



MV1 SERIES



Vision Manufactured

At Quaser Group, we dedicate to

Creating a world where there is no gap between design concept and manufacturing to maximize the power of engineering.

Whatever you design, we can make it to upgrade your competitive edge.

▲ Series Overview

Machine Structure	4
-------------------	---

▲ Design and Technology

Unique Spindle Technology	6
ATC System	8
Coolant system & Chip management	10
Thermal Management	12
Easy Operation	13

▲ Detailed Info

Technical Data	14
Standard / Optional Accessories	22
Machine Dimensions	26
Carbon Reduction & Green Power	30
QUASER Group	31



Machine Structure

▲ MV134 C / P

Travel X / Y / Z: 661 / 572 / 560 (mm)



Motor		MV134C	MV134P	
Spindle code		12C	15C	20C
X / Y / Z (kW)	F	3 / 3 / 4		
	S	2.7 / 2.7 / 4	2.7 / 2.7 / 4.9	-
	M	-		
	T	-	4.5 / 4.5 / 5.4	-

FANUC = F SIEMENS = S MITSUBISHI = M HEIDENHAIN = T

Note: The object might be different from the photo of catalogue if there is any specification update.

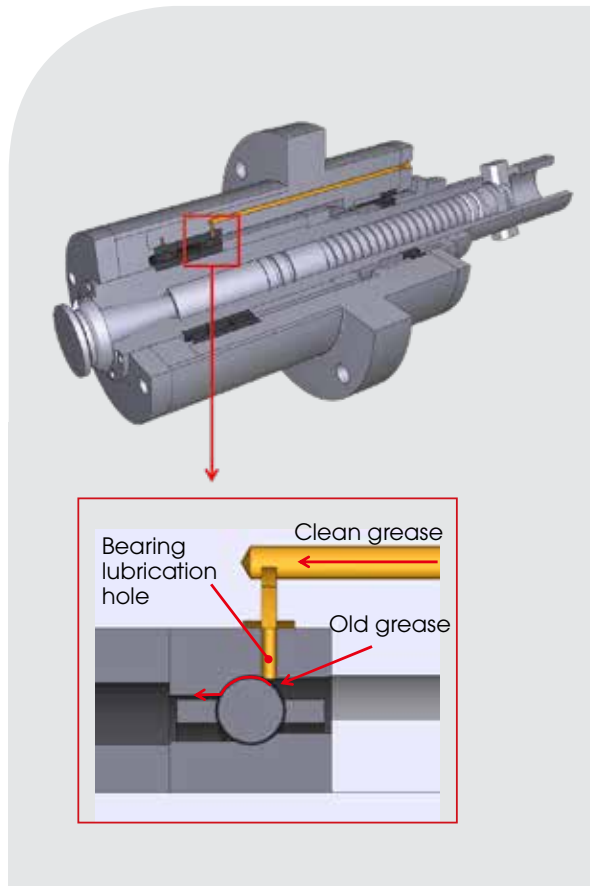
▲ MV184 C / P

Travel X / Y / Z: 1,020 / 610 / 610 (mm)



	MV184C	MV184P	
	12C	15C	20C
		3 / 3 / 4	
	2.7 / 2.7 / 4	2.7 / 2.7 / 4.9	-
	2.2 / 2.2 / 3	-	
	-	4.5 / 4.5 / 5.4	-

Unique Spindle Technology



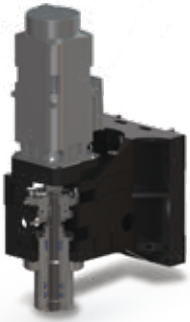
Re-grease supply system is stable and eco-friendly by supplying new grease intermittently to bearings during high speed rotation.



Standard on all models

Spindle	
Shaft diameter	
Spindle taper	
Bearing arrangement	
Ball bearing type	
Roller bearing type	
Bearing lubrication	
Transmission	
Spindle Speed	
FANUC	
Spindle base speed	
Spindle output power kW	(S6-25%)
Spindle output torque Nm	(S6-25%)
HEIDENHAIN	
Spindle base speed	
Spindle output power kW	(S6-25%)
Spindle output torque Nm	(S6-25%)
SIEMENS	
Spindle base speed	
Spindle output power kW	(S6-25%)
Spindle output torque Nm	(S6-25%)
MITSUBISHI	
Spindle base speed	
Spindle output power kW	(30min.)
Spindle output torque Nm	(30min.)
CTS Availability	
Available NC Adapting	
MV134 C	
MV134 P	
MV184 C	
MV184 P	

Note: ⁽¹⁾ S6-40%



SC-4.2		MC-4.1R		MC-4.0R
Ø80 / Ø70		Ø80 / Ø65		Ø70 / Ø60
ISO-40		ISO-40 / HSK A63		
<< >>		< > =		< > =
		Ceramic		
-		Steel		Ceramic
Grease packed		Re-Grease		
		Coupling		
12,000		15,000		20,000
1,500		1,500	1,400	1,150
18.5		15	26	15
118		96.5	177	125
-		2,000		-
-		27.7		-
-		132		-
1,500		2,000		-
17.6		27.7		-
112 ⁽¹⁾		132		-
1,400		-		-
15		-		-
102		-		-
×	Opt.	●		●
FANUC = ●		HEIDENHAIN = ●		SIEMENS = ●
MITSUBISHI = ●				
● ●		-		-
-		● ● ●		●
● ● ●		-		-
-		-		●
		● ● ●		

ATC System



30 ATC (std.)



48 ATC (opt.)

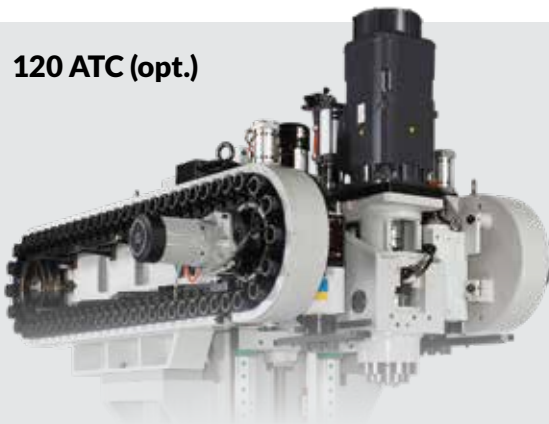


60 ATC (opt.)





120 ATC (opt.)



ATC auto door (std.)



Coolant system & Chip management



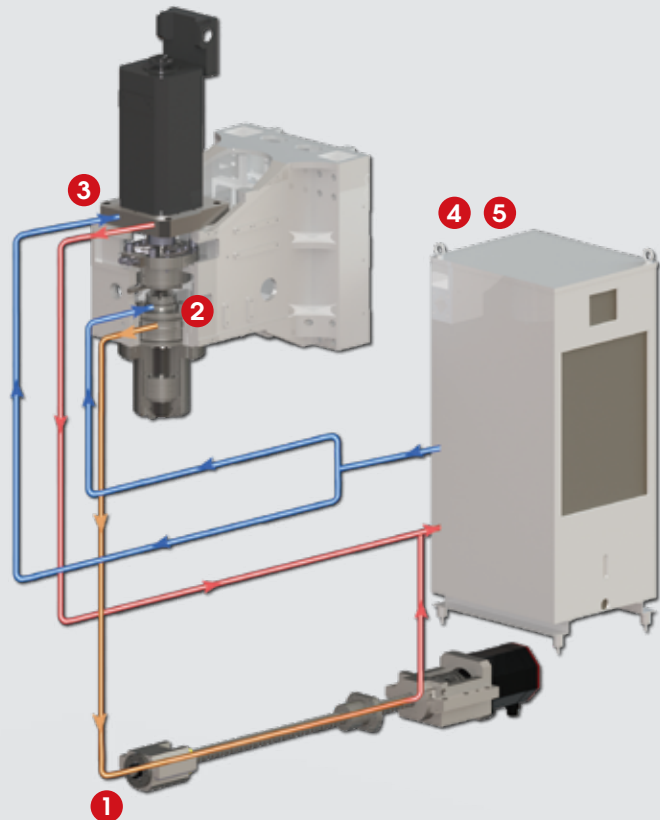
		MV134		MV184	
		C	P	C	P
A	Coolant tank	350L		480L	
B	Coolant through spindle	-	8 bar	-	8 bar
C	Nozzle coolant	3 bar		3 bar	
D	Wash gun	Std.		Std.	
E	Chip augers	Std.		Std.	
F	Chip conveyor	Opt.	Std.	Opt.	Std.
	Scraper type				
G	Filtration unit	-	Opt.	-	Opt.
H	High-angle telescopic cover design with excellent chip	Std.		-	
I	Wash down	1.1 bar		3 bar	



Thermal Management

To meet the rigorous requirements of working accuracy, here are the Thermal Management.

- 1 Coolant through ball screw.
- 2 Spindle cooling circuit.
- 3 Motor mounting block cooling circuit.
- 4 Oil chiller 6,000 BTU.
- 5 Oil chiller 12,000 BTU.



	MV134C	MV134P	MV184C	MV184P
	Coupling	Coupling	Coupling	Coupling
1	×	○	×	○
2	×	● Note2	×	● Note2
3	●	●	●	●
4	×	● Note1	×	● Note1
5	×	● Note2	×	● Note2

Note1: 15,000 rpm / ● Note2: 20,000 rpm / ●

Easy Operation



- a** Front door opening at
 - MV134: 730 mm
 - MV184: 1,077 mm

- b** Ergonomic operation panel with adjustable angle

- c** Convenient distance from operator to the spindle
 - MV134: 715 mm
 - MV184: 861 mm

- d** Table to front door with easy accessibility
 - MV134: 154 mm
 - MV184: 255 mm

Technical Data

Technical Data		MV134
		C
Spindle code		12C
Work range		
Table size (mm)		940 x 550
Travel	X / Y / Z (mm)	661 / 572 / 560
Spindle nose to table surface (mm)		100 ~ 660
Table load capacity (kg)		500
Feed drive		
Feed force	X / Y / Z (N)	6,283 / 6,283 / 11,519 (F) 6,283 / 6,283 / 14,137 (S)
Rapid movement	X / Y / Z (m/min)	36 / 36 / 36
⁽¹⁾ Acceleration	X / Y / Z (m/s ²)	4 / 3.5 / 3.5 (F) 4.5 / 4 / 5.5 (S)
Dia. & pitch of the ball screw (mm)		Ø40 / P= 12
Main spindle		
Spindle taper		40 Taper
Max. spindle speed		12,000
Tool changer		
Tool selection		Random
Magazine positions		30 (std.)
Max. tool diameter (mm)		Ø76.2
Max. tool dia. Due to neighbor pots are empty		Ø150

Control: (F) FANUC (S) SIEMENS (T) HEIDENHAIN

MV134	
P	
15C	20C ⁽²⁾
940 x 550	
661 / 572 / 560	
100 ~ 660	
500	
4,712 / 4,712 / 8,639 (F)	
6,951 / 6,951 / 10,249 (T)	
4,712 / 4,712 / 10,603 (S)	
48 / 48 / 48	
4.5 / 4 / 4 (F)	4.5 / 4 / 4 (F)
4.5 / 3.5 / 5.5 (T)	
5 / 4.5 / 5.5 (S)	
Ø40 / P= 16	
40 Taper	
15,000	20,000
Random	
30 (std.) 48 / 60 (opt.)	
Ø76.2	
Ø150	

Technical Data

Technical Data		MV134
		C
Spindle code		12C
Tool changer		
Max. tool length (mm)		300
Max. tool weight (kg)		10
C to C time-ISO 10791-9 (sec.) ⁽³⁾		4.7 ± 0.2
Coolant system		
Coolant tank capacity (Liter)		350L
- Nozzle capacity		75L / min., 3 bar
Pump capacity - Coolant through spindle		-
- Wash down		75L / min., 1.1 bar
Machine size		
Height (mm)		3,000
Floor space W x D (mm)	30 ATC	2,050 x 3,141
	48 / 60ATC	-
Weight (kg)		6,000 (30ATC)
Connections		
Main power		220~230V / 50~60 Hz, 380~415V/50~60Hz
Power consumption (KVA)		25(F) 30(S)

Note: ⁽¹⁾ Test condition: values are measured by half of the maximum table load capacity.

⁽²⁾ Only for FANUC control. ⁽³⁾ At 60Hz.

- Machine specification might be different from the catalogue if there is any specification update.

MV134	
P	
15C	20C ⁽²⁾
300	
10	
4.7±0.2	
350L	
75L / min., 3 bar	
25 L / min., 8 bar	
75L / min., 1.1 bar	
3,000	
2,050 x 3,141	
2,050 x 3,141	
6,000(30ATC) 6,400(48ATC) 6,600(60ATC)	
220~230V / 50~60 Hz, 380~415V/50~60Hz	
25(F) 30(T) 30(S)	30(F)

Technical Data

Technical Data		MV184
		C
Spindle code		12C
Work range		
Table size (mm)		1,200 x 600
Travel	X / Y / Z (mm)	1,020 / 610 / 610
Spindle nose to table surface (mm)		100 ~ 710
Table load capacity (kg)		500
Feed drive		
Feed force X / Y / Z (N)	F	6,283 / 6,283 / 11,519
	T	-
	M	6,283 / 6,283 / 11,781
	S	4,712 / 4,712 / 14,137
Rapid movement X / Y / Z (m/min)		32 / 32 / 24 (F) (M) (S)
⁽¹⁾ Acceleration X / Y / Z (m/s ²)	F	3.5 / 3.5 / 3
	T	-
	M	2.5 / 2.5 / 2.5
	S	3.5 / 2.5 / 2
Dia. & pitch of the ball screw		Ø45 / P = 12 / 12 / 12 (F) Ø45 / P = 12 / 12 / 12 (M) Ø45 / P = 16 / 16 / 12 (S)
Main spindle		
Spindle taper		40 Taper
Max. spindle speed		12,000

Control: (F) FANUC (S) SIEMENS (M) MITSUBISHI (T) HEIDENHAIN

MV184	
P	
15C	20C ⁽²⁾
1,200 x 600	
1,020 / 610 / 610	
100 ~ 710	
500	
4,712 / 4,712 / 11,519	
6,951 / 6,951 / 13,666	
-	
4,712 / 4,712 / 14,137	
40 / 40 / 36 (F) (T) (S)	
4 / 4 / 4	
3.5 / 2.5 / 5	
-	
4 / 2.5 / 5	
Ø45 / P = 16 / 16 / 12	
40 Taper	
15,000	20,000

Technical Data

Technical Data		MV184
		C
Spindle code		12C
Tool changer		
Tool selection		Random
Magazine positions		30
Max. tool diameter (mm)		76.2
w/o adjacent tool (mm)		125
Max. tool length (mm)		280
Max. tool weight (kg)		7
CTC time - ISO 10791-9 (sec.) ⁽³⁾		4.7±0.2
Coolant system		
Coolant tank capacity (Liter)		480L
- Nozzle coolant		75 L / min., 3 bar
Pump capacity	- Coolant through spindle	-
- Wash down		75 L / min., 3 bar
Machine size		
Height (mm)		3,030
Floor space W x D (mm)	30ATC	2,548 x 3,240
	48 / 60ATC	-
Weight (kg)		6,990
Connections		
Main power		220~230V / 50~60 Hz, 380~415V/50~60Hz
Power consumption (KVA)		25(F)(M) 30(S)

Note: ⁽¹⁾ Test condition: values are measured by half of the maximum table load capacity.

⁽²⁾ Only for FANUC control. ⁽³⁾ At 60Hz.

- Machine specification might be different from the catalogue if there is any specification update.

MV184

P

15C

20C⁽²⁾

Random

30 (std.) 48 & 60 (opt.)

76.2

125

280

7

4.7±0.2

480L

75 L / min., 3 bar

25 L / min., 8 bar

75 L / min., 3 bar

3,030

2,912 x 3,339

2,912 x 3,339 / 2,912 x 3,349

7,090

220~230V / 50~60 Hz, 380~415V/50~60Hz

30(F)(T)(S)

Standard / Optional Accessories

Standard / Optional Accessories	MV134		
	C	P	
Spindle code	12C	15C	20C
FANUC 0iMF Plus	●	×	×
FANUC 31iB Plus <AICC II(Look-ahead 200 blocks)>	×	○	○
HEIDENHAIN TNC640	×	○	×
SIEMENS 828D	○	○	×
40 Taper 30 position tool magazine	●	●	●
40 Taper 48 position tool magazine	×	○	○
40 Taper 60 position tool magazine	×	○	○
ATC auto door	●	●	●
- BT40	●	●	●
Tooling			
- ISO40 & DIN40	○	○	○
- HSK A63	×	○	○
Pull stud for BT tooling	○	●	●
Balance tooling for spindle warm up	○	●	●
4th axis preparation	×	●	●
Ø255mm rotary table & tail stock	×	○	○
Transformer ⁽¹⁾	○	○	○
Linear scale	×	○	○

●=Standard ○=Option X=N/A

Standard / Optional Accessories	MV134		
	C	P	
Spindle code	12C	15C	20C
Work probe	×	○	○
Tool length / breakage measurement	○	○	○
Coolant system	●	●	●
Coolant wash down / wash gun	●	●	●
Coolant through ball screw	×	○	○
Coolant through spindle 8 bar	○	●	●
Coolant through spindle 20 bar	○	○	○
Coolant through spindle 50 bar	×	○	○
Cutter air blast	●	●	●
Chip auger	●	●	●
Scraper external lift-up conveyor	○	●	●
Oil-mist collector	○	○	○
Filtration unit	×	○	○
Documentation (USB) ⁽²⁾	●	●	●
Total Enclosure Guard (with top side cover)	●	●	●
Work light	●	●	●
Machine status light	●	●	●
CE ⁽³⁾	○	○	○

Note: ⁽¹⁾Transformer as standard or optional item will be varied according to control system and power supply condition.

⁽²⁾ Paper documentation is optional. ⁽³⁾ Standard for EU areas except C type.

- Machine specification might be different from the catalogue if there is any specification update.

Standard / Optional Accessories

Standard / Optional Accessories	MV184		
	C	P	
Spindle code	12C	15C	20C
FANUC 0iMF Plus	●	×	×
FANUC 31iB Plus	×	○	○
HEIDENHAIN TNC640	×	○	×
SIEMENS 828D	○	○	×
MITSUBISHI M80 (package A)	○	×	×
MITSUBISHI M830	○	×	×
40 Taper 30 position tool magazine	●	●	●
40 Taper 48 position tool magazine	×	○	○
40 Taper 60 position tool magazine	×	○	○
40 Taper 120 position tool magazine ⁽¹⁾	×	○	○
ATC auto door	●	●	●
- BT40	●	●	●
Tooling			
- ISO40 & DIN40	○	○	○
- HSK A63	×	○	○
Pull stud for BT tooling	○	●	●
Balance tooling for spindle warm up	○	●	●
4th axis preparation	×	●	●
Ø255mm rotary table & tail stock	×	○	○

●=Standard ○=Option X=N/A

Standard / Optional Accessories	MV184		
	C	P	
Spindle code	12C	15C	20C
Transformer ⁽²⁾	○	○	○
Linear scale	×	○	○
Work probe	×	○	○
Tool length / breakage measurement	○	○	○
Coolant system	●	●	●
Coolant wash down / wash gun	●	●	●
Coolant through ball screw	×	○	○
Coolant through spindle 8 bar	×	●	●
Coolant through spindle 20 bar	○	○	○
Coolant through spindle 50 bar	×	○	○
Cutter air blast	●	●	●
Chip auger	●	●	●
Scraper external lift-up conveyor	○	●	●
Oil-mist collector	○	○	○
Filtration unit	×	○	○
Documentation (USB) ⁽³⁾	●	●	●
Total Enclosure Guard (with Top side cover)	●	●	●
Work light	●	●	●
Machine status light	●	●	●
CE ⁽⁴⁾	○	○	○

Note: ⁽¹⁾ Only for MV184 coupling spindle.

⁽²⁾ Transformer as standard or optional item will be varied according to control system and power supply condition.

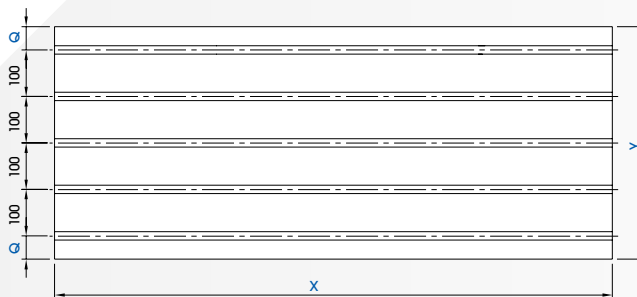
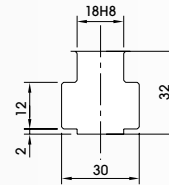
⁽³⁾ Paper documentation is optional. ⁽⁴⁾ Standard for EU areas except C type.

- Machine specification might be different from the catalogue if there is any specification update.

Machine Dimensions

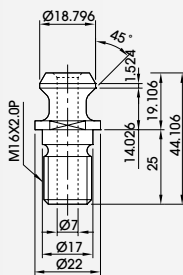
Table dimension

	MV134	MV184
X	940	1200
Y	550	600
Q	75	100

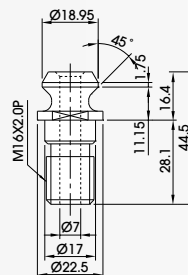


Pull stud and applicable tools

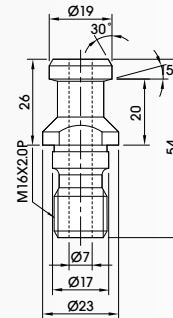
BT 40



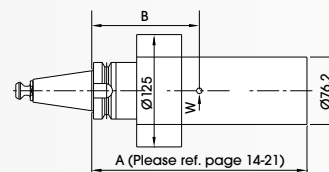
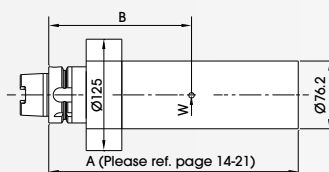
ISO (7388-B)



DIN (69872-A)

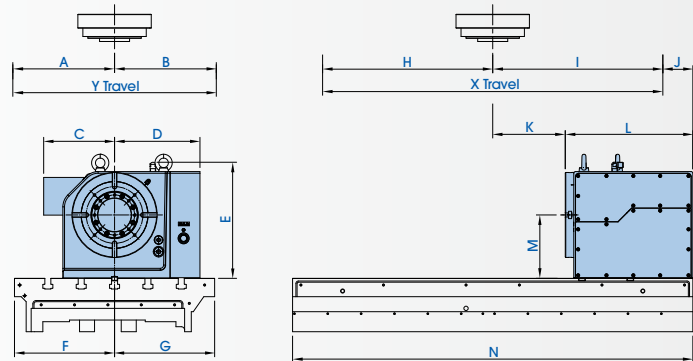


B	tool median point distance	
W	tool weight	
MOMENT=W*B (≤ 10.29N-m)		MOMENT=W*B (≤ 9.85N-m)

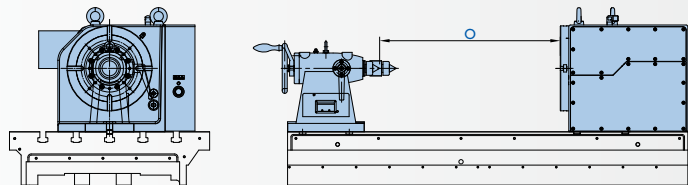


GVA255HBII

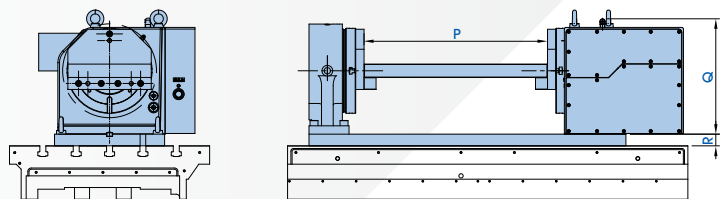
	MV134	MV184
A	286	305
B	286	305
C	212.5	212.5
D	256	256
E	348	348
F	375	300
G	175	300
H	330.5	510
I	330.5	510
J	139.5	90
K	87.5	217.5
L	382.5	382.5
M	190	190
N	940	1200
O	281.5	541.5
P	340	550
Q	391	346
R	35	35



GVA255HBII+ST255



GVA255HBII-Flxture 2

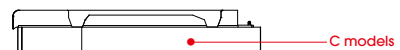
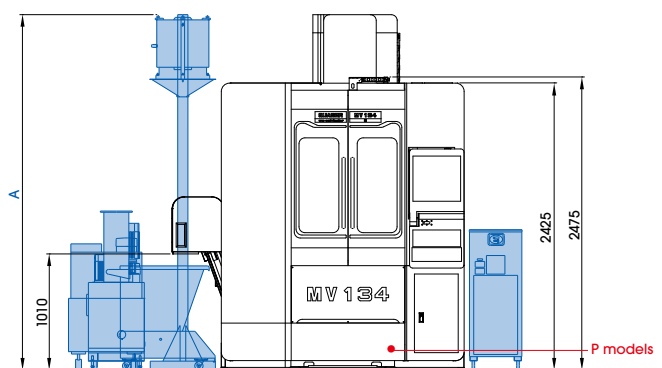
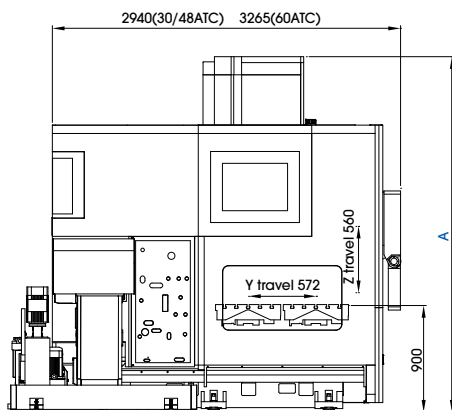
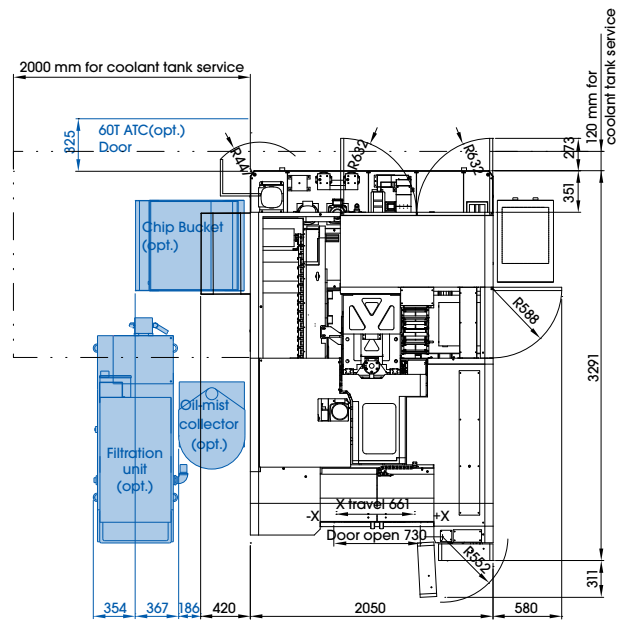


Machine Dimensions

Dimension installation

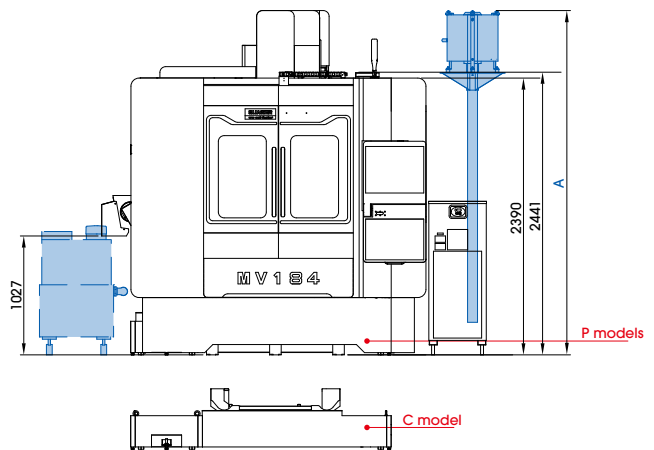
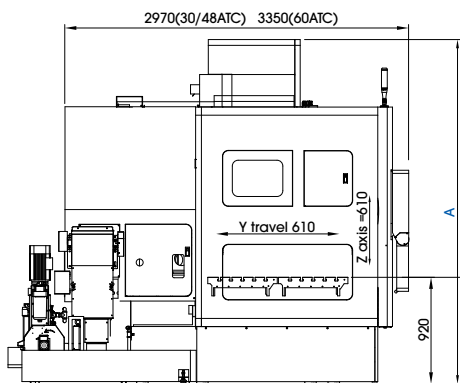
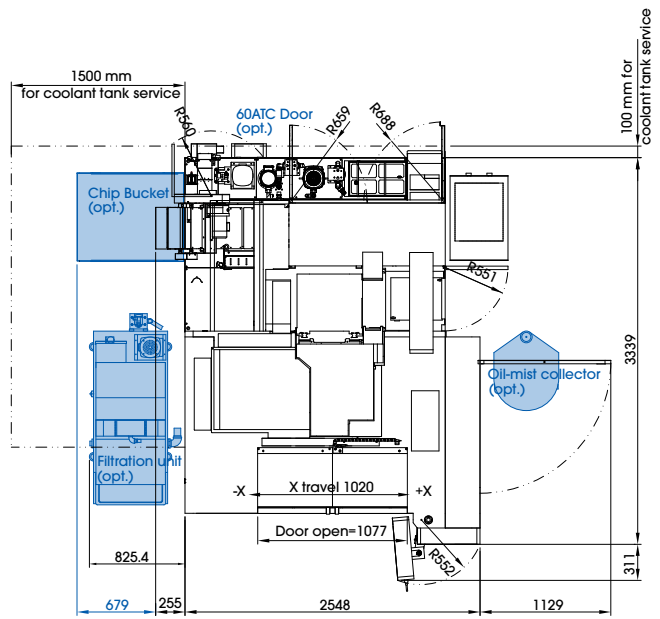
MV134

A	12C/15C/20C	3,005
---	-------------	-------



MV184

A	12C/15C/20C	3,030
---	-------------	-------



Carbon Reduction & Green Power



Quaser in the future will not only dedicate to technology in new field, but also contribute to escalating Cooperate Social Responsibility, such as obtain carbon neutral within 5 years. Instead of urging, we will lead stakeholders to reach the goal together.

We are trying to implement a sustainable economy, build healthy cities with the world, and create a prosperous future.

Business or Citizens, everyone is accountable to save the world.

We would never achieve it without your support.

Let's create a green future and start it from today, everyday!

ISO 9001 / ISO 14001 / ISO 14952-1



QUASER Group



Taichung Taiwan

No.3, Gong 6th Rd., Youshih Industrial Park,
Dajia Dist, Taichung City 43768, Taiwan

www.quaser.com
sales@qmt.com.tw
T +886 4 2682 1277
F +886 4 2682 1266



Jiangsu China

No.503, Building 002, 555 Hengchangjing
Road, Zhoushi Town, Kunshan City, Jiangsu,
P.R. China

qmtc@qmt.com.tw
T 0512 8262 7139
F 0512 8262 7138



Heiligenhaus Germany

Carl-Zeiss-Straße 22, 42579 Heiligenhaus,
Germany

qe@qmt.com.tw
T +49 205 6259 6780
MB +49 160 799 9819



South Carolina USA

3049 Southcross Boulevard, Suite 105 Rock
Hill, South Carolina 29730 USA

sales@winbrogroup.com
T +1 803 985 9481 (Sales)
F +1 888 948 6400 (Service)



Leicestershire UK

Unit 1, Gelders Hall Road, Shepshed
Leicestershire LE12 9NH, UK

sales@winbrogroup.com
T +44 (0)1530 516 000

