

**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



• VG-120~250GN/GB



• VL-46~100A/M/H



• VL-66KA2



• HL-26/32AT



YES! WE ARE HONOR!



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

Heavy Duty Series

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Agent:

201804 2000

CNC Vertical Lathe / CNC Vertical Turning Center



HONOR SEIKI Co., Ltd.

www.honorseiki.com.tw



■ 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

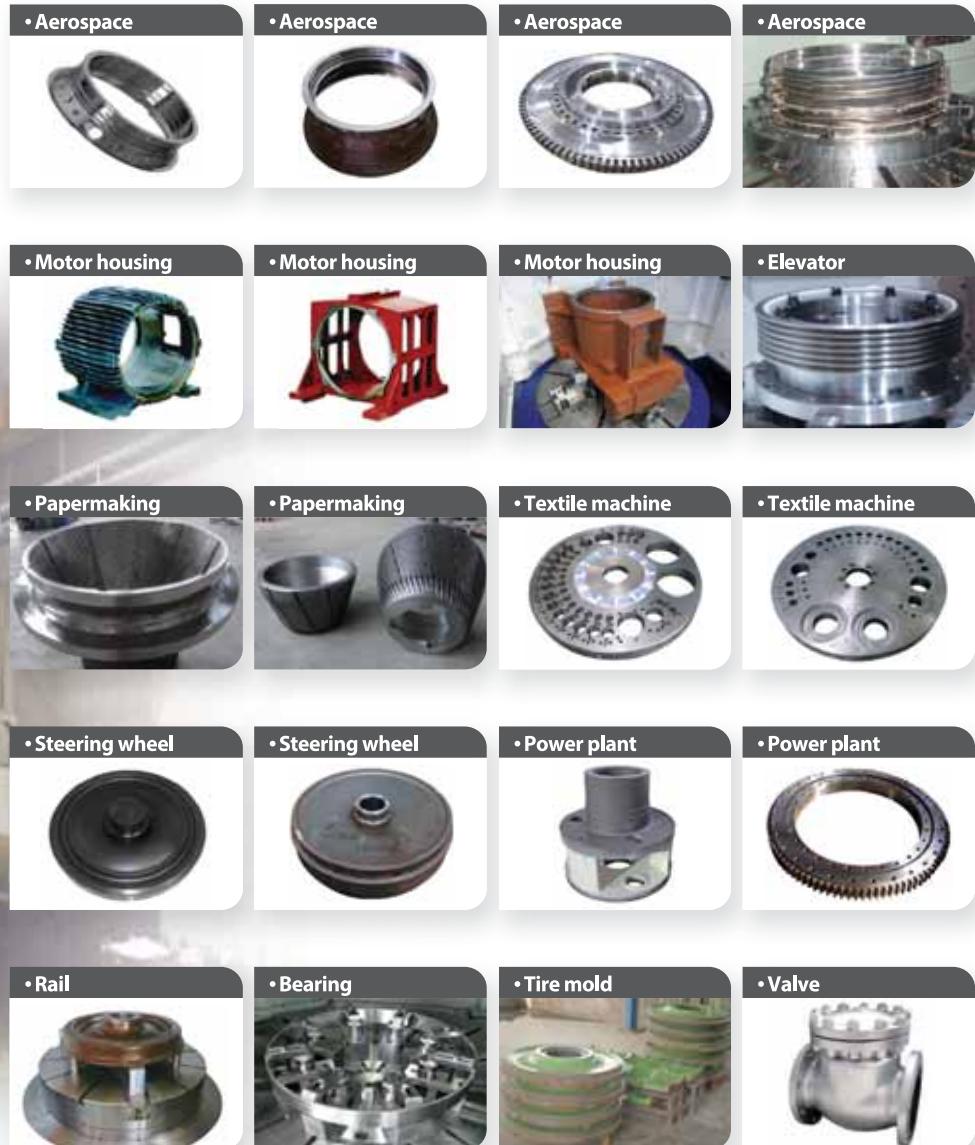
Vertical Lathe & Vertical Turning Center

- Construction
- Automotive
- Aerospace
- Rail
- Boat
- Bearing

- Valve
- Mold
- Gear
- Machine tool
- Power plant
- Oil & gas
- Wind power



• Thousands Of Successful Turnkey



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 parallelsimand 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.



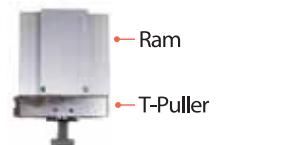
▪ Photo of VL-160CM

C-TYPE ATC

(Turning)



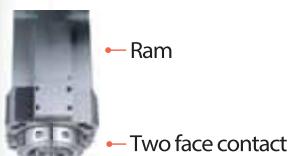
• GC-200 Curvic coupling
(for VL-125 / VL-160)



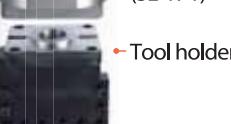
Tool Holder Base (GC-200)



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



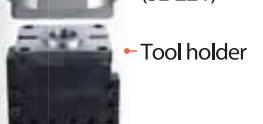
Two face contact tool clamp (PC17T)



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



Two face contact tool clamp (PC22T)



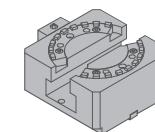
C-Type ATC Tool System

RAM

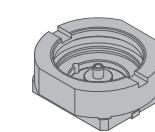
□220X220

□250X250

Clamping Type



Model:GC-200



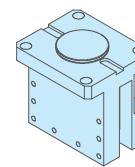
Model:SL-17T(□220/□250)



Model:SL-22T(□300)

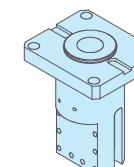
Tool holder Model

OD/Facing Tool



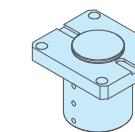
IDF25-200-200
IDF32-200-200
IDF32-240-200
IDF40-285-200

ID Tool



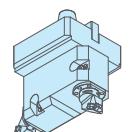
IFL25-120-250
IFL32-130-250
IFL25-160-200
IFL32-160-200

Boring Tool



BOS60-130-160

Capo



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

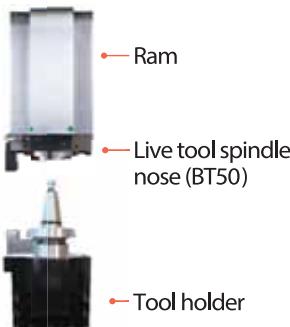
BDC6-250-200
FDC6-250-200
VHC6-250-200
HVC6-250-200

M-TYPE ATC (BT50)

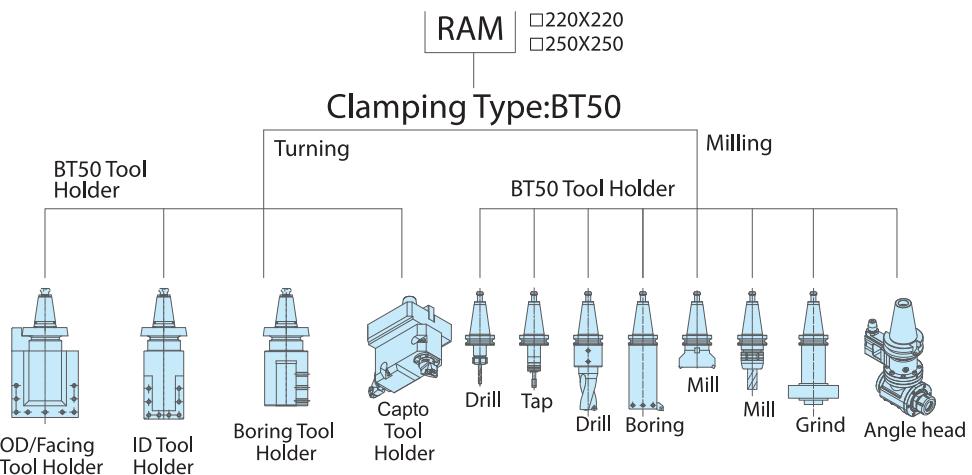
(Turning and milling)



• BT50-200
(BT50)



M-Type ATC Tool System



M-TYPE ATC (Solid Lock)

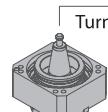
(Turning and milling)



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



Clamping Type:

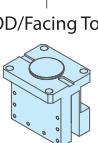


Turning

Tool Holder Base

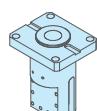
SL-17A(\square 220)
SL-22A(\square 250)

Tool Holder



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

ID Tool



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

Boring Tool



BOS60-130-160
BDC6-220-200
FDC6-220-200
VHC6-220-200
HVC6-220-200

Capto



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

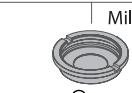


Solid-lock ATC Tool System(option)



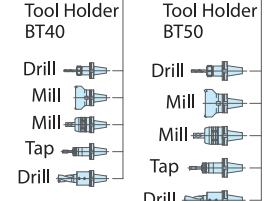
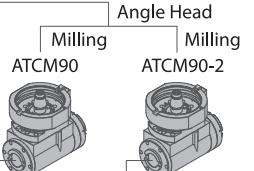
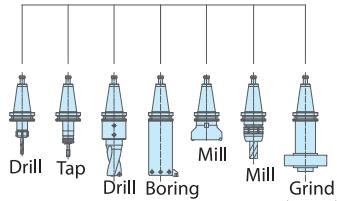
□220X220
□250X250
□300X300

PC17A/PC22A (Solid Lock Patent)

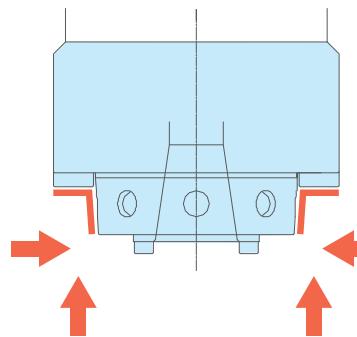


Milling
Cover

BT50 Tool Holder



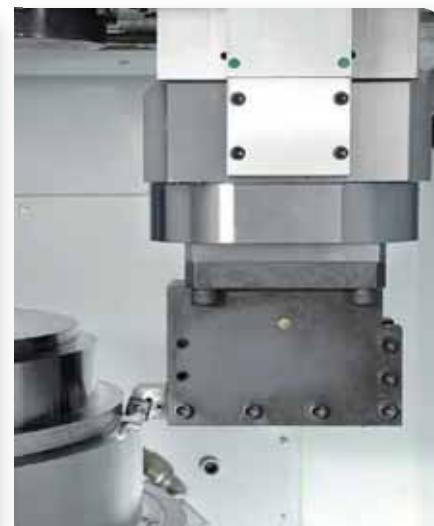
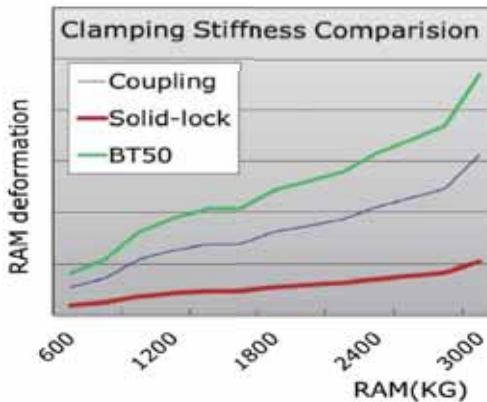
SOLID LOCK (Patent of the U.S, Taiwan and China)



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 ³ /min |

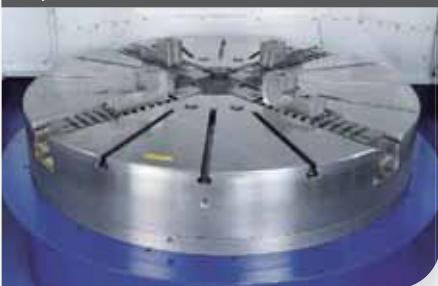
■ Turning Capacity

| 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 |

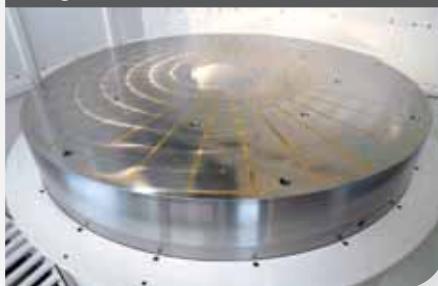


Option

• Hydraulic chuck



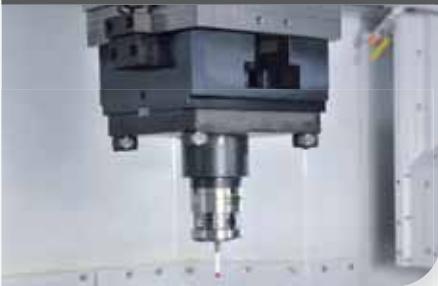
• Magnetic chuck



• 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

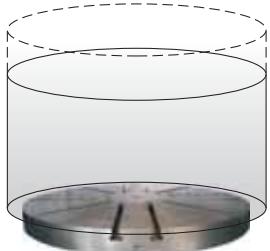
■ Z-axis travel



● : 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

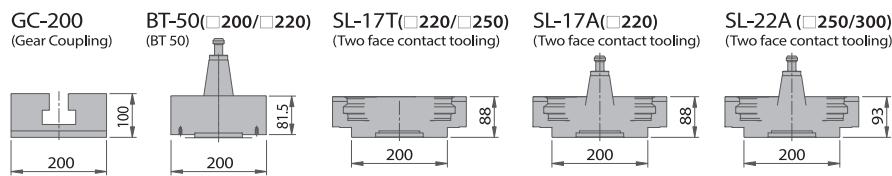


■ Full enclosed splash guard

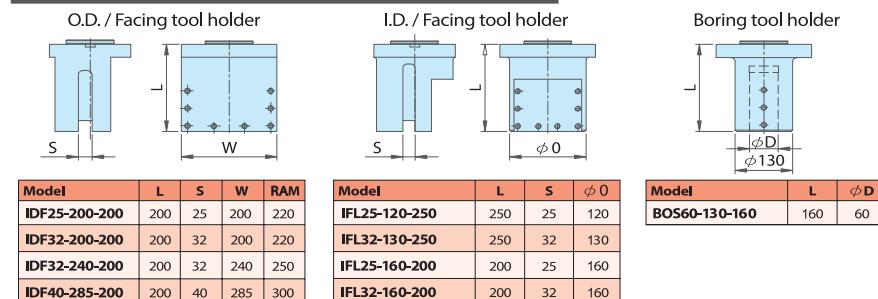


Tool Holder System

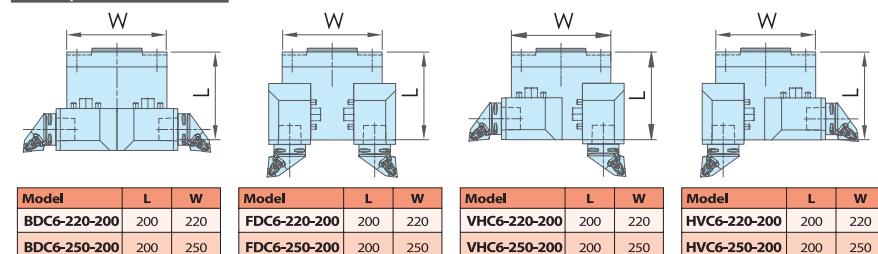
■ Tool holder base :



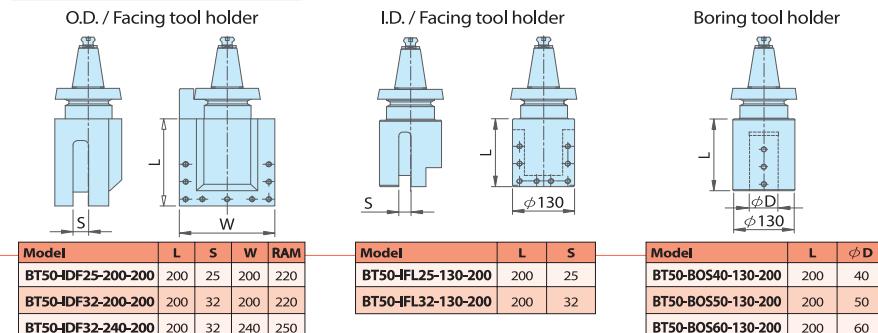
■ GC-200 / RG250 / SL-17T / SL-17A / SL-22A Tool holder :



■ Capto Tool holder :



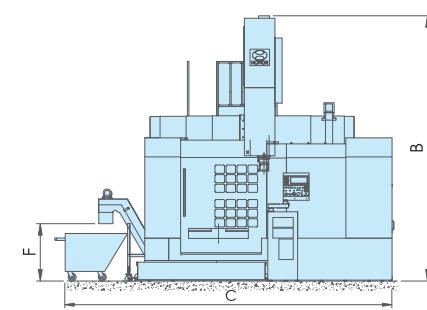
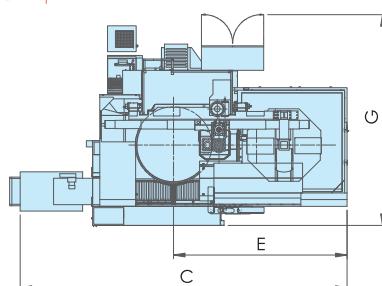
■ BT50 Tool holder (Option) :



Machine Dimensions

■ VL-125/VL-160 series

| | A | B | C | ϕ D | E | F | G | H |
|----------|------|------|------|-------------|------|------|------|----------|
| VL-125C | 1100 | 5250 | 6480 | ϕ 1250 | 3277 | 1200 | 4875 | 650~1450 |
| VL-125CM | 1100 | 5650 | 6850 | ϕ 1250 | 3625 | 1200 | 4875 | 635~1435 |
| VL-160C | 1100 | 5250 | 7035 | ϕ 1600 | 3500 | 1200 | 5175 | 650~1450 |
| VL-160CM | 1100 | 5650 | 7380 | ϕ 1600 | 3825 | 1200 | 5175 | 635~1435 |



■ VL-200/VL-250 series

| | A | B | C | ϕ D | E | F | G | H | I |
|----------|------|------|------|-------------|------|------|------|----------|------|
| VL-200C | 1455 | 6635 | 7970 | ϕ 2000 | 3960 | 1280 | 5532 | 785~1785 | 6030 |
| VL-200CM | 1455 | 6970 | 8400 | ϕ 2000 | 4120 | 1280 | 5532 | 785~1785 | 6030 |
| VL-250C | 1455 | 6635 | 8295 | ϕ 2500 | 3915 | 1280 | 5564 | 785~1785 | 6030 |
| VL-250CM | 1455 | 6970 | 8580 | ϕ 2500 | 4200 | 1280 | 5564 | 785~1785 | 6030 |

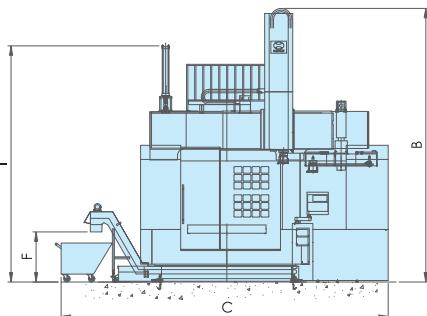
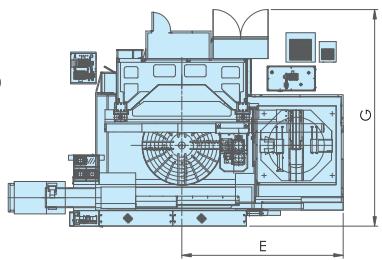
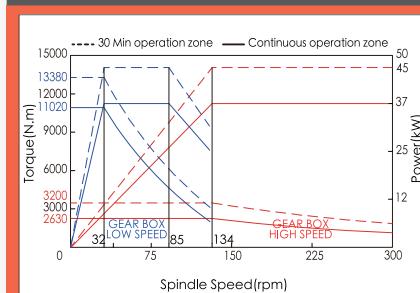
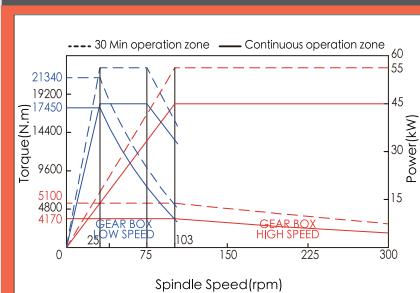


Table Speed, Torque Output Chart

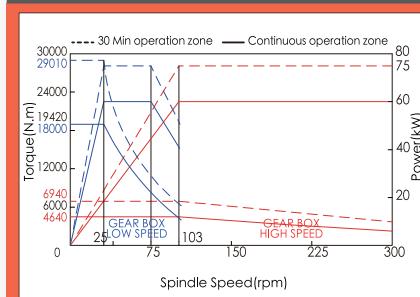
■ VL-125 Series 37/45kW, 2 steps



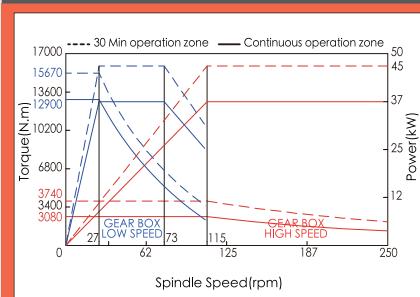
■ VL-125 Series 45/55kW, 2 steps (Option)



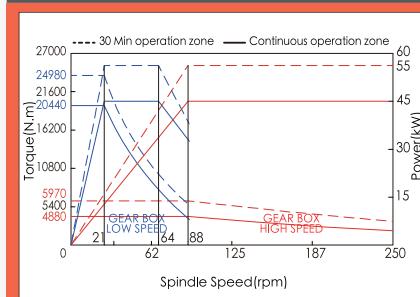
■ VL-125 Series 60/75kW, 2 steps (Option)



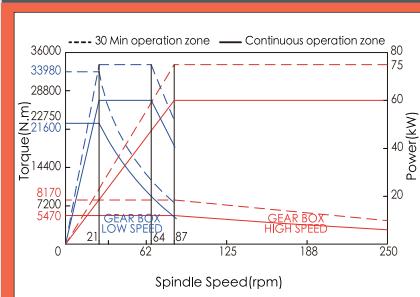
■ VL-160 Series 37/45kW, 2 steps



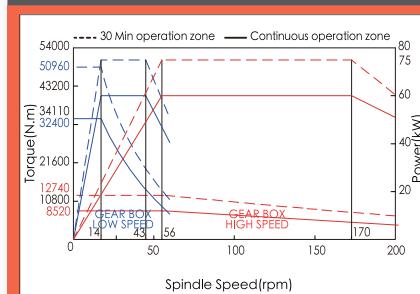
■ VL-160 Series 45/55kW, 2 steps (Option)



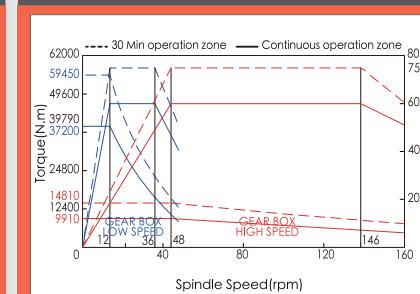
■ VL-160 Series 60/75kW, 2 steps (Option)



■ VL-200 Series 60/75kW, 2 steps

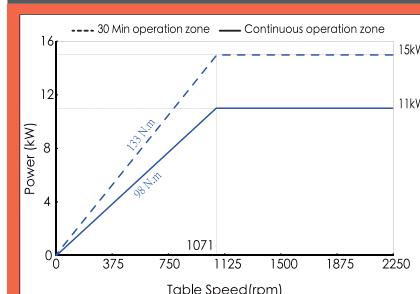


■ VL-250 Series 60/75kW, 2 steps

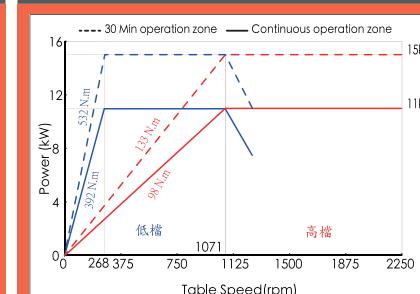


Live Tool Spindle Speed, Torque Output Chart

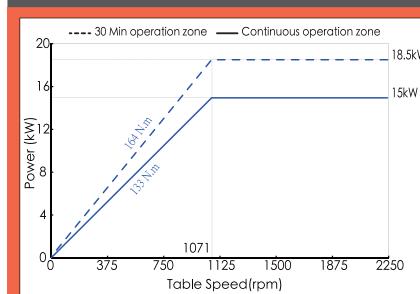
■ MODEL : α12 11/15kW



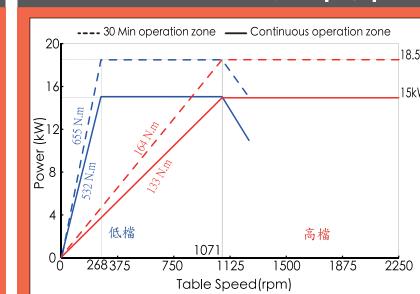
■ MODEL : α12 11/15kW, 2 steps (Option)



■ MODEL : α15 15/18.5kW



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



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") | 1170 (46") | 1200 (47") | 1170 (46") | | 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) | |
| Motor | Control system | | Fanuc 0i-T | | Fanuc 0i-T | | Fanuc 0i-T | | Fanuc 0i-T | |
| | 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 |
| Machine size | Power requirement | kVA | 75 | 90 | 75 | 90 | 90 | 105 | 90 | 105 |
| | 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.

NOTE

Standard accessories

1. Complete splash guard.(Top open)
2. Hydraulic power unit.
3. Table with manual 4-jaw chuck as spec.
4. Protection door.
5. Automatic lubrication system.
6. Working light.
7. Warning light.(R/Y/G)
8. Workpiece counter.(CNC controller)
9. Coolant system with tank.
10. Coolant bed wash down system.

Optional accessories

1. Hydraulic chuck & cylinder, size selections.
2. Hard jaw for hydraulic chuck.
3. Hydarulic chuck soft jaw.
4. High & low pressure chucking.
5. Air conditioner for electrical cabinet.(Standard for CM series)
6. Power transformer.
7. Oil skimmer.(Disk type)
8. Tool holder base.
9. Other tool holder & special tool holder.
10. Tool presetter.
11. Linear encoder of X/Z axis.
12. Lubricant chiller for spindle bearing & gear.
13. Extend vertical travel.(Z axis)
14. Extend higher column.
15. High pressure coolant through tool holder.
16. Dual speed gear box for live tool spindle.
17. Chip conveyor.(scraper type)
18. Manual guide i .
19. CE certificate.
20. Tooling.
21. Jig & fixture
22. Turnkey project.
23. Siemens controller.
24. Grinding function

NOTE