

**QUASER**

*we cut faster*

# **MV204C SERIES**

# **MV205C SERIES**

**With . . .**

**X & Y travels increase  
from 1,000 x 600 mm to  
1,200 x 700 mm while the  
floor space requirements  
are the same.**

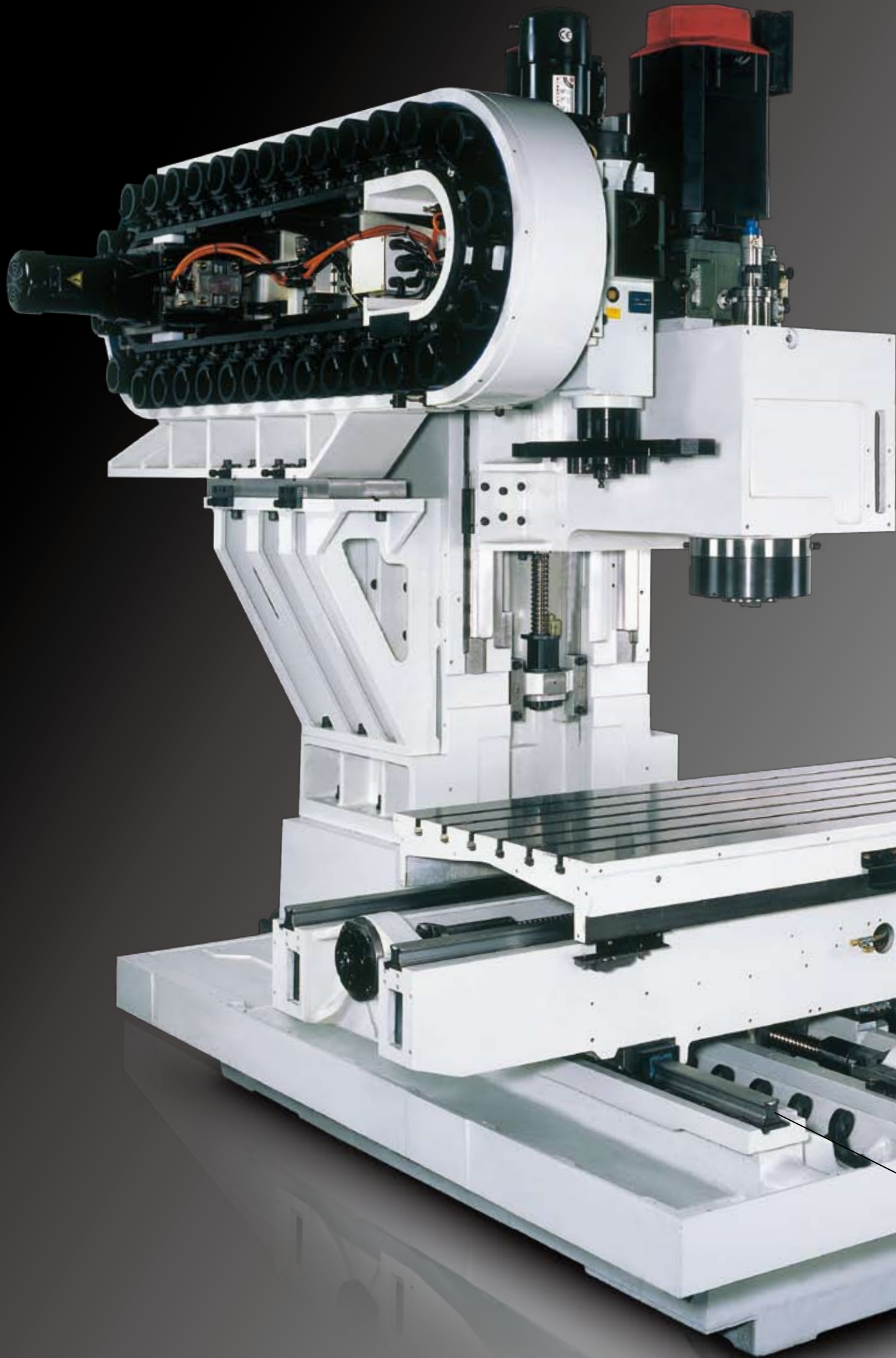


# MV204C

The evolution model of MV204II

(1,245 units built from 1999 to 2008)





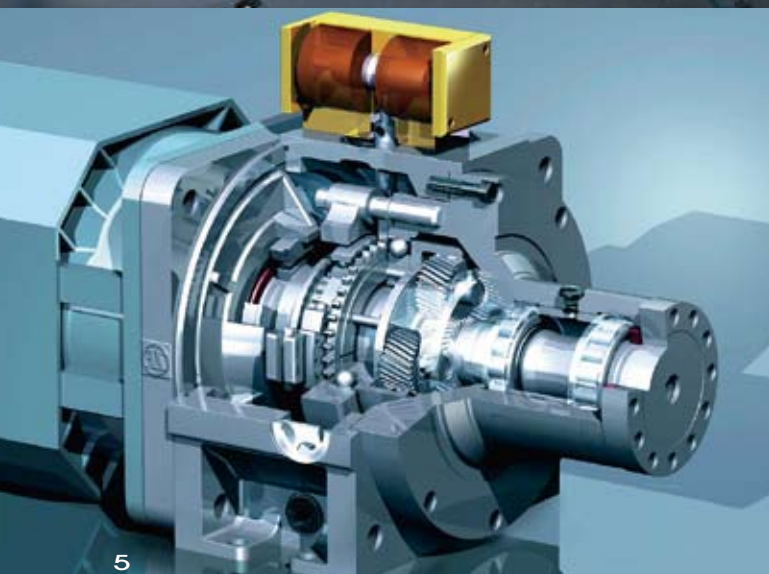
**Very rigid cast iron frame:**


- 1,000 mm Y-spacing
- Anti-deformation (bending & torsion) saddle
- Cross ribs column
- The weight of ATC unit is directly on the machine base





ZF two speeds gear box for NO.50 taper mega torque spindle





**Various spindle systems to meet your requirements; from very affordable NO.40 taper 22 kW, 15,000 min<sup>-1</sup> belt spindle to NO.50 taper mega torque (955Nm) for detail, ref. 「SPINDLE SERIES」**

# 40 Taper



60 ATC

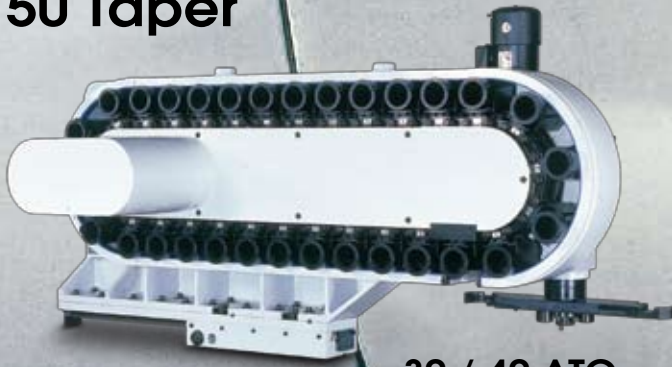


48 ATC



30 ATC

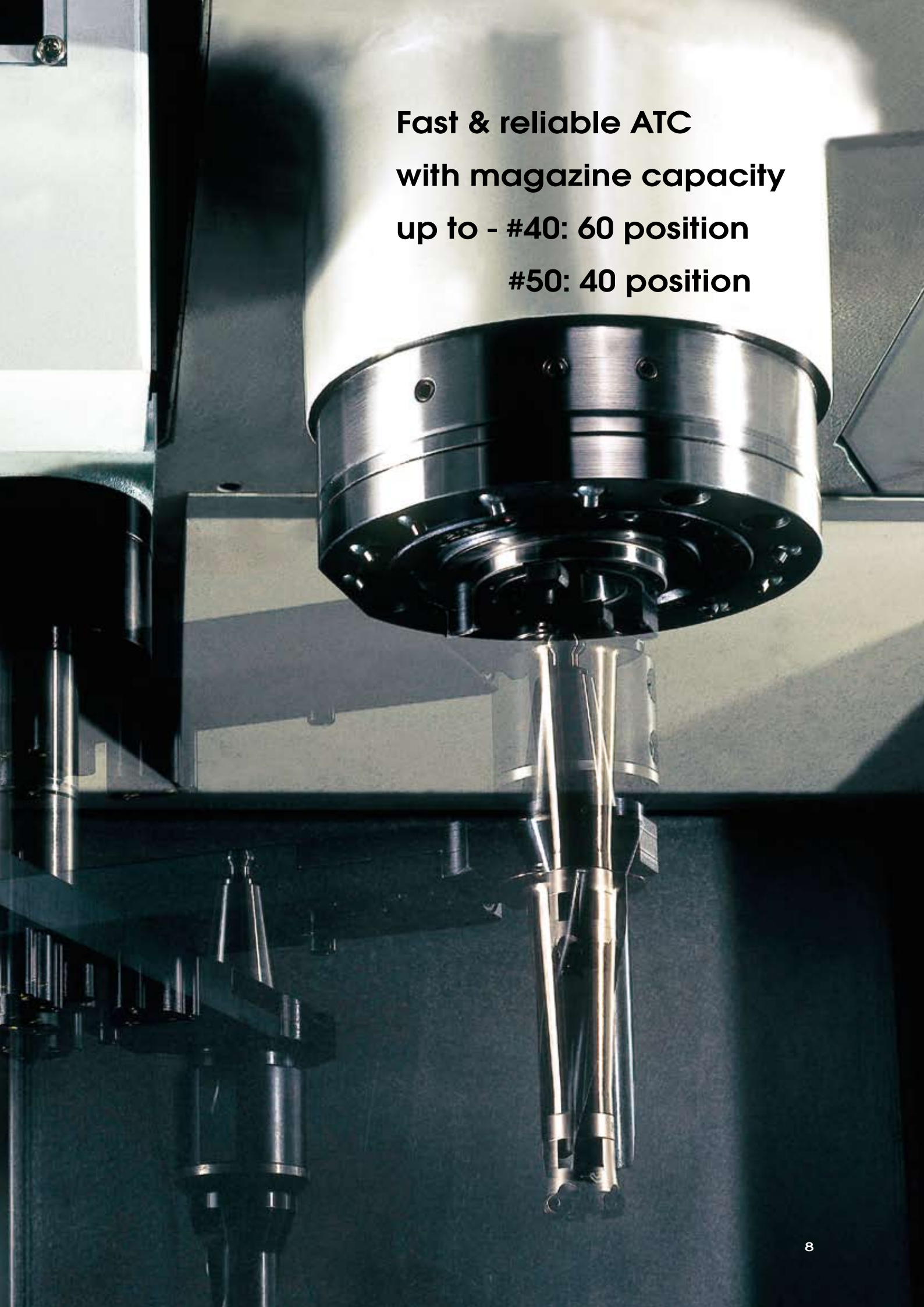
# 50 Taper



30 / 40 ATC



**Fast & reliable ATC  
with magazine capacity  
up to - #40: 60 position  
#50: 40 position**





## Ergonomics . . .

- Operator oriented panel
- View cutting through 3 sides



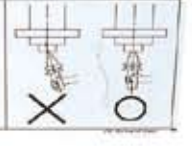
Well organized chip management including the following standards:

- chip augers to the front, large 4 openings & chip conveyers
- 4 bar nozzle coolants
- 4 bar auto flushing on stainless base slopes
- 20 bar T.S.C.
- 600 L tank



Keep hands clear of tool changer  
Tool changer rotates automatically.  
Can cause severe injury.  
Turn off and lock out power at electrical panel before servicing.

Keep hands, clothing and body clear of tool / spindle rotation  
Machine starts and stops automatically  
**SAFETY INSTRUCTION**  
Before working near spindle:  
1. Return all tools to magazine.  
2. Set to manual mode, stop spindle.  
3. Press "Do not touch" sign on operator's panel.  
4. Wear safety glasses.





**LASER**  
cut faster

1,400mm (1,700mm for CPL)

**Easy loading of  
large workpiece**



**MV204**  
CP

195 mm

# QUASER mill i FANUC 18iMB

Black: ●○× MV204CE & MV204CV & MV204CP & MV204CPL & MV205CP & MV205CPL  
 Blue: ●○× MV204CP & MV205CP  
 Red: ●○× MV204CPL & MV205CPL

Technical Data	MV204CE / MV204CV			MV204CP / MV204CPL					MV205CP / MV205CPL	
	Value			Performance					50 Taper	
	/9B	/12B	/15B	/9B	/12B	/15B	/15C	/15D	/7.5B	
<b>Work range</b>										
Table size (mm)	1,400 x 700			1,400 x 700 / 1,700 x 700						
Travel X (mm)	1,200			1,200 / 1,500						
Y (mm)				700						
Z (mm)				610						
Spindle nose to table surface (mm)	150 ~ 760			150 ~ 760					190 ~ 800	
Table load capacity (kg)	1,000			1,800 / 2,000						
<b>Feed drive</b>										
Feed force	X (N)	6,283			11,519					
	Y (N)	6,283			11,519					
	Z (N)	11,519			11,519					
Rapid movement	X / Y / Z (m/min)			36						
Acceleration	X / Y / Z (m/s <sup>2</sup> )			4 / 4 / 4					4 / 4 / 2	
Dia. & pitch of the ball screw										
Ø45 / P = 12 / 12 / 12										
<b>Position accuracy</b>										
In X / Y / Z (mm)										
0.015 / 0.008 (Linear encoder) – ISO 230-2										
0.008 / 0.004 (Linear encoder) - JIS										
<b>Main spindle</b>										
Spindle model	40 Taper								50 Taper	
Spindle taper	BBT40						BBT40 HSK A63		BBT50	
Max. spindle speed	9,000	12,000	15,000	9,000	12,000	15,000	15,000	15,000	7,500	
Spindle base speed	1,125	1,500	1,875	1,125	1,500	1,875	1,400	600	375	
Spindle output kw (S6-40%)	22*			30			22	30	30	
Spindle output torque Nm (S6-40%)	187*	140*	112*	255	191	153	150	350	764	
Spindle transmission	Belt			Belt			Coupling		Gear box	
Spindle diameter (mm)	Ø70								Ø100	
<b>Tool changer</b>										
Tool selection	Random									
Magazine positions	Std.	30			30 / 48					30
	Opt.	48 / 60			48 & 60 / 60					40
Max. tool diameter (mm)	76.2			76.2						125
w/o adjacent tool (mm)				125						200
Max. tool length (mm)				300						350
Max. tool weight (kg)				7						15
CTC time – ISO 10791-9 (sec)	6			5.5						9

Note:\*(S3-25%)



## Main spindle

## Control

40 Taper	Belt spindle	- 9,000 min <sup>-1</sup> & 12,000 min <sup>-1</sup> & 15,000 min <sup>-1</sup>
	Coupling spindle	- 15,000 min <sup>-1</sup>
50 Taper	Gear box	- 7,500 min <sup>-1</sup>

QUASER mill i	(For E type)
FANUC 18iMB	(For V and P type)

Technical Data	MV204CE / MV204CV Value			MV204CP / MV204CPL Performance					MV205CP / MV205CPL 50 Taper	
	/9B	/12B	/15B	/9B	/12B	/15B	/15C	/15D	/7.5B	
<b>Coolant system</b>										
Coolant tank capacity (Liter)	600									
Pump capacity										
- Nozzle coolant	60 L / min, 4 bar									
- Through spindle coolant	25 L / min, 20 bar									
- Wash down	60 L / min, 4 bar									
<b>Machine size</b>										
Height (mm)	2,880			2,950 3,030					3,300 3,370	
Floor space W x D (mm)										
40 Taper	30 ATC	3,675 x 2,615			3,675 x 2,615 / -					-
	48 ATC	3,675 x 2,900			3,675 x 2,900 / 4,475 x 2,900					-
	60 ATC	3,675 x 3,350			3,675 x 3,350 / 4,475 x 3,350					-
50 Taper	30 ATC	-			-					3,675 x 3,050 / 4,475 x 3,050
	40 ATC	-			-					3,675 x 3,650 / 4,475 x 3,650
Weight (kg)	8,500			8,500 - 9,100 / 9,500 - 10,100					9,000 - 9,600 / 10,000 - 10,600	
<b>Connections</b>										
Main power	220 V / 60 Hz or 400 V / 50 Hz									
Power consumption (KVA)	25			35		35		45	40	

● = Standard ○ = Option ✕ = N / A

Standard / option accessories	MV204CE / MV204CV			MV204CP / MV204CPL					MV205CP / MV205CPL
	/9B	/12B	/15B	/9B	/12B	/15B	/15C	/15D	/7.5B
■ QUASER mill i for MV204CE only	●	●	●	✕	✕	✕	✕	✕	✕
■ FANUC 18iMB	●	●	●	●	●	●	●	●	●
■ FANUC 3 "O" package 18iMB + RISC, Data servo, AI nano HPCC	✕/○	✕/○	✕/○	○	○	○	○	○	○
■ Belt spindle 9,000 / 12,000 / 15,000 min <sup>-1</sup>	●	●	●	●	●	●	✕	✕	✕
■ Coupling spindle 15,000 min <sup>-1</sup>	✕	✕	✕	✕	✕	✕	●	●	✕
■ Gear box spindle 7,500 min <sup>-1</sup>	✕	✕	✕	✕	✕	✕	✕	✕	●
■ 40 Taper 30 position tool magazine	●	●	●	●✕	●✕	●✕	●✕	●✕	✕
■ 40 Taper 48 position tool magazine	○	○	○	○●	○●	○●	○●	○●	✕
■ 40 Taper 60 position tool magazine	○	○	○	○	○	○	○	○	✕
■ 50 Taper 30 position tool magazine	✕	✕	✕	✕	✕	✕	✕	✕	●
■ 50 Taper 40 position tool magazine	✕	✕	✕	✕	✕	✕	✕	✕	○
■ ATC auto door	○	○	○	○	○	○	○	○	○
■ Linear encoder absolute 0.05 μm	○	○	○	○	○	○	○	○	○
■ Remote manual pulse generator	●	●	●	●	●	●	●	●	●
■ Spindle ECO cooler	●	●	✕	●	●	✕	✕	✕	✕
■ Spindle oil chiller	○	○	○	○	○	●	●	●	●
■ 4th axis preparation	●	●	●	●	●	●	●	●	●
■ Coolant system	●	●	●	●	●	●	●	●	●
■ 20 bar through spindle coolant	●	●	●	●	●	●	●	●	●
■ 50 bar through spindle coolant	○	○	○	○	○	○	○	○	○
■ Coolant wash gun	●	●	●	●	●	●	●	●	●
■ Chip conveyor	Scrape type			●	●	●	●	●	●
	Hinge type			○	○	○	○	○	○
■ Cutter air blast	●	●	●	●	●	●	●	●	●
■ Mist collector	○	○	○	○	○	○	○	○	○
■ Probe	○	○	○	○	○	○	○	○	○
■ Work light	●	●	●	●	●	●	●	●	●
■ Machine status light	●	●	●	●	●	●	●	●	●
■ CE & EMC	●	●	●	●	●	●	●	●	●

# HEIDENHAIN iTNC530

Black: ●○× MV204CV & MV204CP & MV204CPL & MV205CP & MV205CPL  
 Blue: ●○× MV204CP & MV205CP  
 Red: ●○× MV204CPL & MV205CPL

Technical Data	MV204CV			MV204CP / MV204CPL						MV205CP / MV205CPL		
	Value			Performance						50 Taper		
	/9B	/12B	/15B	/9B	/12B	/15B	/15C	/15M	/25M	/7.5B		
<b>Work range</b>												
Table size (mm)	1,400 x 700			1,400 x 700 / 1,700 x 700								
Travel X (mm)	1,200			1,200 / 1,500								
Y (mm)				700								
Z (mm)				610								
Spindle nose to table surface (mm)	150 ~ 760			150 ~ 760						190 ~ 800		
Table load capacity (kg)	1,000			1,800 / 2,000								
<b>Feed drive</b>												
Feed force	X (N)	9,268			11,310							
	Y (N)	9,268			11,310							
	Z (N)	13,666			19,897							
Rapid movement	X / Y / Z (m/min)	32			36							
Acceleration	X / Y / Z (m/s <sup>2</sup> )	4 / 3 / 4			5 / 5 / 4 4 / 4 / 4							
Dia. & pitch of the ball screw	Ø45 / P = 12 / 12 / 12											
<b>Position accuracy</b>												
In X / Y / Z (mm)	0.015 / 0.008 (Linear encoder) - ISO 230-2 0.008 / 0.004 (Linear encoder) - JIS											
<b>Main spindle</b>												
Spindle model	40 Taper								50 Taper			
Spindle taper	BBT40						BBT40 HSK A63	BBT40	HSK A63	BBT50		
Max. spindle speed	9,000	12,000	15,000	9,000	12,000	15,000	15,000	15,000	25,000	7,500		
Spindle base speed	1,125	1,500	1,875	1,125	1,500	1,875	1,500	2,000	5,880	375		
Spindle output kw (S6-40%)	25			30			25	36(42)*	51(61)*	30		
Spindle output torque Nm (S6-40%)	212	159	127	255	191	153	159	172(201)*	81(97)*	764		
Spindle transmission	Belt			Belt			Coupling	Motor spindle		Gear box		
Spindle diameter (mm)	Ø70								Ø65	Ø100		
<b>Tool changer</b>												
Tool selection	Random											
Magazine positions	Std.	30			30 / 48						30	
	Opt.	48 / 60			48 & 60 / 60						40	
Max. tool diameter (mm)	76.2			76.2						125		
w/o adjacent tool (mm)	125						75		200			
Max. tool length (mm)	300						200		350			
Max. tool weight (kg)	7						4.5		15			
CTC time – ISO 10791-9 (sec)	6			5.5				8		9		

Note:\*(S6-25%)

## Main spindle

## Control

40 Taper	Belt spindle	- 9,000 min <sup>-1</sup> & 12,000 min <sup>-1</sup> & 15,000 min <sup>-1</sup>	HEIDENHAN iTNC 530
	Coupling spindle	- 15,000 min <sup>-1</sup>	
	Motor spindle	- 15,000 min <sup>-1</sup> & 25,000 min <sup>-1</sup>	
50 Taper	Gear box	- 7,500 min <sup>-1</sup>	

Technical Data	MV204CV			MV204CP / MV204CPL					MV205CP / MV205CPL		
	Value			Performance					50 Taper		
	/9B	/12B	/15B	/9B	/12B	/15B	/15C	/15M	/25M	/7.5B	
<b>Coolant system</b>											
Coolant tank capacity (Liter)	600										
Pump capacity											
- Nozzle coolant	60 L / min, 4 bar										
- Through spindle coolant	25 L / min, 20 bar										
- Wash down	60 L / min, 4 bar										
<b>Machine size</b>											
Height (mm)	2,880			2,950					3,300		
Floor space W x D (mm)				3,030					3,370		
40 Taper	30 ATC	3,675 x 2,615			3,675 x 2,615 / -					-	
	48 ATC	3,675 x 2,900			3,675 x 2,900 / 4,475 x 2,900					-	
	60 ATC	3,675 x 3,350			3,675 x 3,350 / 4,475 x 3,350					-	
50 Taper	30 ATC	-			-					3,675 x 3,050 / 4,475 x 3,050	
	40 ATC	-			-					3,675 x 3,650 / 4,475 x 3,650	
Weight (kg)	8,500			8,500 - 9,100 / 9,500 - 10,100					9,000 - 9,600 / 10,000 - 10,600		
<b>Connections</b>											
Main power	220 V / 60 Hz or 400 V / 50 Hz										
Power consumption (KVA)	25			35		45		55		40	

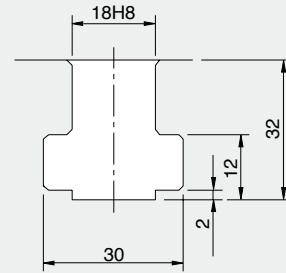
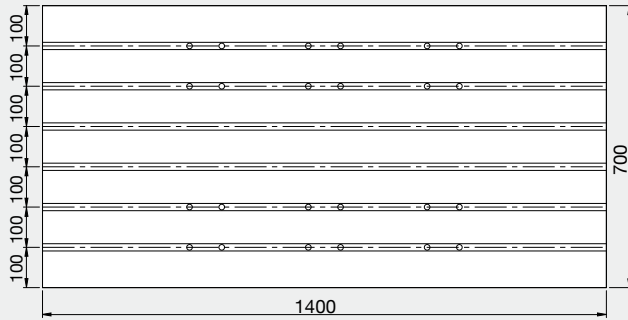
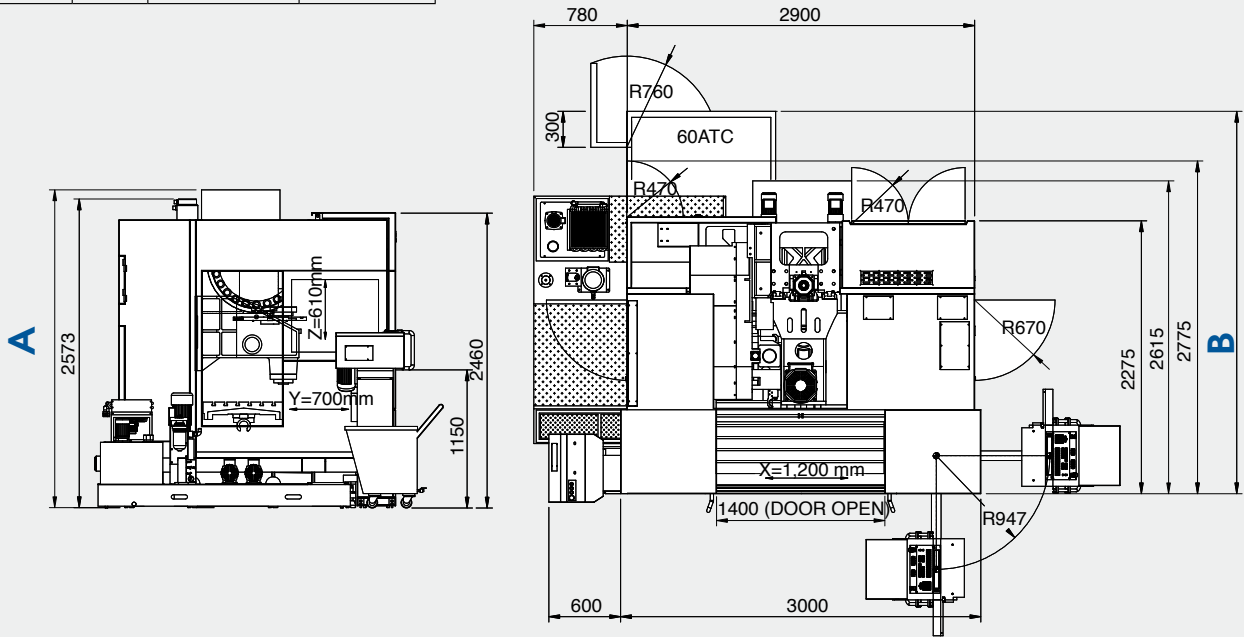
● = Standard ○ = Option ✕ = N / A

Standard / option accessories	MV204CV			MV204CP / MV204CPL					MV205CP / MV205CPL	
	/9B	/12B	/15B	/9B	/12B	/15B	/15C	/15M	/25M	/7.5B
■ HEIDENHAIN iTNC530	●	●	●	●	●	●	●	●	●	●
■ HEIDENHAIN option 2	○	○	○	○	○	○	○	○	○	○
■ Belt spindle 9,000 / 12,000 / 15,000 min <sup>-1</sup>	●	●	●	●	●	●	✕	✕	✕	✕
■ Coupling spindle 15,000 min <sup>-1</sup>	✕	✕	✕	✕	✕	✕	●	✕	✕	✕
■ Motor spindle 15,000 / 25,000 min <sup>-1</sup>	✕	✕	✕	✕	✕	✕	✕	●	●	✕
■ Gear box spindle 7,500 min <sup>-1</sup>	✕	✕	✕	✕	✕	✕	✕	✕	✕	●
■ 40 Taper 30 position tool magazine	●	●	●	●✕	●✕	●✕	●✕	●✕	●✕	✕
■ 40 Taper 48 position tool magazine	○	○	○	○●	○●	○●	○●	○●	○●	✕
■ 40 Taper 60 position tool magazine	○	○	○	○	○	○	○	○	○	✕
■ 50 Taper 30 position tool magazine	✕	✕	✕	✕	✕	✕	✕	✕	✕	●
■ 50 Taper 40 position tool magazine	✕	✕	✕	✕	✕	✕	✕	✕	✕	○
■ ATC auto door	○	○	○	○	○	○	○	○	○	○
■ Linear encoder absolute 0.05 μm	○	○	○	○	○	○	○	○	○	○
■ Remote manual pulse generator	●	●	●	●	●	●	●	●	●	●
■ Spindle ECO cooler	●	●	✕	●	●	✕	✕	✕	✕	✕
■ Spindle oil chiller	○	○	●	○	○	●	●	●	●	●
■ 4th axis preparation	●	●	●	●	●	●	●	●	●	●
■ Coolant system	●	●	●	●	●	●	●	●	●	●
■ 20 bar through spindle coolant	●	●	●	●	●	●	●	●	●	●
■ 50 bar through spindle coolant	○	○	○	○	○	○	○	○	○	○
■ Coolant wash gun	●	●	●	●	●	●	●	●	●	●
■ Chip conveyor	Scrape type		●	●	●	●	●	●	●	●
	Hinge type		○	○	○	○	○	○	○	○
■ Cutter air blast	●	●	●	●	●	●	●	●	●	●
■ Mist collector	○	○	○	○	○	○	○	○	○	○
■ Probe	○	○	○	○	○	○	○	○	○	○
■ Work light	●	●	●	●	●	●	●	●	●	●
■ Machine status light	●	●	●	●	●	●	●	●	●	●
■ CE & EMC	●	●	●	●	●	●	●	●	●	●

# MV204C & MV205C Series

<b>A</b>	E&V	9B / 12B / 15B	2,950
	P	9B	
		12B	
		15B	
		15C / 15D	
		15M / 25M	
	7.5B	3,300	

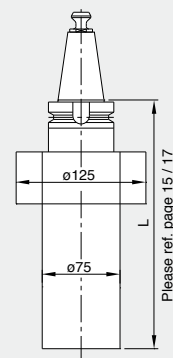
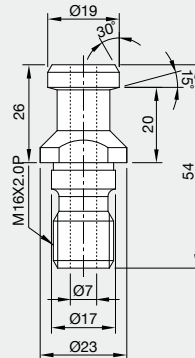
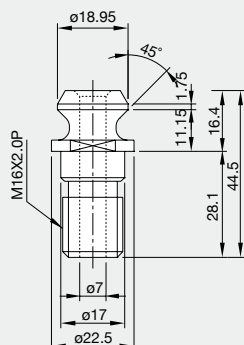
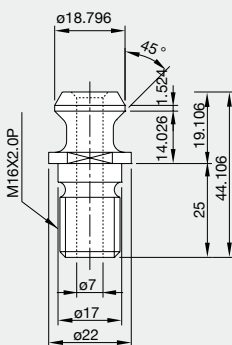
<b>B</b>	40Taper		50Taper	
	30ATC	2,615	30ATC	3,050
	48ATC	2,900	40ATC	3,650
	60ATC	3,350		



BT 40 (QUASER SUPPLY)

ISO (7388-B)

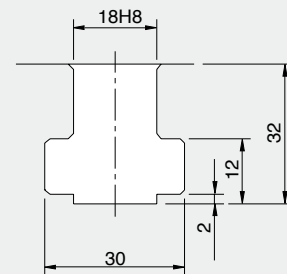
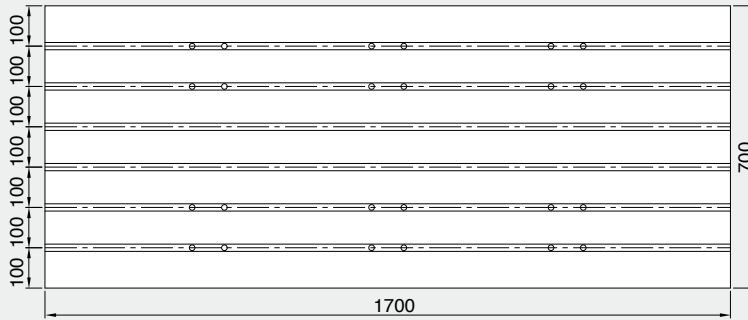
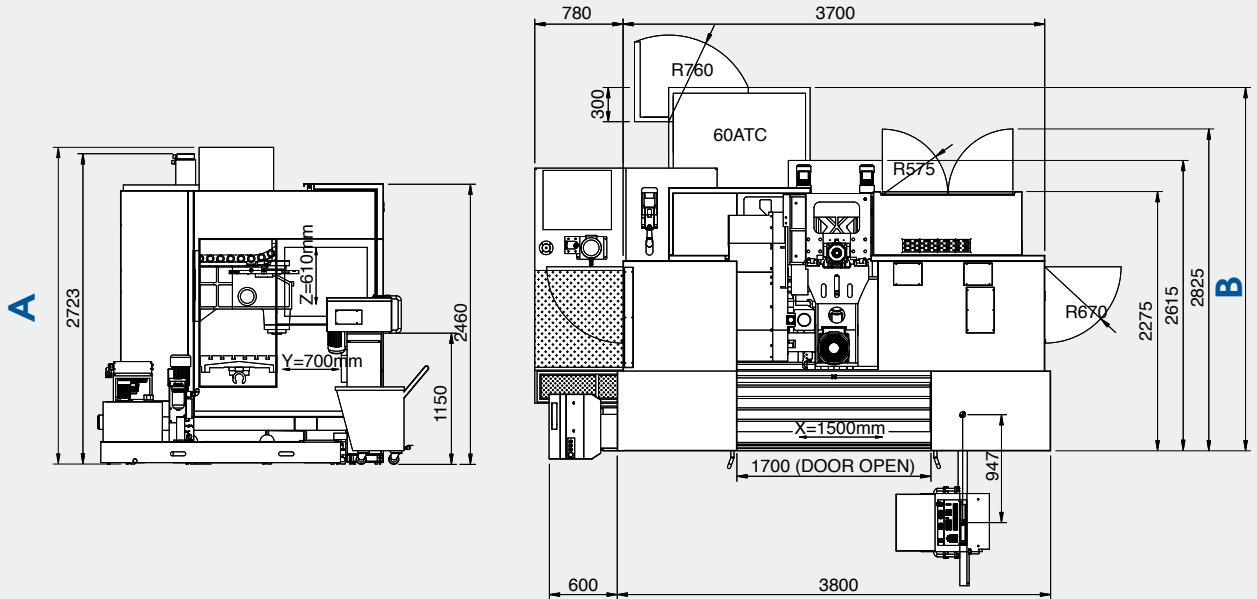
DIN (69872-A)



# MV204CL & MV205CL Series

<b>A</b>	PL	9B	3,030
		12B	
		15B	
		15C / 15D	
		15M / 25M	3,370
7.5B			

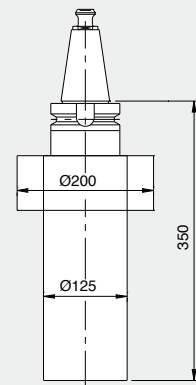
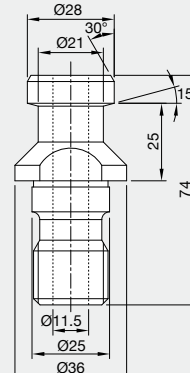
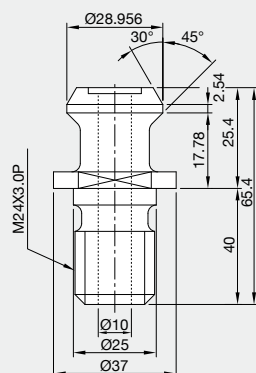
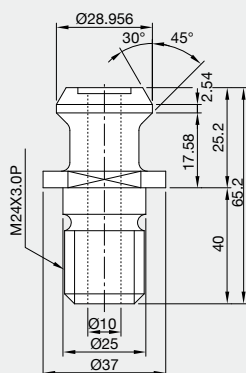
<b>B</b>	40Taper		50Taper	
	48ATC	2,900	30ATC	3,050
	60ATC	3,350	40ATC	3,650



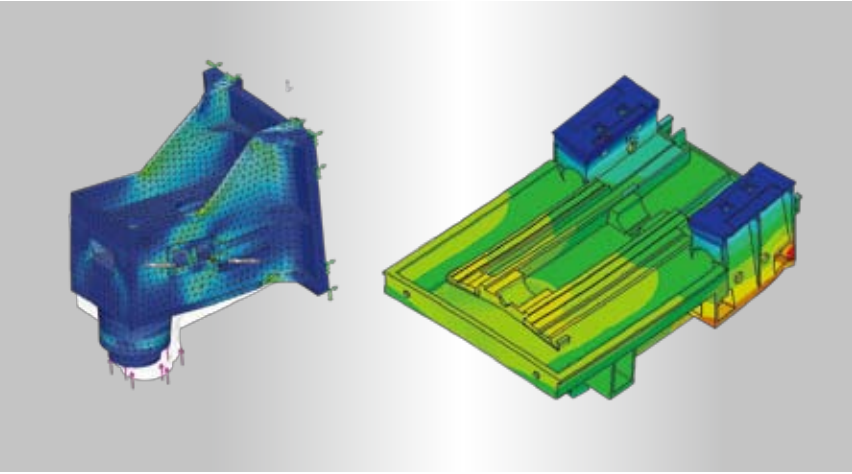
BT 50 (QUASER SUPPLY)

ISO (7388-B)

DIN (69872-A)



We build machines in a hybrid way -



**very classic craftsmanship combined with most advanced modern equipments in a clean environment...**





[www.quaser.com](http://www.quaser.com)

**Fold here for filing!**

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