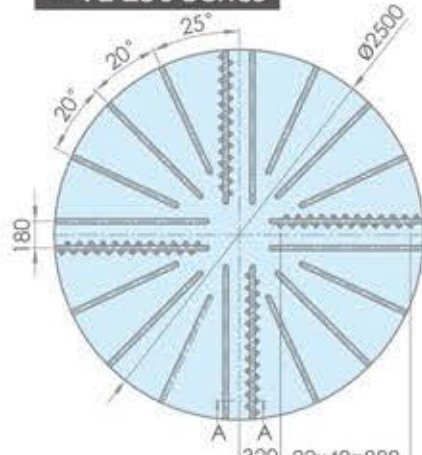
## VL-160 Series



## VL-200 Series

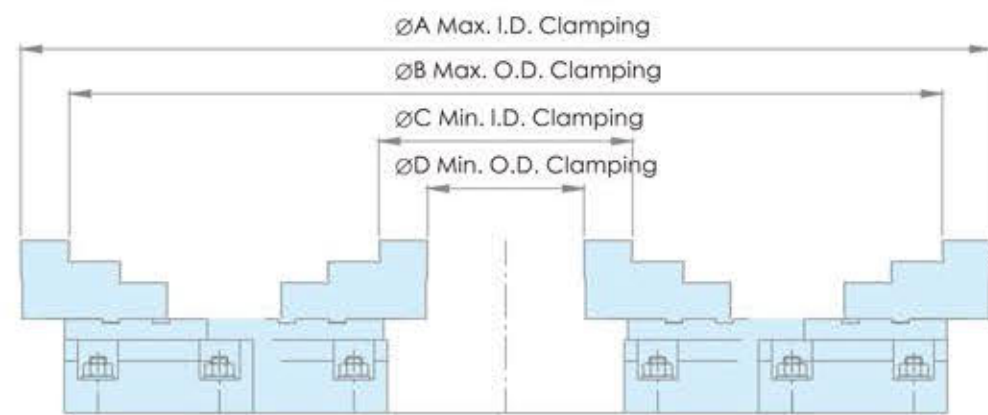


## VL-250 Series



(unit:mm)

# Workpiece Clamping

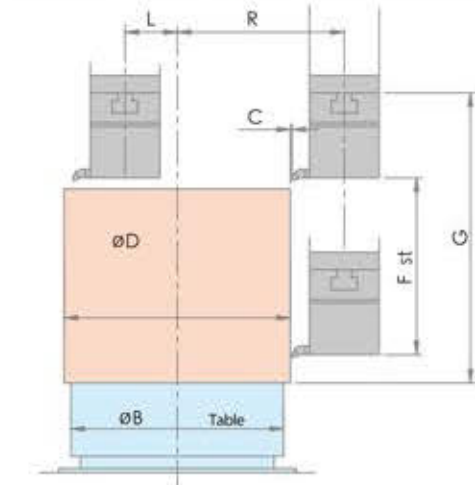
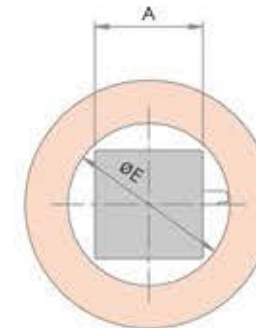


(unit:mm)

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



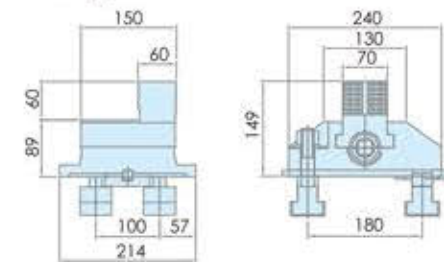
(unit:mm)

Model	A	$\varnothing B$	C	$\varnothing D$	$\varnothing E$	F	G	R	L
VL-125	220	1250	20	1600	330	900	650-1450	950	200
VL-160	220	1600	20	2000	330	900	650-1450	1150	200
VL-200	250	2000	40	2500	360	1200	825-1825	1450	300
VL-250	250	2500	5	2970	360	1200	825-1825	1650	300

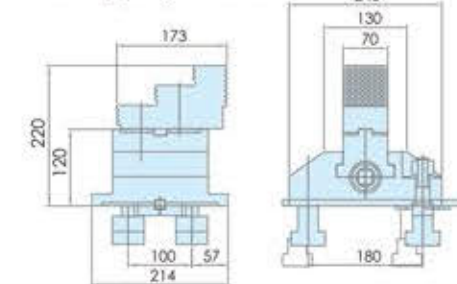
# Jaws Dimensions

## VL-125,VL-160 Series

### F Type

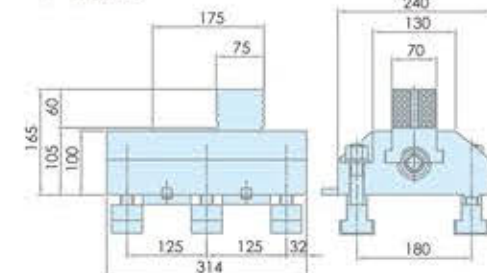


### C Type (Standard)

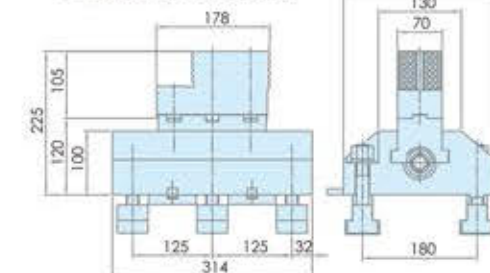


## VL-200,VL-250 Series

### F Type



### C Type (Standard)



(unit:mm)

