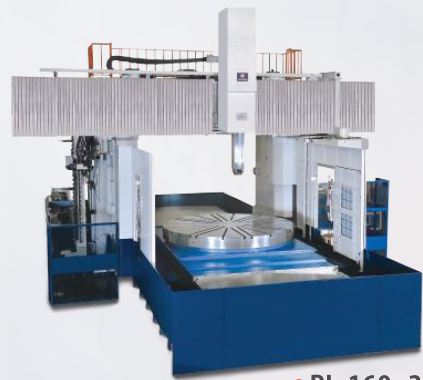




● VL-300~600C/CM



● PL-160~350CM



● VL-160~600C/CM-2R



● VL-66~250C/CM



● VL-46~100A/M/H

High Precision / High Efficiency
High Durability / Perfection

HONOR SEIKI Co., Ltd.

Precision, Reliability, Performance, No Compromises!

VL

SERIES

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Honor Seiki Company, Ltd.

VL

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VL-46

VL-66

VL-86

VL-100

**High
Speed**

SERIES



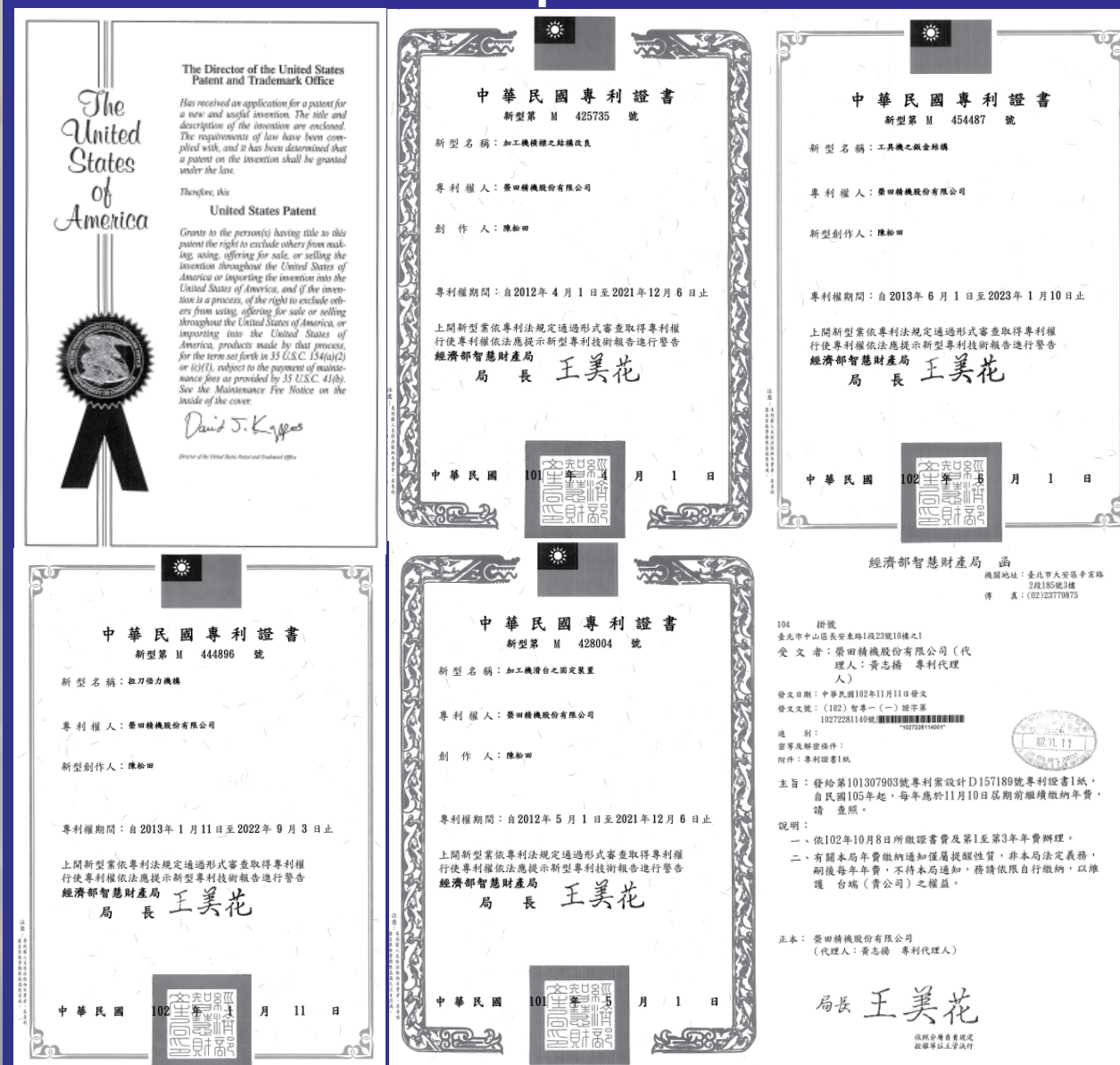
CNC
SYSTEMS INC
THE POWER OF PRECISION



■ 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.

With Multiple World Wide Patents Let HONOR's Experience Guide You .



Flexible Manufacturing

Turnkey Solutions



Providing **High Speed** Solutions

Honor Seiki VTL Disc Brake production Line

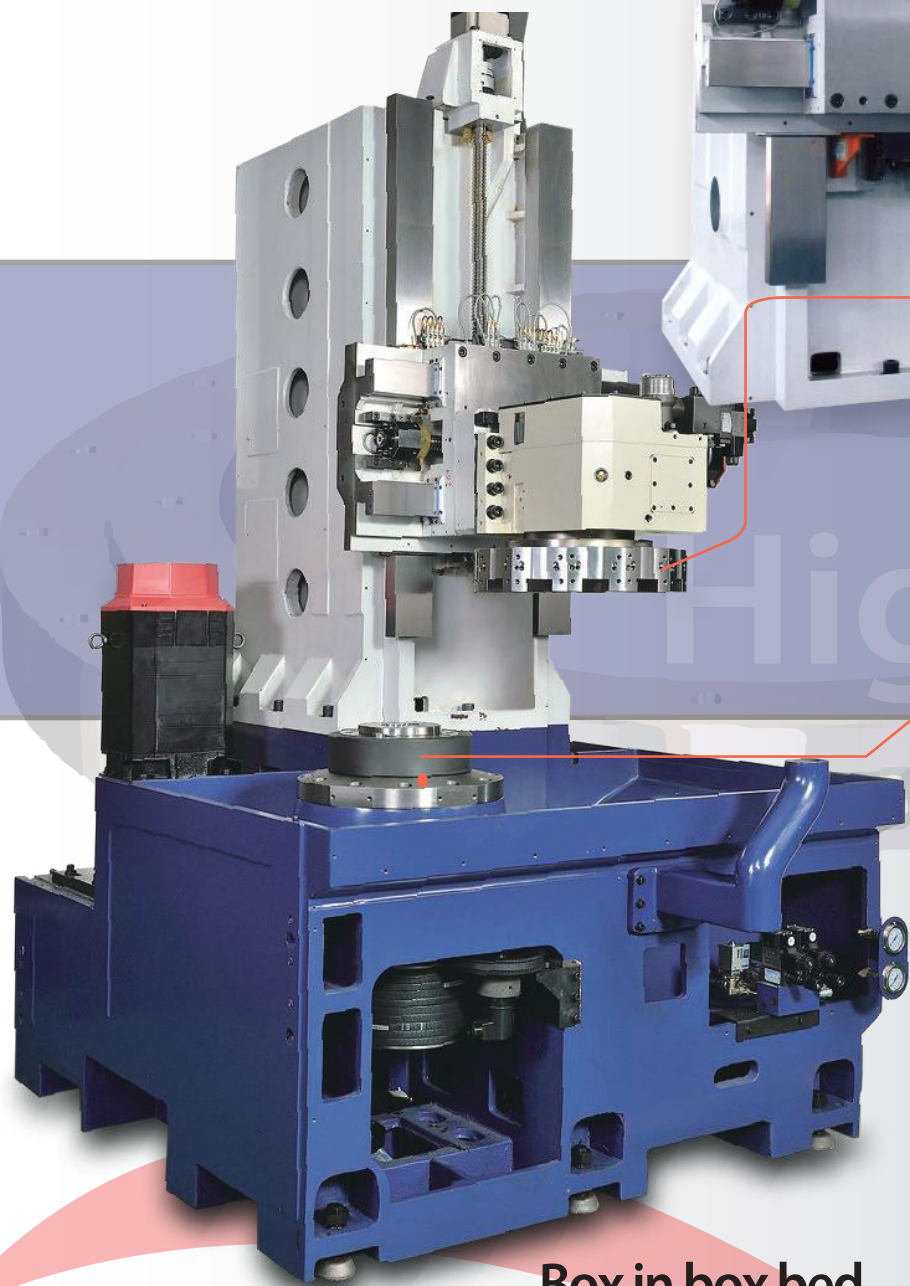
Machine Structure Design

High performance rigidity column

- Wide span column with hardened box way.
- Box way design with Turcite-B coated side way and precision hand scraping.
- 20m/min rapid feed rate.
- Symmetrical axis design ensures high accuracy and long-term stability.

High Speed

SERIES



Spindle

- HONOR designed, assembled and tested.
- 100% spindle balancing process offers high durability.
- Symmetrical design absorbs heat variation and maintains long term stability.

High / Low hydraulic pressure

- Easy access to hydraulic control system.
- Optional High/Low chuck clamping pressure.

Box in box bed

- High-grade Meehanite casting with box in box structure offers high rigidity and stability for long-term heavy cutting.



Multiple Turret Types

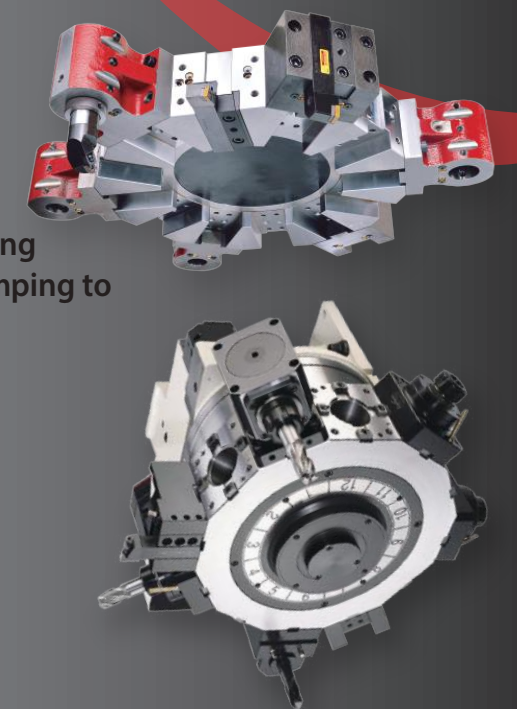
Flexible Turret Application

Horizontal type turret (H8, H12)

- Available for: VL46A, VL66A, VL86A, VL100A
Compact Design and high durability, suitable for heavy duty cutting high speed tool turret rotation with sooth turret clamping/unclamping to optimize production efficiency.

Milling type turret (BMT, VDI)

- Available for: VL46M, VL66M, VL86M, VL100M
The live tool function allows for drilling, tapping and machining of components to reduce the number of operations and machine set up times .



Vertical type turret (V4, V6)

- Available for: VL46H, VL66H, VL86H
The Star / V type turrets are designed for high durability and heavy cutting for brake drums, electric motor housings along with many other types of complex parts.



Gang type turret (G5)

- Available for: VL46G, VL66G, VL86G
The GANG style flexible tool system saves turret index times For high production components as well as near net shape parts requiring high accuracies and minimal tooling



Live 50 taper spindle (AM)

- VL-66AM and VL-86AM Series:
Adding a 50 Taper spindle and a double arm tool changing system this (AM) series allows for higher efficiency of all types of simple to complex parts that require drilling, tapping and milling,



VL

SERIES

VL-46A Specifications

VL-46 Series

■ VL-46A / VL-46AR / VL-46G / VL-46H / VL-46M

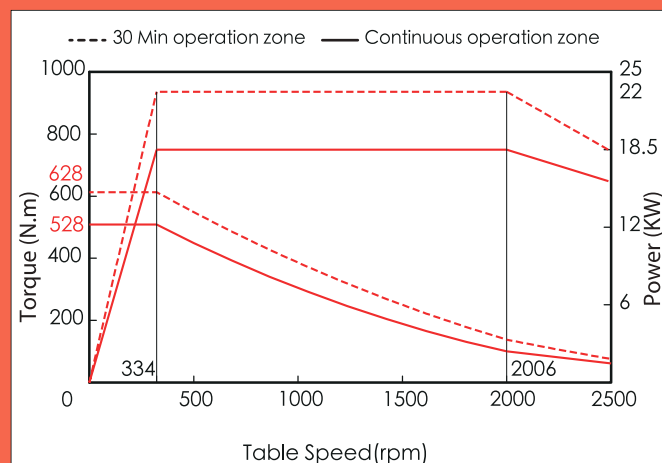


Specification

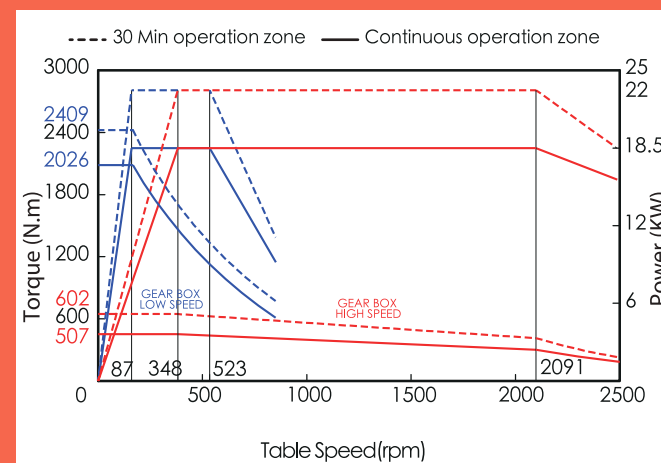
Max. Spindle Speed : 2500 rpm
Motor (Cont. / 30 min) : 18.5 / 22 kW

- Hydraulic chuck : 305mm (12inch)
- Number of tool position : 12
- Max. turning diameter : 560mm
- Rapid feed rate (X/Z) : 20/20 m/min
- Machine dimension : 1700 x 3100 x 2855 mm
- Machine weight : 6500 kg
- The above information is for VL-46A only.

■ Spindle Power-torque : aip40 18.5/22kW



■ Spindle Power-torque : aip40 18.5/22kW, 2 steps (Option)



VL-66 Series

■ VL-66A / VL-66AR / VL-66G / VL-66H / VL-66M

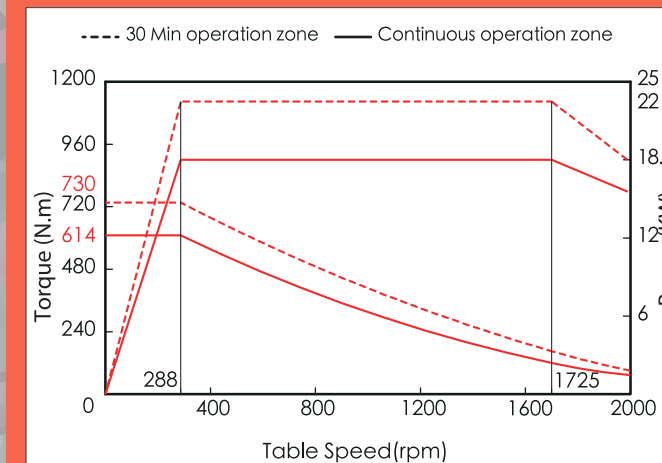


Specification

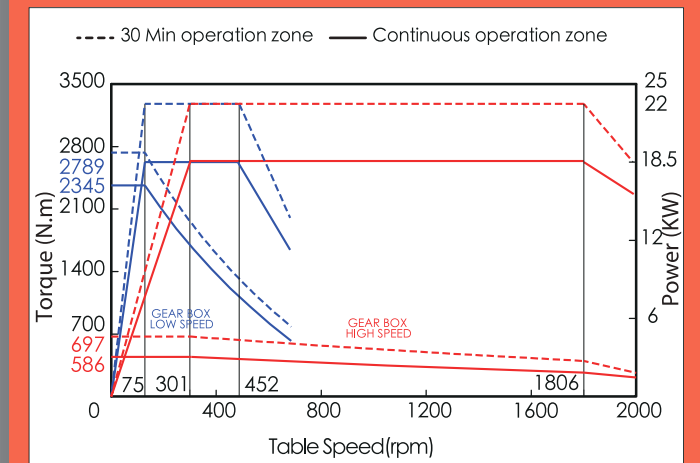
Max. Spindle Speed : 2000 rpm
Motor (Cont. / 30 min) : 18.5 / 22 kW

- Hydraulic chuck : 457mm (18inch)
- Number of tool position : 12
- Max. turning diameter : 760mm
- Rapid feed rate (X/Z) : 20/20 m/min
- Machine dimension : 1950 x 3410 x 3450 mm
- Machine weight : 11500kg
- The above information is for VL-66A only.

■ Spindle Power-torque : aip40 18.5/22kW



■ Spindle Power-torque : aip40 18.5/22kW, 2 steps (Option)



VL-86A specifications

VL-100A Specifications

VL-86 Series

■ VL-86A / VL-86AR / VL-86G / VL-86H / VL-86M



Specification

Max. Spindle Speed : 1500 rpm
Motor (Cont. / 30 min) : 18.5 / 22 kW

- Hydraulic chuck : 533mm (21 inch)
- Number of tool position : 12
- Max. turning diameter : 860mm
- Rapid feed rate (X/Z) : 20/20 m/min
- Machine dimension : 2100 x 3500 x 3900 mm
- Machine weight : 14500 kg
- The above information is for VL-86A only.

VL-100 Series

■ VL-100A / VL-100M

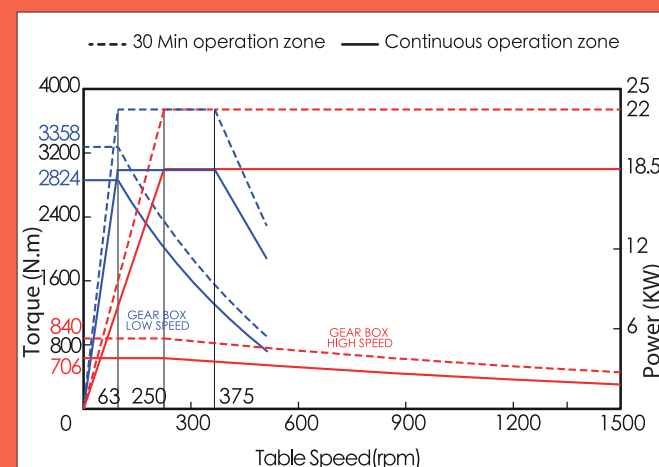


Specification

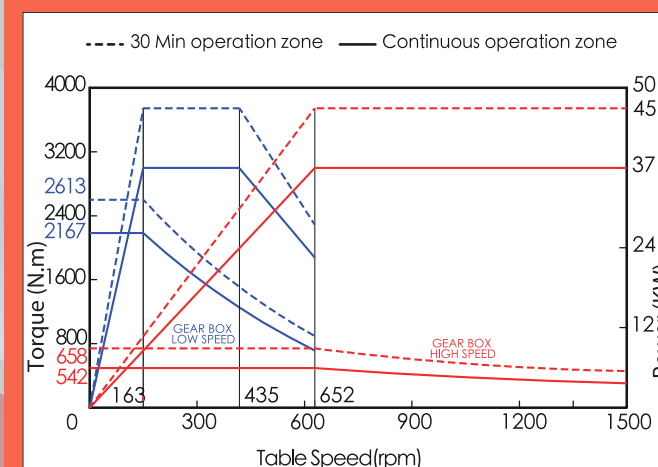
Max. Spindle Speed : 850 rpm
Motor (Cont. / 30 min) : 37 / 45 kW

- Manual chuck : 1000mm (40inch)
- Number of tool position : 12
- Max. turning diameter : 1000mm
- Rapid feed rate (X/Z) : 20/20 m/min
- Machine dimension : 2700 x 4000 x 4050 mm
- Machine weight : 21000kg
- The above information is for VL-100A only.

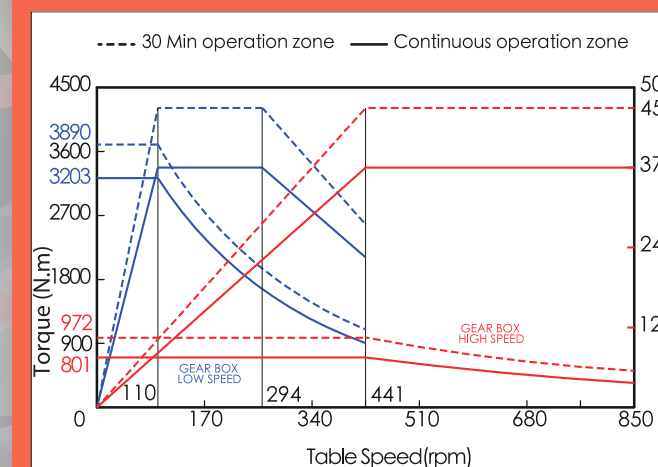
■ Spindle Power-torque : aip40 18.5/22kW,2 steps



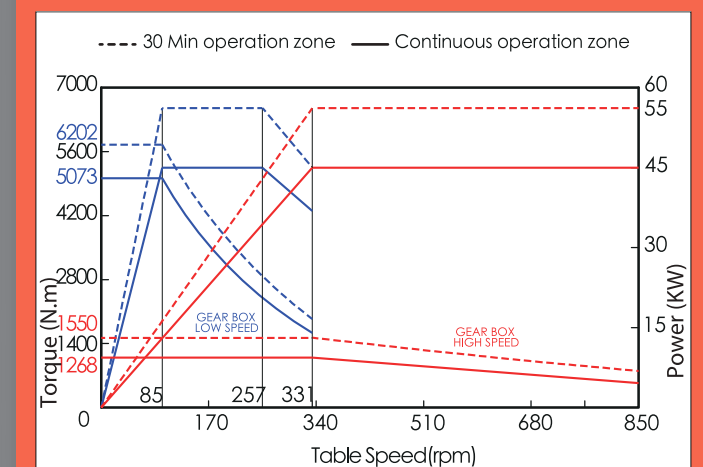
■ Spindle Power-torque : a40 37/45kW,2 steps (Option)



■ Spindle Power-torque : a40 37/45kW,2 steps



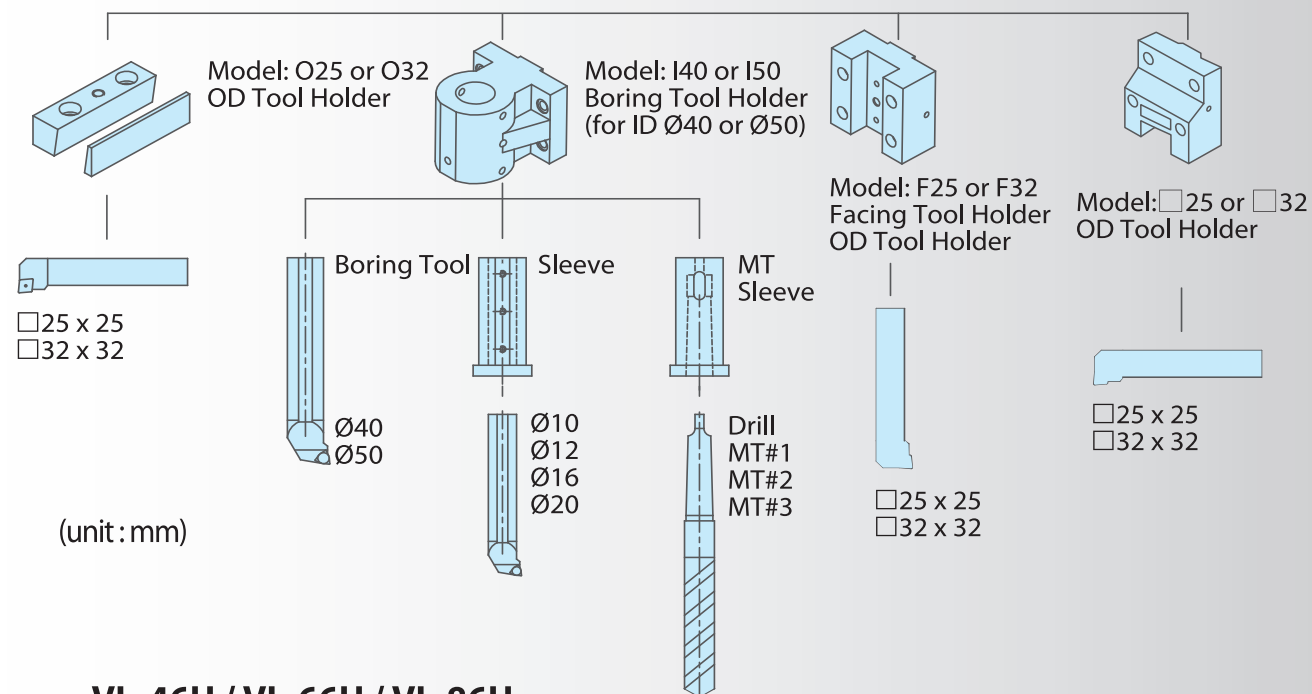
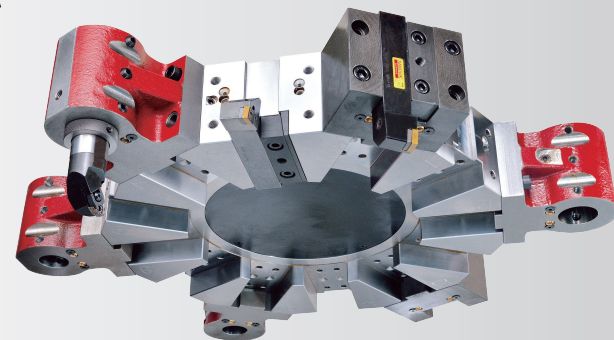
■ Spindle Power-torque : a50 45/55kW,2 steps (Option)



VL-A/H Turret Tool System

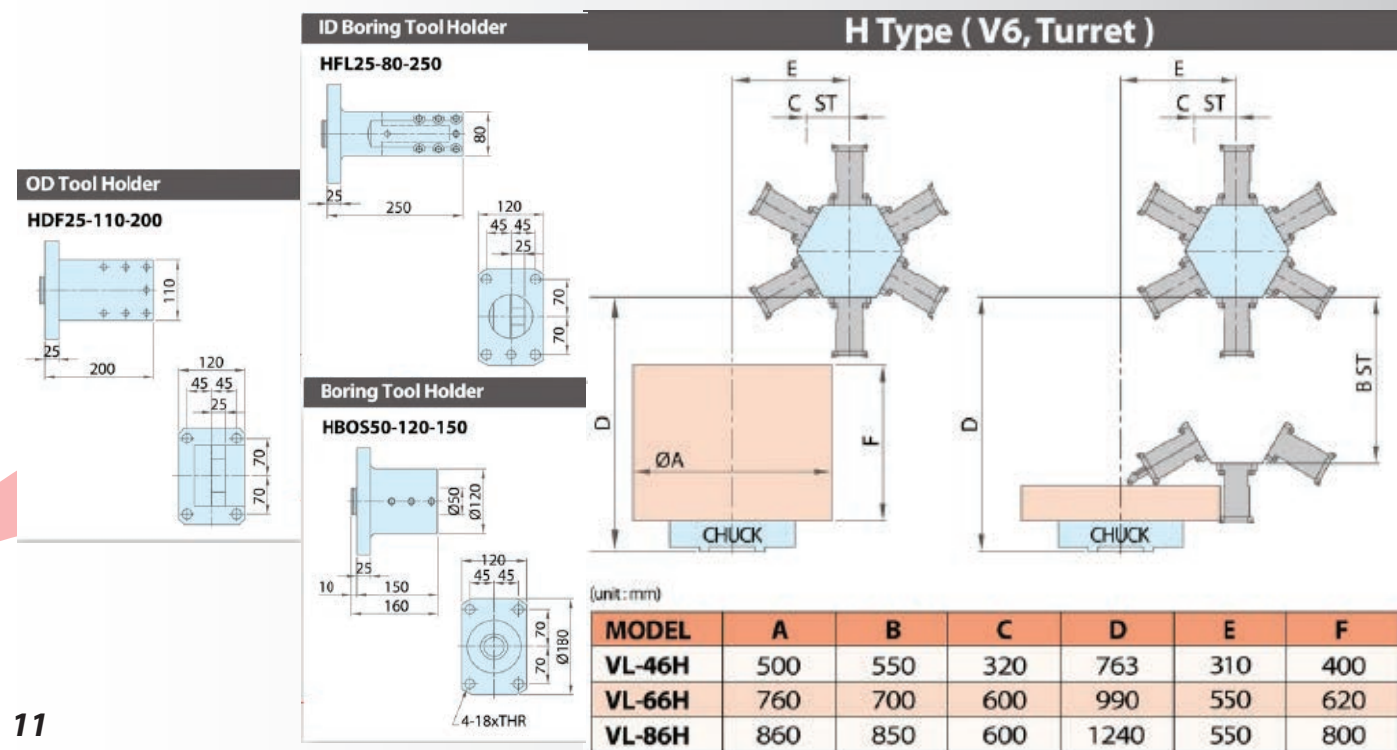
VL-46A / VL-66A / VL-86A / VL-100A

Standard US H Type Configuration



VL-46H / VL-66H / VL-86H

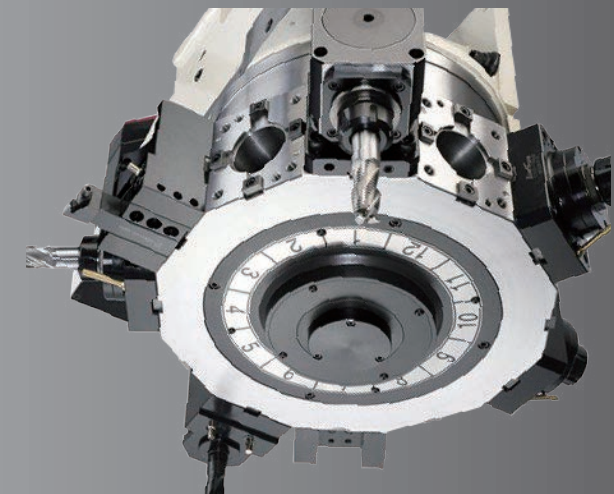
Optional Star Type Configuration



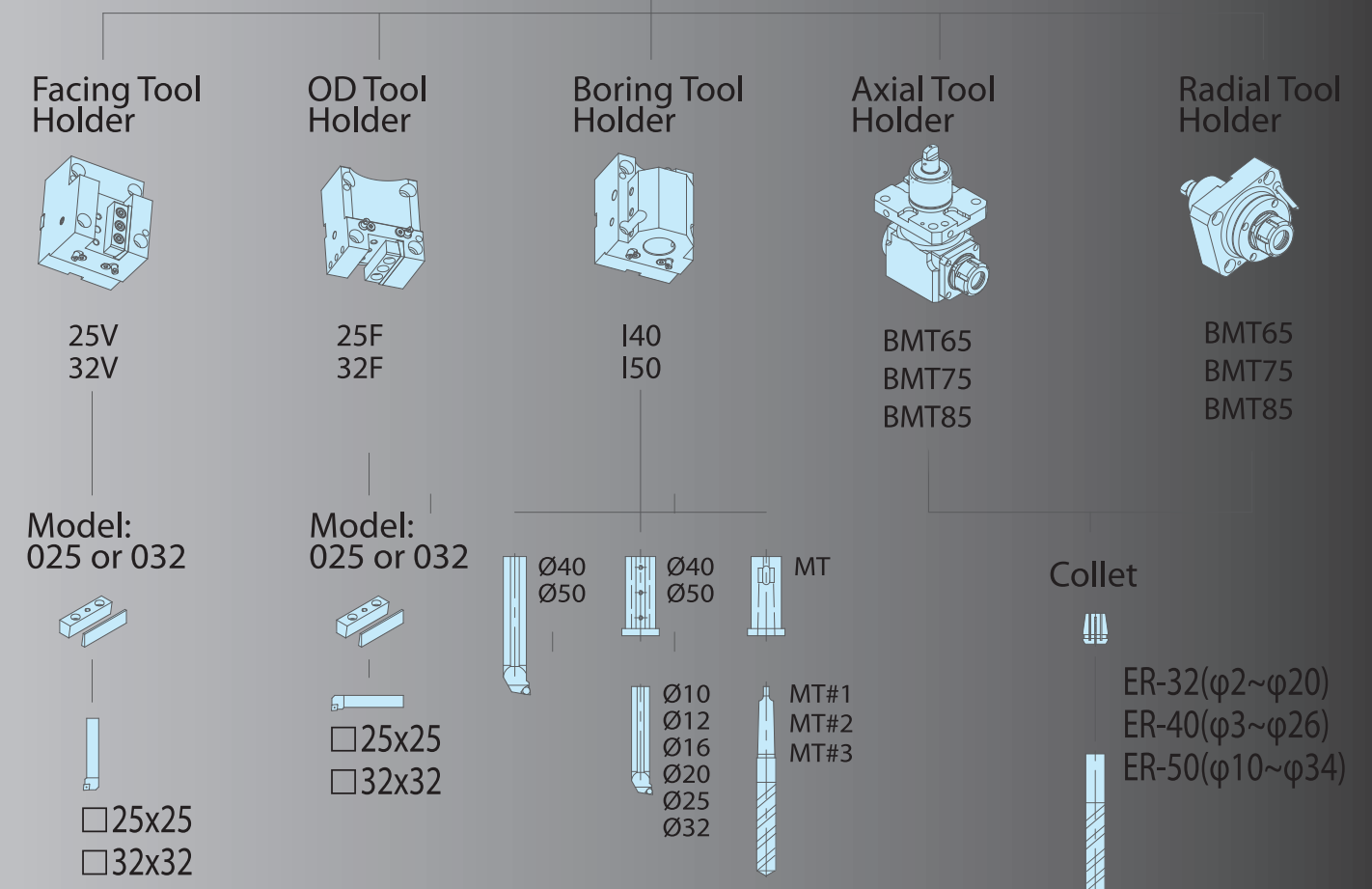
VL-M Live Tooling System

VL-46M / VL-66M / VL-86M / VL-100M

Standard US M Type Configuration



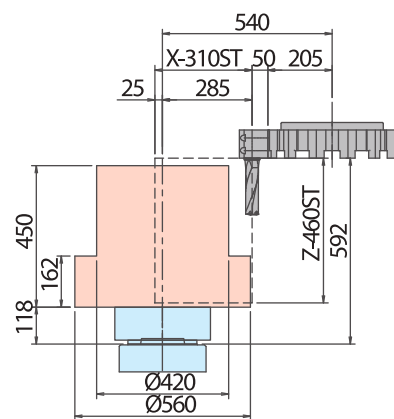
Tool Holder



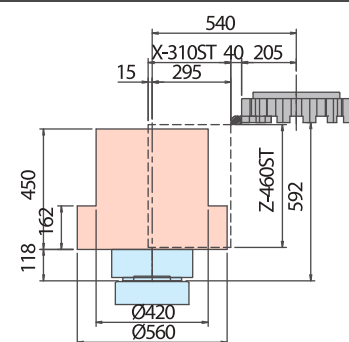
VL 46A /66A Machining Range

VL-46A (unit: mm)

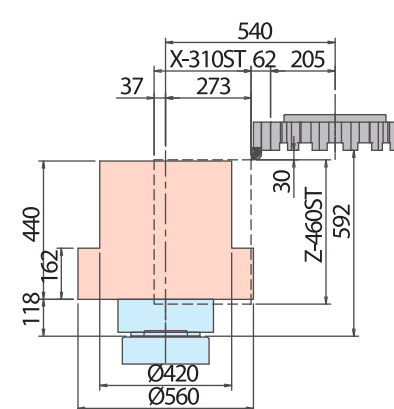
VL-46A(Boring Tool)



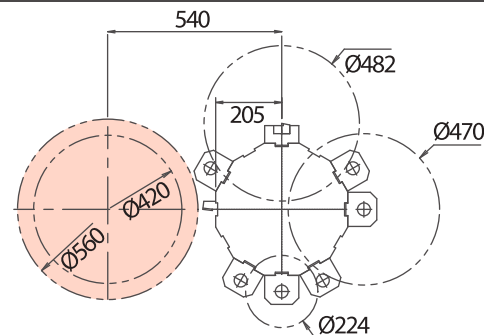
VL-46A(O.D Tool)



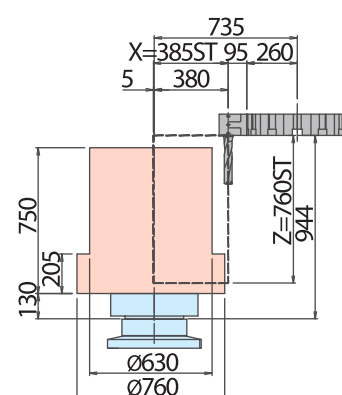
VL-46A(Face Tool)



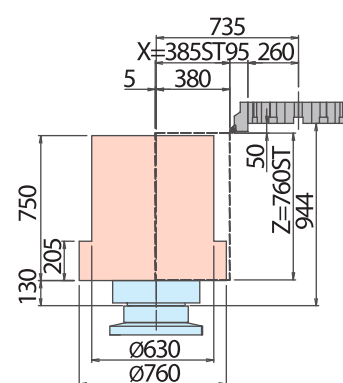
VL-46A Tool Interference



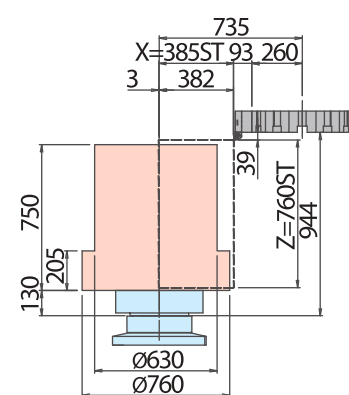
VL-66A(Boring Tool)



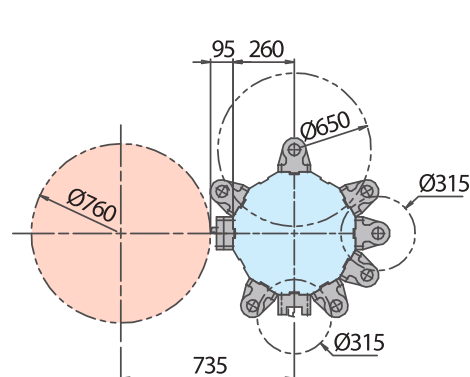
VL-66A(O.D Tool)



VL-66A(Face Tool)



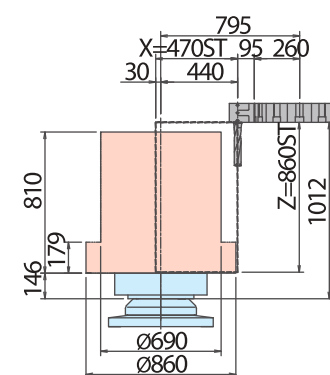
VL-66A Tool Interference



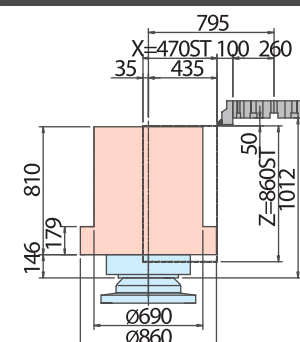
VL-86A/100A Machining Range

VL-86A (unit: mm)

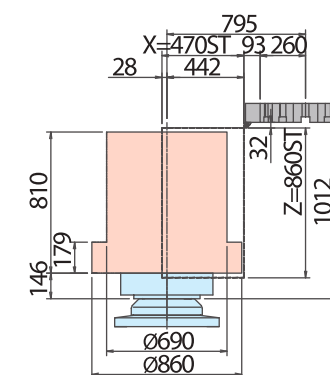
VL-86A(Boring Tool)



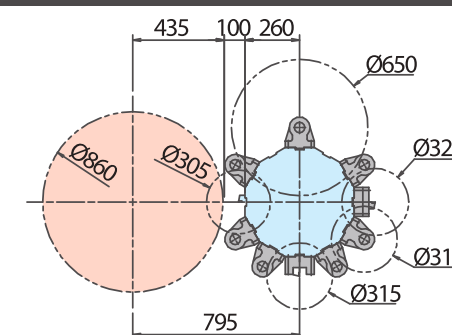
VL-86A(O.D Tool)



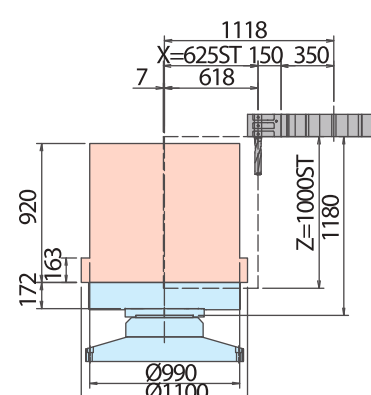
VL-86A(Face Tool)



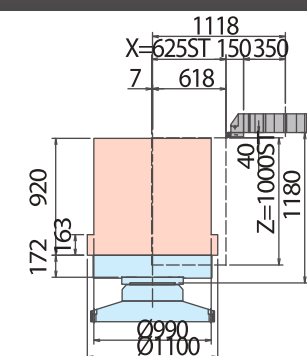
VL-86A Tool Interference



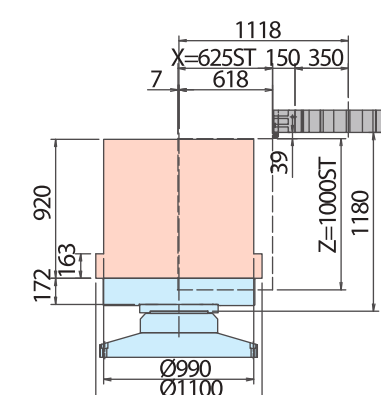
VL-100A(Boring Tool)



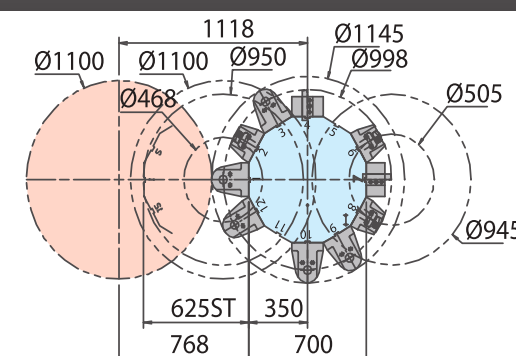
VL-100A(O.D Tool)



VL-100A(Face Tool)

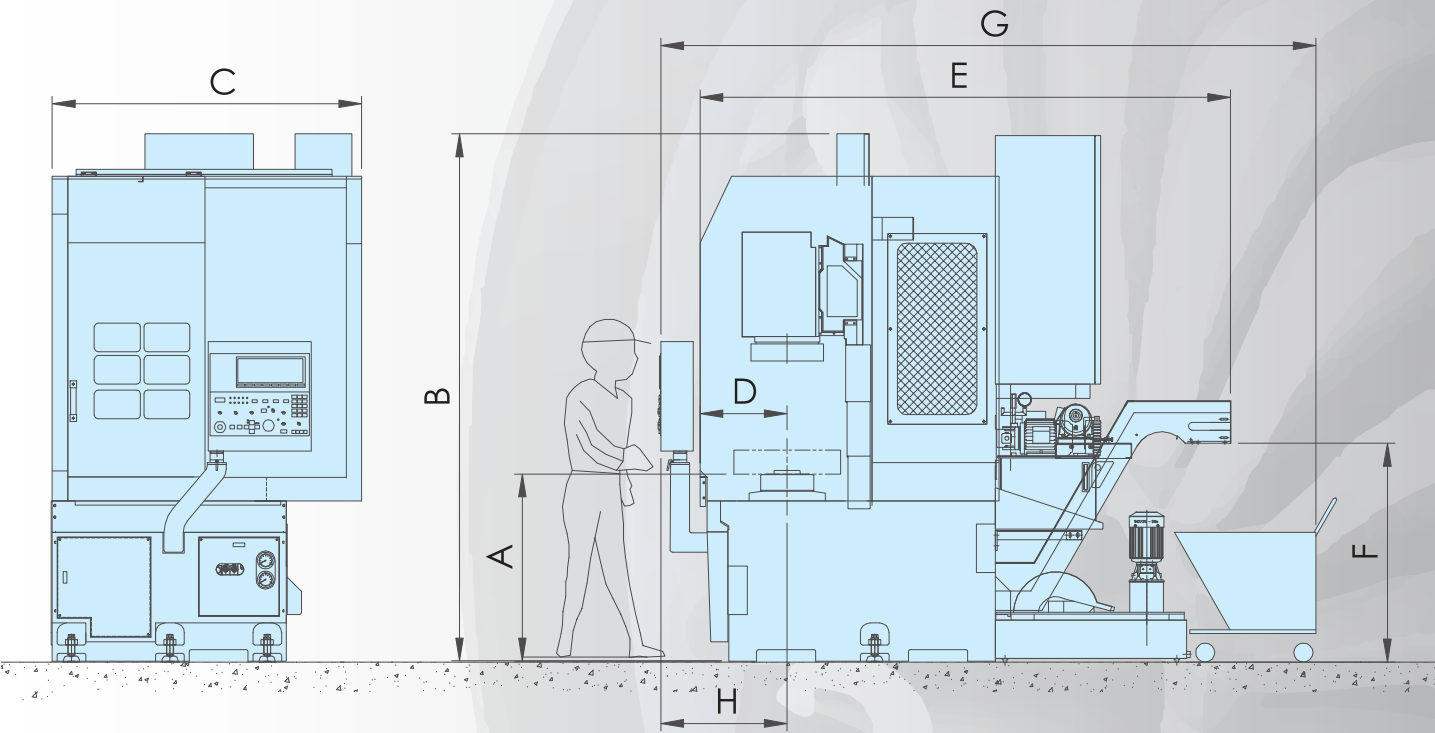


VL-100A Tool Interference



VL-100A (unit: mm)

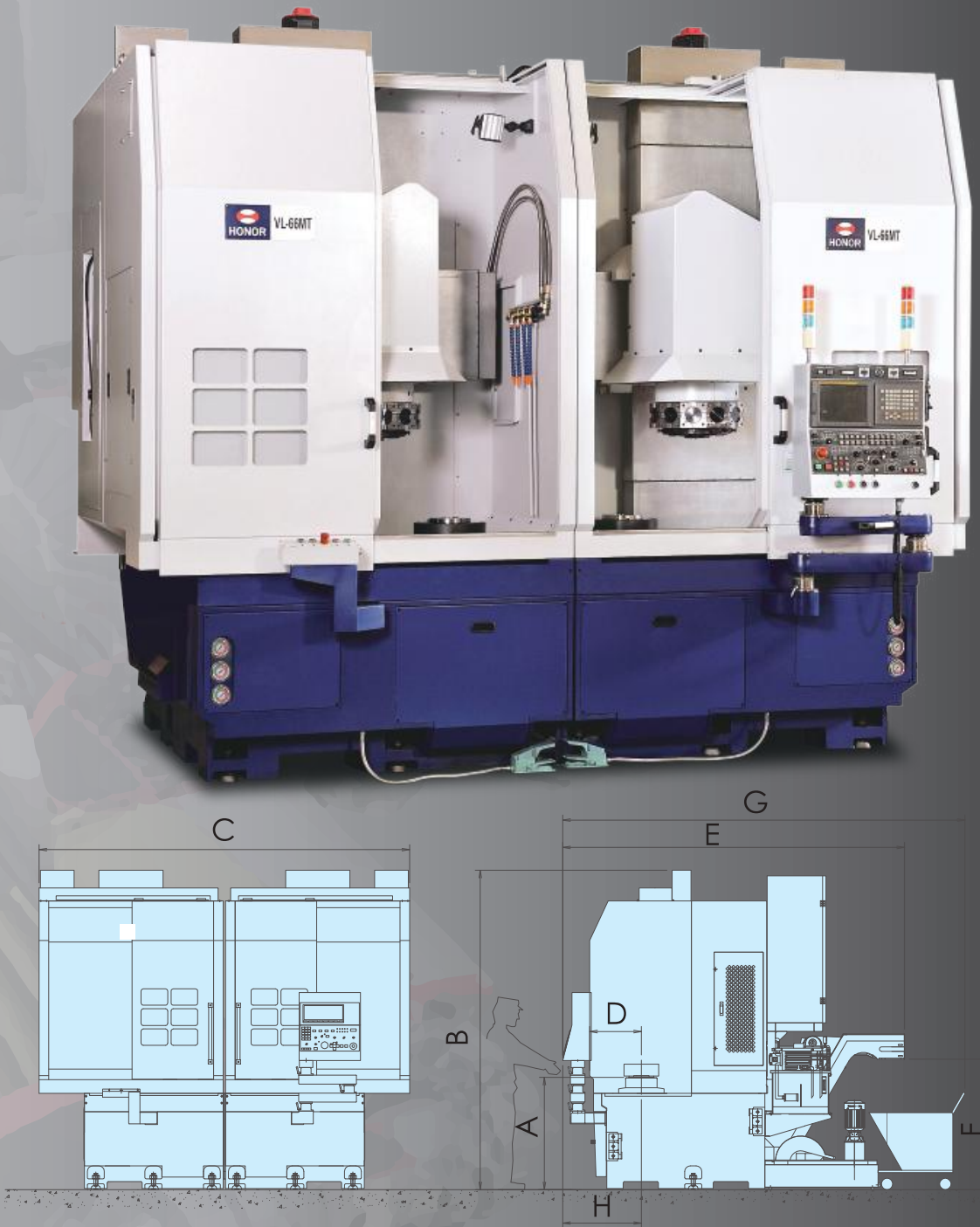
VL-46 / VL-66 / VL-86 / VL-100 Series



(unit:mm)

	A	B	C	D	E	F	G	H
VL-46A	990	2855	1620	457	2780	1140	3430	650
VL-66A	1080	3440	1950	505	2980	1200	3670	710
VL-86A	1200	3900	2100	655	3288	1200	3870	860
VL-100A	1250	4042	2710	755	3700	1250	4230	1030
VL-46H	980	2970	1700	453	2733	975	3432	630
VL-66H	1175	3680	2030	575	3180	1015	3885	845
VL-86H	1175	4000	2030	575	3180	1013	3885	845
VL-46G	980	2950	2220	400	2670	975	3435	630
VL-66G	1175	3680	2070	575	3180	1015	3885	845
VL-86G	1175	4000	2070	575	3180	1015	3885	845
VL-100G	1250	4042	2710	755	3700	1250	4230	1030
VL-46M	990	2815	1620	457	2780	1140	3430	650
VL-66M	1080	3450	1950	505	2980	1200	3670	710
VL-86M	1200	3872	2100	655	3288	1200	3870	860
VL-100M	1250	4042	2710	755	3700	1250	4230	1030

VL-46/66/86/100 Twin Series



	A	B	C	D	E	F	G	H
VL-46AT/MT	990	2855	3240	457	2780	1140	3430	650
VL-66AT/MT	1080	3440	3900	505	2980	1200	3670	710
VL-86AT/MT	1200	3900	4200	655	3288	1200	3870	860
VL-100AT/MT	1250	4042	5580	755	3700	1250	4230	1030

VL-46A ~ VL-66A Specifications

SPECIFICATION	Unit	46A	46H	46M	66A	66H	66M
Capacity							
Chuck Size	mm/In	12"	12"	12"	18"	18"	18"
Max. Swing diameter	mm/In	22"	25.6"	22"	31.4"	33.4"	31.4"
Max. Turning diameter	mm/In	22"	22"	22"	29.9"	29.9"	27.5"
Max. turning height	mm/In	17.7"	17.7"	15.7"	29.5"	24.4"	25.5"
Travel							
X axis travel	in	12.2"	12.2"	12.2"	15.6"	-1.97" / 21.6"	15.6"
Z axis travel	in	18.1"	21.6"	18.1"	29.93"	27.6"	29.93"
Spindle							
Spindle Bearing	mm	120	120	120	160	160	160
Spindle Nose	mm	A2-8	A2-8	A2-8	A2-11	A2-11	A2-11
Transmission Steps					2	2	2
Spindle Speed Low Gear	rpm	25-2500			25-652	25-652	25-652
Spindle Speed High Gear	rpm				653-2000	653-2000	653-2000
Max. Spindle torque NM	Nm	630	630	630	2789	2789	2789
Live Tool Speed (M only)	rpm/min			3,000			3000
Fanuc Motor							
Main Spindle	HP	30	30	30	30	30	30
X-axis servo motor	HP	4	4	4	5.4	5.4	5.4
Z-axis servo motor	HP	5.4	9.4	5.4	9.4	5.4	9.4
Live tool spindle motor	HP	N/A	N/A	7.5	N/A	N/A	15
Feed							
Rapid Feedrate X axis	IPM	787"	787"	787"	787"	787"	787"
Rapid Feedrate Z axis	IPM	787"	787"	787"	787"	787"	787"
Cutting Feedrate	m/min	.001-500	.001-500	.001-500	.001-500	.001-500	.001-500
Turret							
Turret type	pcs	H-12	V4/V6/V8	BMT-65	H-12	V4/V6/V8	BMT-75
Number of tools		12	4/6/8	12	12	4/6/8	12
Toll shank size	sec	□25 □32 Ø 40	□25 □32 Ø 40	□25 □32 Ø 40	□25 □32 Ø40,50	□25 □32 Ø40,50	□25 □32 Ø40,50
Machine Tank Capacity							
Hydraulic tank	L	40	40	40	40	40	40
Coolant tank	L	280	280	280	320	320	320
Lubrication tank for	L	4	4	4	4	4	4
Machine dimensions							
Air Consumption	kgf/cm²	5	5	5	5	5	5
Electric Power Supply	KVA	40	40	50/100	45 /90	45	70/140
Coolant motor(bed / turret)	watt	1100 / 550	1100 / 550	1100 / 550	1100 / 550	1100 / 550	1100 / 550
Floor space (L x W)	in	70 x 112	70 x 112	70 x 112	77 x 135	77 x 135	77 x 135
Machine Height	in	113"	113"	113"	136"	136"	136"
Machine Weight	Lbs	14,300	14,300	14,400	25,300	25,300	25,400

Standard accessories

1. Complete splash guard.

2. Hydraulic 3-jaw chuck and rotary cylinder.(VL-46/66/86)

3. Manual 4-jaw chuck.(VL-100)

4. Hydraulic power unit.

5. Soft jaws for hydraulic chuck.(VL-46/66/86)

6. Automatic lubrication system.

7. Heat exchanger for electrical cabinet.

8. Safety glass for front door.

9. Foot switch for hydraulic chuck.

10. Working light.
11. Warning light.(R/Y/G)

12. Coolant through turret.

13. Coolant system with coolant tank and bed wash down system.

14. Hand tool sets with tool box.

15. Leveling bolts & seat pads.

16. Chip conveyor.(Hinge type)

17. Chip trolley.

18. Spindle orientation.

19. Manual of operation & maintenance.

20. Manual of electrical & hydraulic circuit diagram.

21. Workpiece counter.(CNC controller)

VL-86A~ VL-100A Specifications

SPECIFICATION	Unit	86A	86H	86M	100A	100M
Capacity						
Chuck Size	in	24"	24"	24"	40" Manual	40" Manual
Max. Swing diameter	in	39.4"	39.4"	39.4"	52"	52"
Max. Turning diameter	in	33.9"	33.9"	31.5"	43.3"	43.3"
Max. turning height	in	31.9"	31.5"	31.5"	36.2"	35.4"
Travel						
X axis travel	in	18.5"	-1.97 / 19.69	18.5"	24.6"	24.6"
Z axis travel	in	33.9"	33.5"	33.9"	39.4"	39.4"
Spindle						
Spindle Bearing	mm	200	200	200	200	200
Spindle Nose	mm	A2-11/15	A2-11/15	A2-11/15	Ø380	Ø380
Transmission Steps		2	2	2	2	2
Spindle Speed Low Gear	rpm	25-652	25-652	25-652	5-652	5-652
Spindle Speed High Gear	rpm	653-2000	653-2000	653-2000	653-850	653-850
Max. Spindle torque NM	Nm	3,358	3,358	3,358	4,000	4,000
Live Tool Speed (M only)	rpm/min			3,000		3,000
Fanuc Motor						
Main Spindle	HP	30	30	30	60	60
X-axis servo motor	HP	5.4	5.4	5.4	5.4	5.4
Z-axis servo motor	HP	9.4	9.4	9.4	9.4	9.4
Live tool spindle motor	HP			15		15
Feed						
Rapid Feedrate X axis	m/in	787"	787"	787"	787"	787"
Rapid Feedrate Z axis	m/in	787"	787"	787"	787"	787"
Cutting Feedrate	m/min	.001-500	.001-500	.001-500	.001-500	.001-500
Turret						
Turret type	pcs	H-12	V4/V6/V8	BMT-75	H-12	BMT-85
Number of tools		12	4/6/8	12	12	12
Toll shank size	sec	□25 □32 Ø40,50	□25 □32 Ø40,50	□25 □32 Ø40,50	□32 Ø40,50	□32 Ø40,50
Machine Tank Capacity						
Hydraulic tank	L	40	40	40	40	40
Coolant tank	L	320	320	320	520	520
Lubrication tank for slidways	L	4	4	4	4	4
Spindle cooler tank	L	N/A	N/A	N/A	N/A	N/A
Machine dimensions						
Air Consumption	kgf/cm²	5	5	5	5	5
Electric Power Supply	KVA	45	45	55	80	80
Coolant motor (bed / turret)	watt	1100 / 550	1100 / 550	1100 / 550	1100 / 550	1100 / 550
Floor space (L x W)	in	83" x 138"	83" x 138"	83" x 138"	106" x 158"	106" x 158"
Machine Height	in	153.5"	153.5"	153.5"	160"	160"
Machine Weight	Lbs	32,000	32,200	32,200	46,300	48,100

Specifications are subject to change for improvement without notice:



Optional Accessories

■ Double cutting



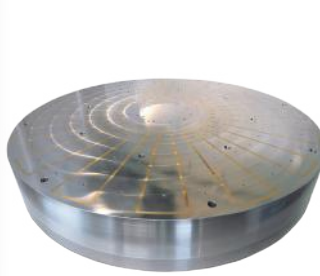
■ Oil skimmer (Disk)



■ Auto door



■ Magnetic chuck



■ Siemens controller



■ Air conditioner for electrical cabinet



■ 2-Speed gear box



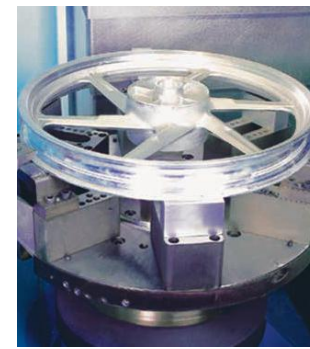
■ Fully protection telescopic cover



■ Oil mist collector



■ Finger hydraulic chuck



■ Second control box



■ Tool presetter



Optional accessories

1. Hydraulic chuck and rotary cylinder.(VL-100)
2. Manual chuck.(VL-86 series)
3. Spindle motor upgrade.
4. Air conditioner for electrical cabinet.
5. Auto door.(Automatic opening & closing of main door)
6. Power transformer.
7. Oli skimmer.(Disc type)
8. Oil mist collector.
9. Counter display for each inserts.
10. Double cutting tools.
11. Tool presetter.
12. Dual speed gear box for spindle motor.
13. High & low pressure chucking.
14. Chuck position sensor.
15. Tool holder.
16. Hard jaw of chuck.
17. High pressure coolant through turret.
18. Chip conveyor.(scraper type)
19. CNC controller 31i series.
20. Manual guide i .
21. CE certificate.
22. Tooling.
23. Jig & fixture.
24. Turnkey project.

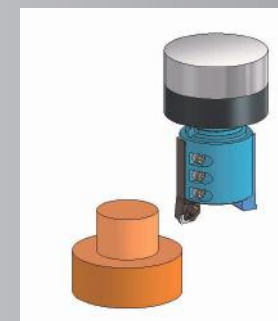
Specialized Machines

VL-66AM/VL-86AM



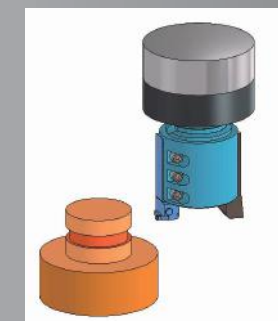
50 Taper spindle
24 Double arm ATC
Turning with milling / drilling / tapping:

• Tool Holder Index System



Turning

• ATC specification



Grooving

