

QUASER

we cut faster

MV154APC series

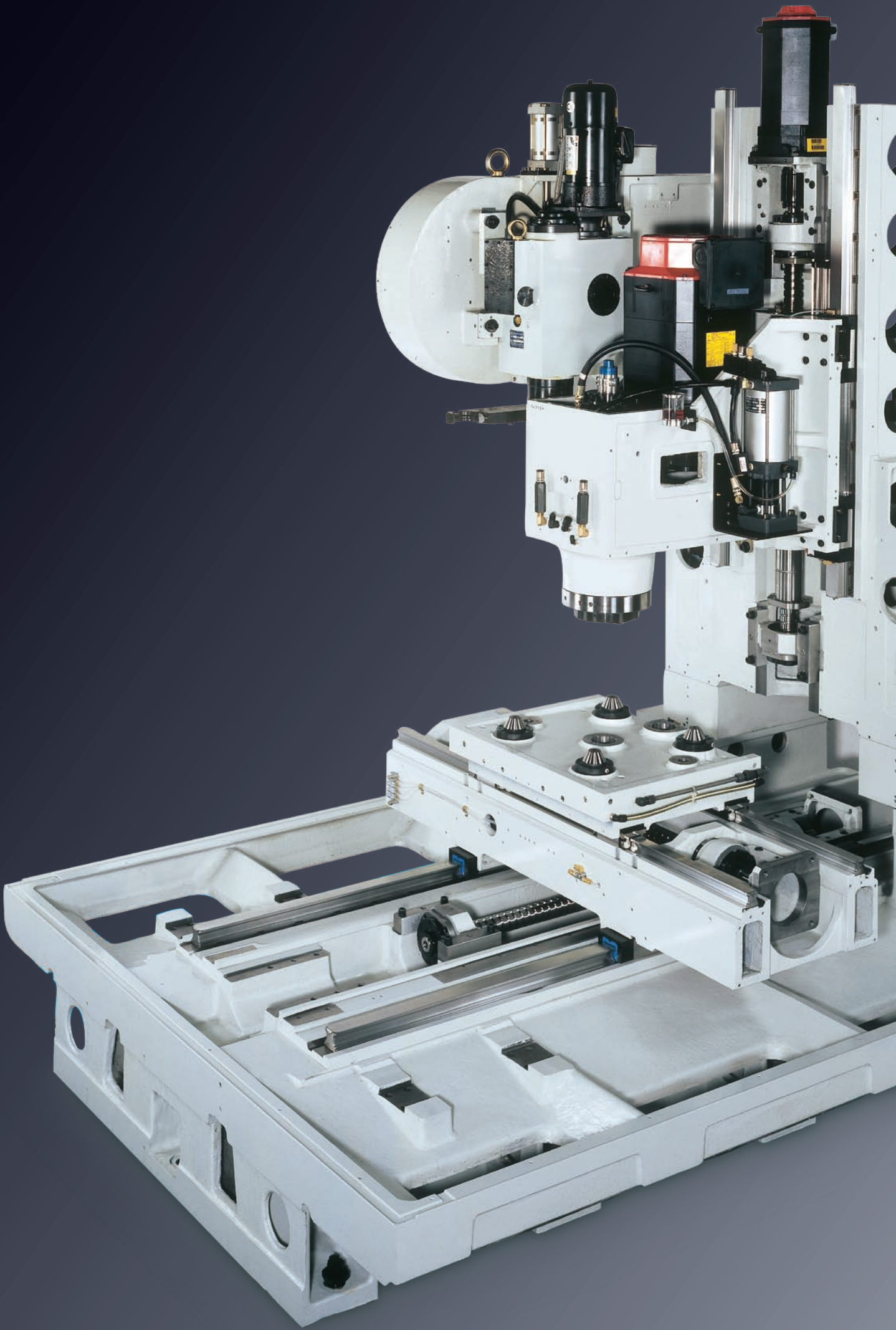




High speed VMC with
automatic pallet changer
for series production



(Front stainless steel for /HS model only)



One piece base and rigid frame structure to meet 60 m/min rapid with 1 G acc/dec.
Large tool capacity up to 60 (120 under development)



HIGH PRODUCTIVITY M / C

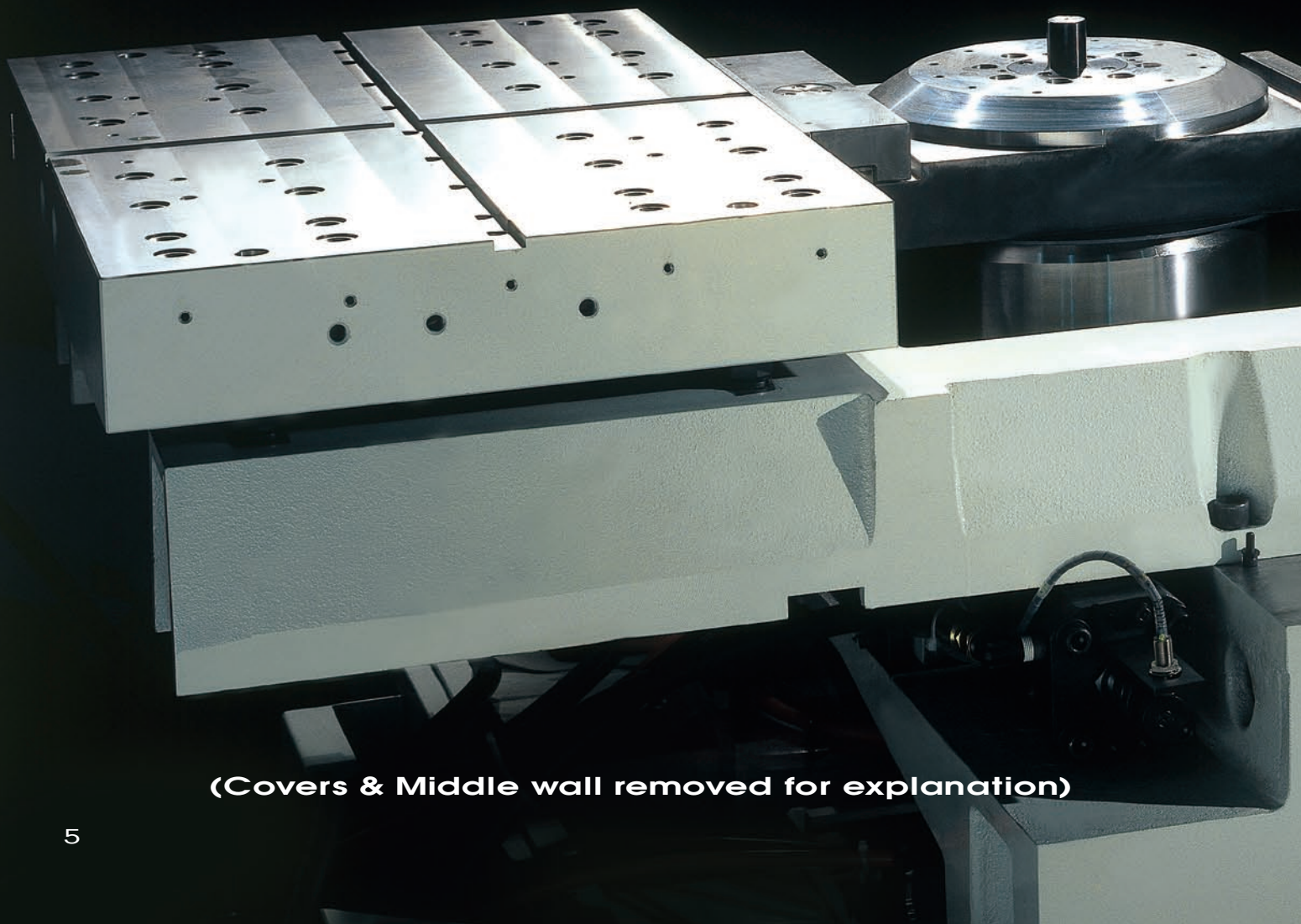
Rapid : 60 m/min

Axes acc / dec : 10 / 10 / 8 m/s²

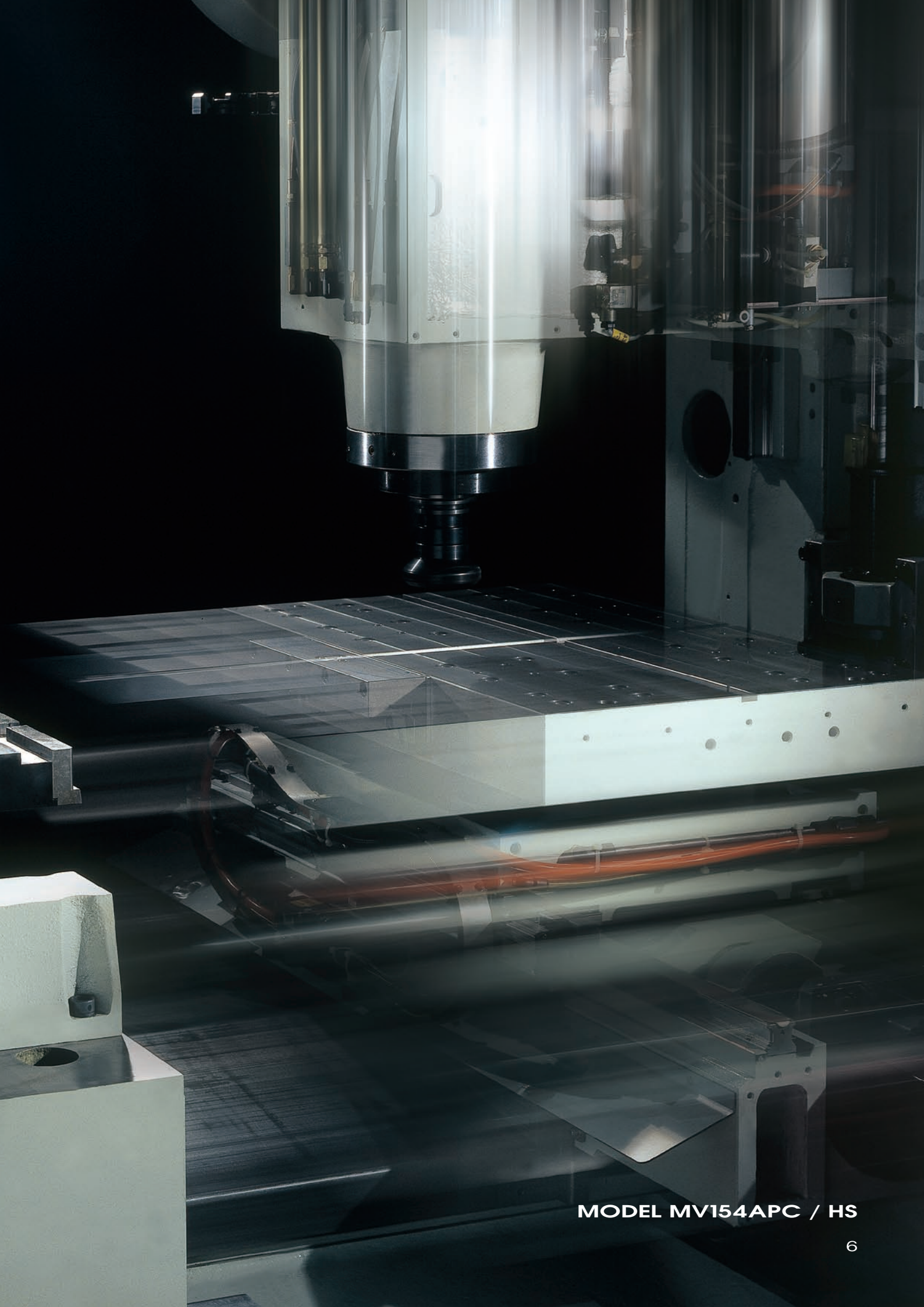
Chip to chip : 2.9 sec

Spindle 0~15,000 min⁻¹ : 2.9 sec

Magazine rotation #1~#31 : 9.8 sec

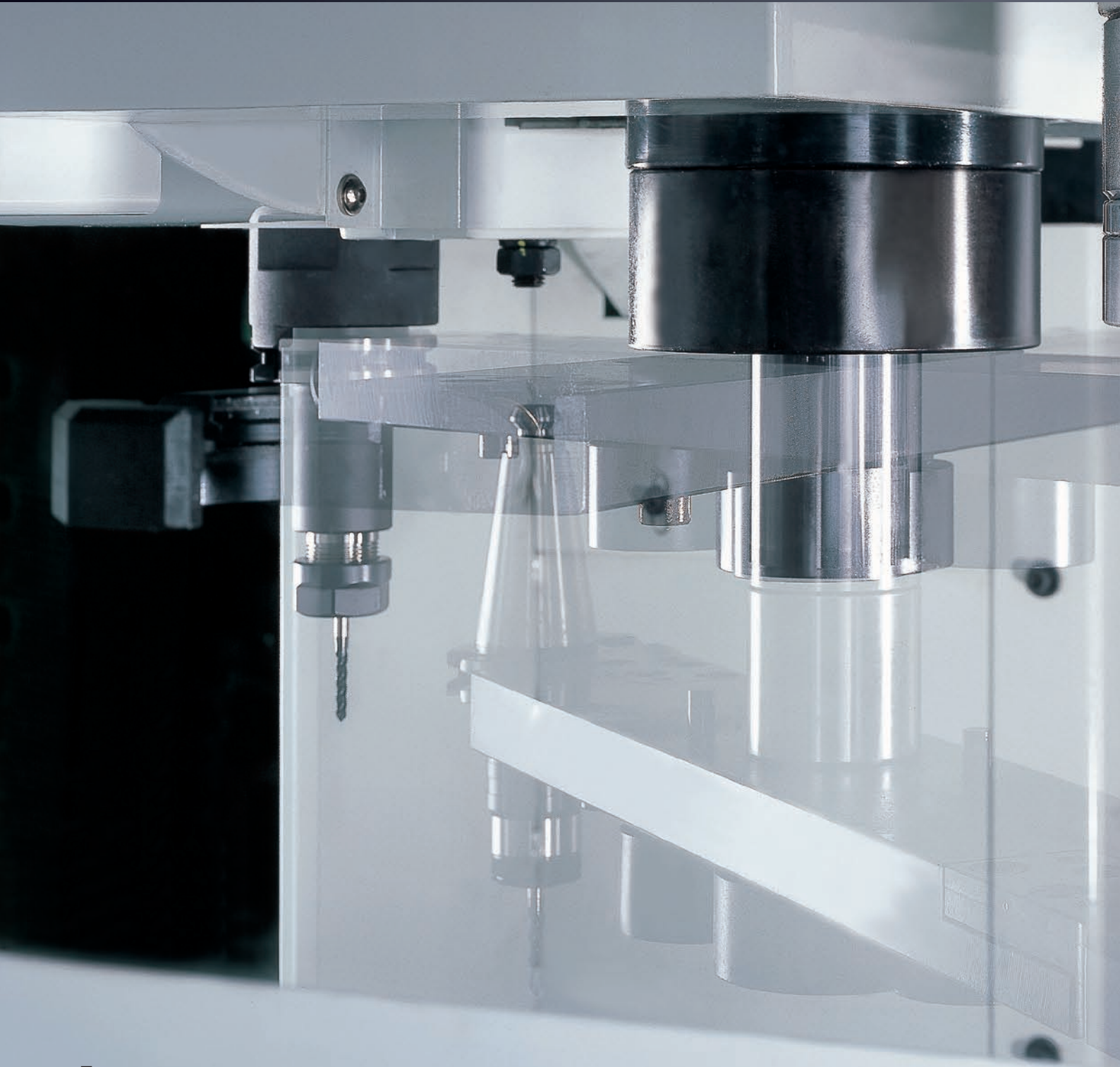


(Covers & Middle wall removed for explanation)



MODEL MV154APC / HS

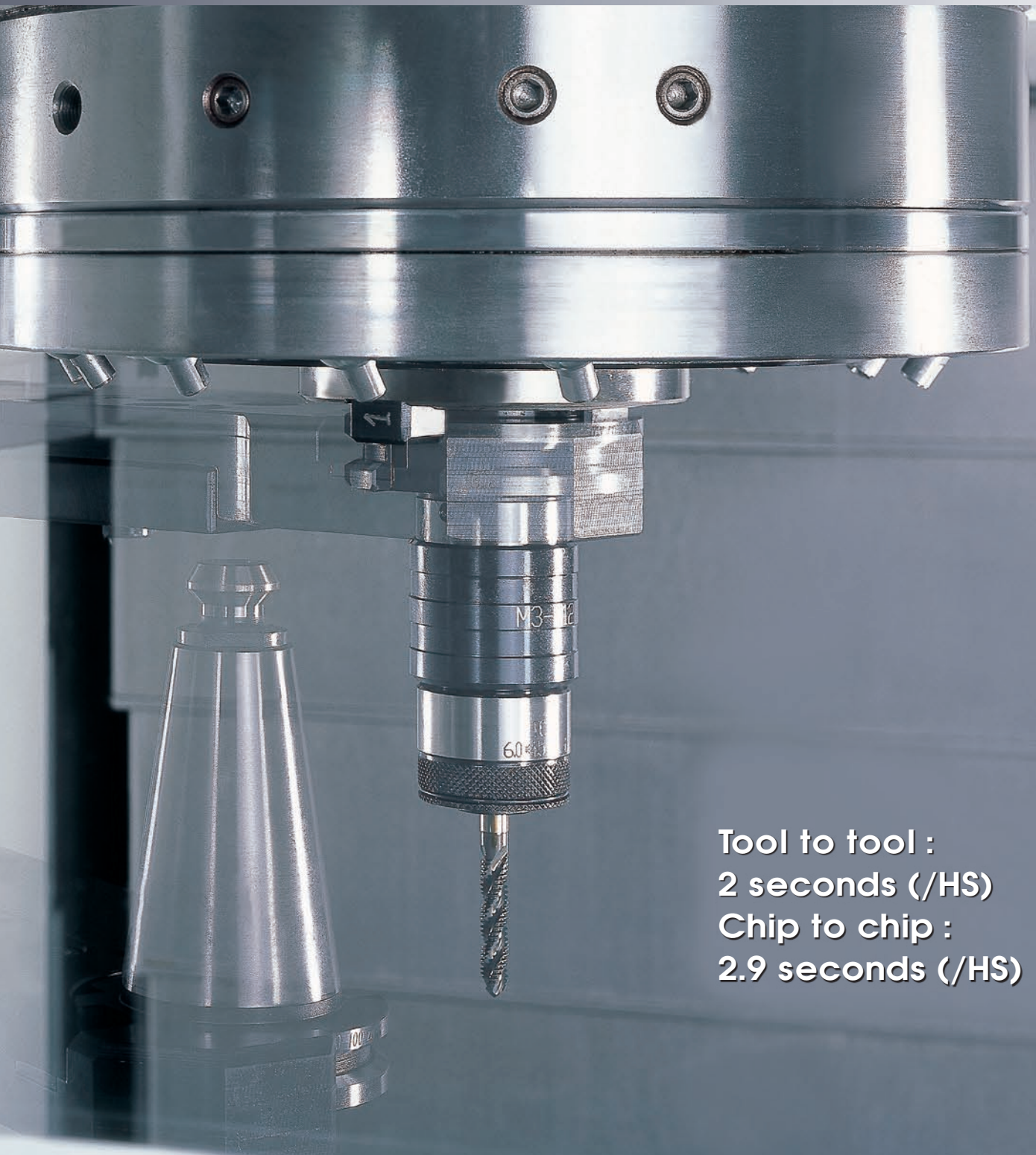
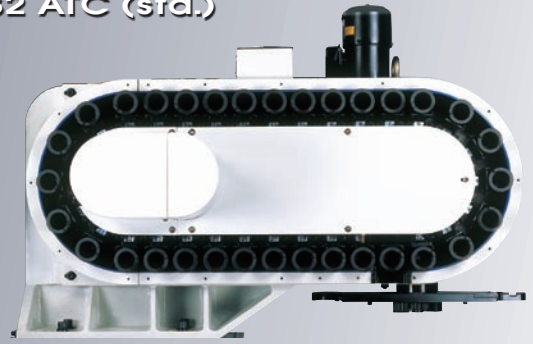
60 ATC (opt.)



48 ATC (opt.)



32 ATC (std.)

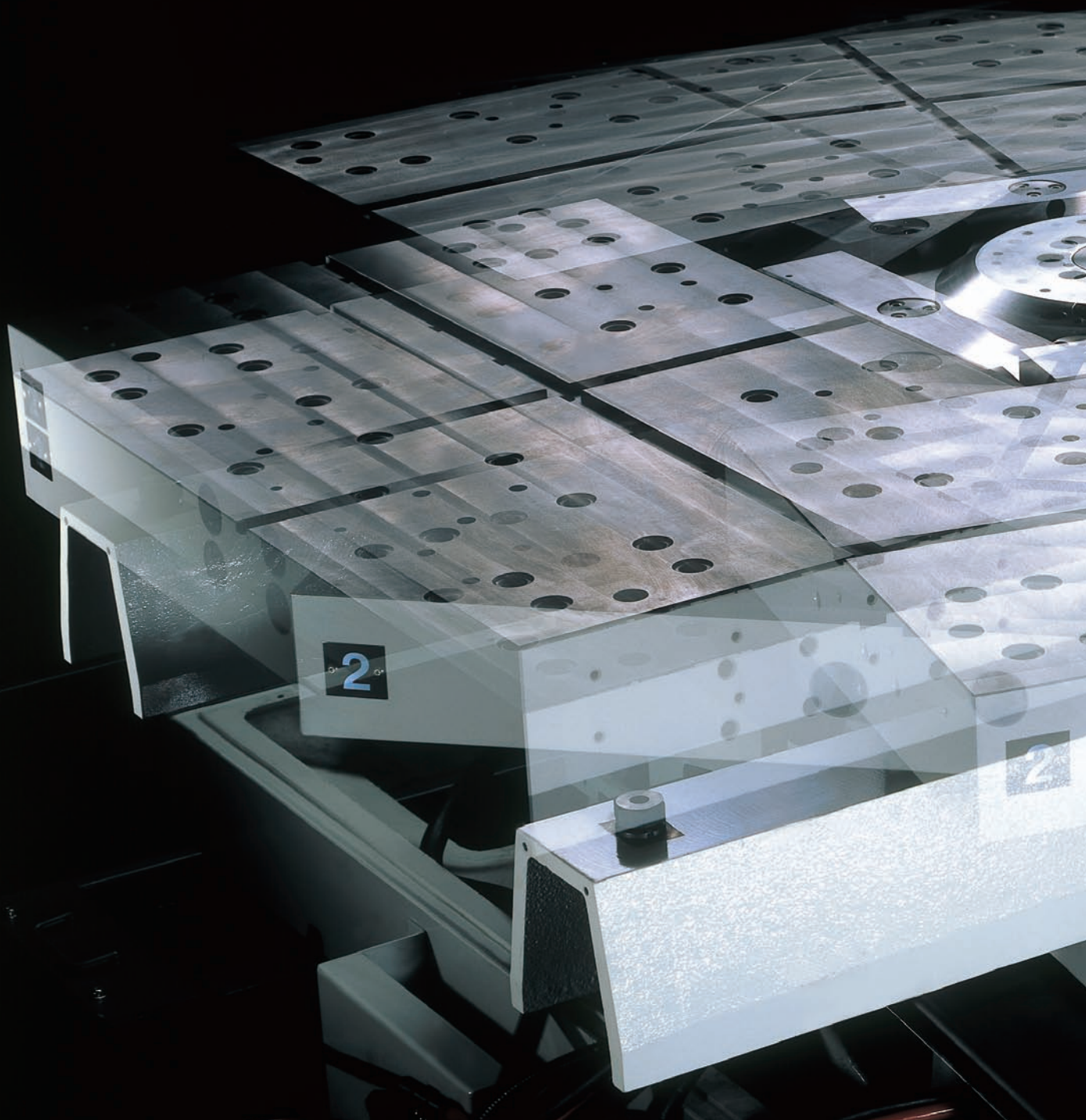


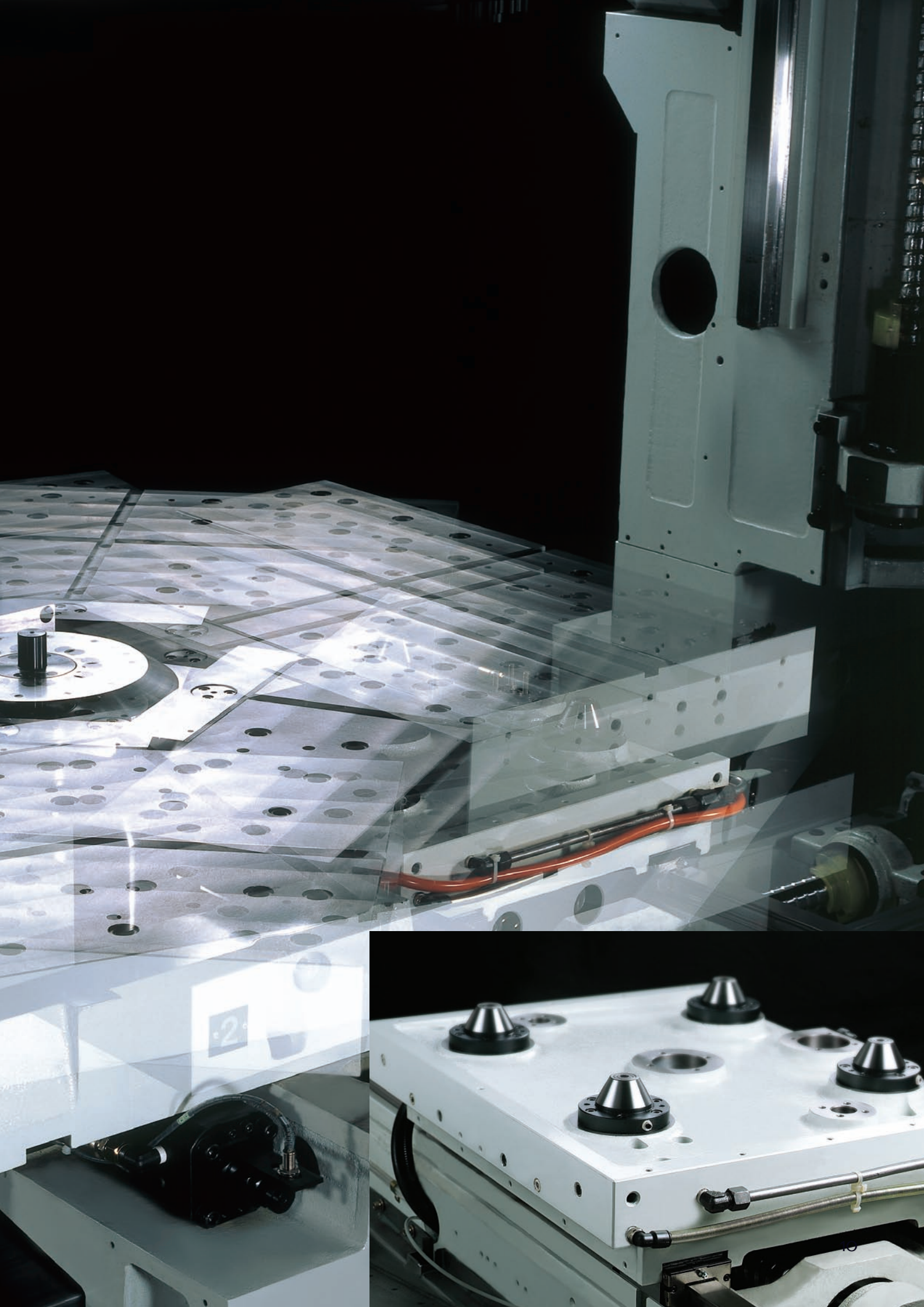
Tool to tool :
2 seconds (/HS)
Chip to chip :
2.9 seconds (/HS)

45,000 N hydraulic clamping force through four taper cones which use the same mechanism from our long proven horizontal center.

Special cares against swarfs have been built-in include:

- **Air blasting at cones connection**
- **Air pressure monitor against swarf envision**

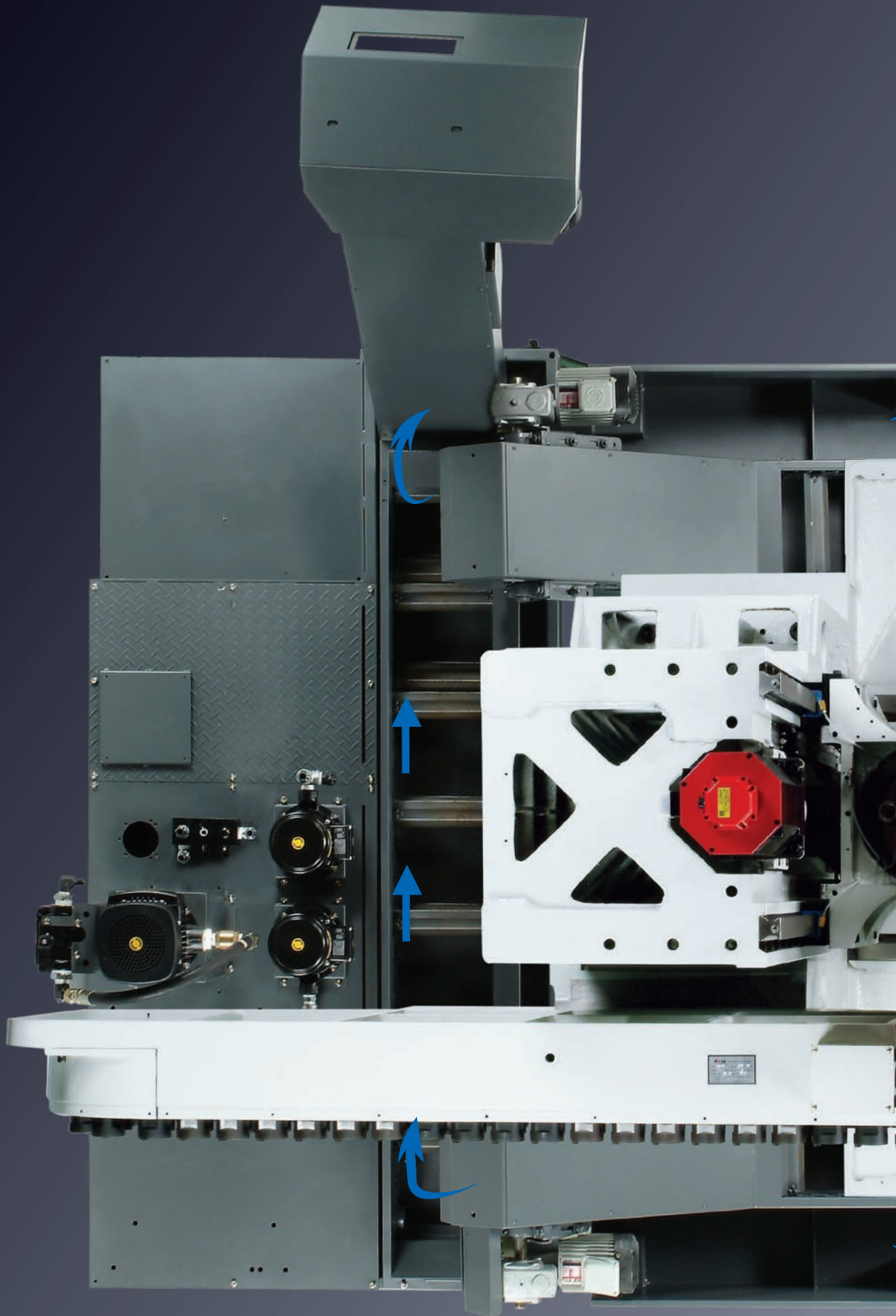




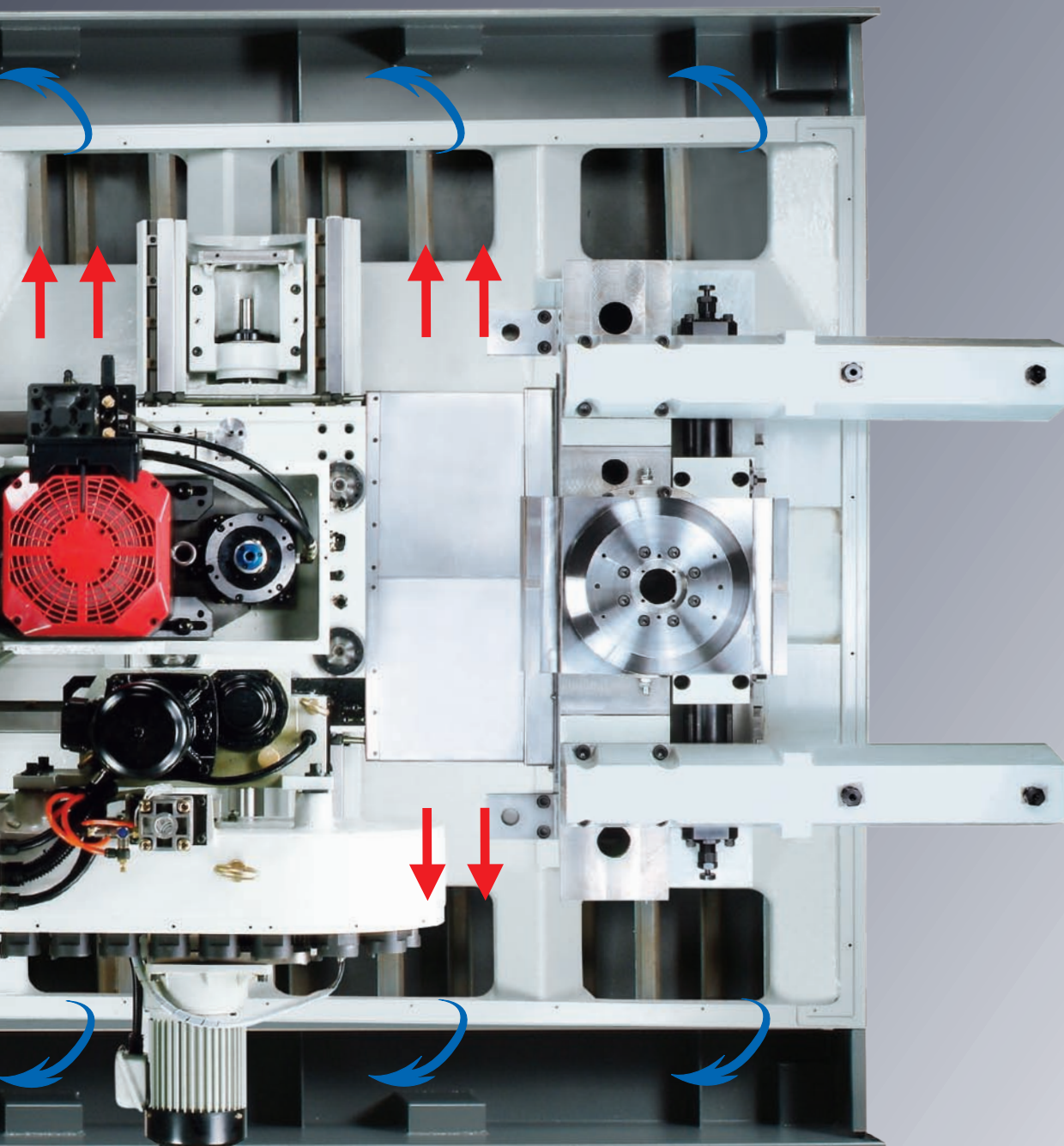




Large side operation door offers easy workpiece & tool checking;
The 920 mm width loading / unloading doors with top free design for heavy work piece.



Dual side conveyors + main conveyor at the back for large volume swarf management.



MV154 APC series

Technical data

Models

Economic	Performance	Super high speed
MV154APC/E	MV154APC/P	MV154APC/HS

Technical Data	MV154APC/E	MV154APC/P	MV154APC/HS	
	Economic	Performance	Super high speed	
Work range	800 x 500			
Table size (mm)	800 x 500			
Travel	X (mm)	700		
	Y (mm)	500		
	Z (mm)	560		
Spindle nose to table surface (mm)	150 ~ 710			
Max. work piece size X / Y / Z (mm)	800 x 500 x 320			
Table load capacity (kg)	250			
Feed force	X (N)	4,189	4,712	6,912
	Y (N)	6,283	8,639	9,425
	Z (N)	11,519	11,519	9,425
Rapid movement X / Y / Z (mm/min.)	32	40	60	
Acceleration X / Y / Z (m/s ²)	3 / 3 / 5	5 / 5 / 5	10 / 10 / 8	
	α -8i / 12i / 22i	α -12i / 22i / 22i	α -22i / 30i / 30i	
Dia. & pitch of the ball screw	ϕ 45 / P=12 / 12 / 12	ϕ 45 / P=16 / 16 / 12	ϕ 45 / P=20 / 20 / 20	
Position accuracy	0.015 / 0.008		-	
ISO 230-2 / JIS	w/o scale	0.008 / 0.004		
	w scale			
Main spindle	BBT 40			
Spindle taper	BBT 40			
Max. spindle speed	12,000	12,000 / 15,000**	15,000	
Spindle base speed	1,500	1,500 / 1,875**	1,500	
Spindle output kW (S6-40%)	15	18.5 / 22**	22	
Spindle output torque Nm (S6-40%)	96	118 / 112**	150	
Spindle transmission	Belt	Belt	Coupling	
Motor type	α -12 / 12000i	α -15 / 12000i	α -T15 / 15000i	
Spindle diameter (mm)	ϕ 70	ϕ 70	ϕ 70	
Tool changer	Random			
Tool selection	Random			
Magazine positions	32 (48 / 60)			
Max. tool diameter (mm)	75			
<w/o adjacent tool (mm)	125			
Max. tool length (mm)	280			
Max. tool weight (kg)	7			
CTC time - ISO 10791-9 (sec.)	5	4	2.9	
Pallet changer	2			
Number of pallet	2			
APC method	Swing type			
APC cycle time (sec)	10*			

Main spindle

Belt spindle -9,000 min⁻¹, 12,000 min⁻¹ & 15,000 min^{-1**}
 Coupling spindle -15,000 min⁻¹

Control

(F) : FANUC OiM-C (For E type)
 18iM-B (For P & HS type)

Technical Data	MV154APC/E	MV154APC/P	MV154APC/HS
	Economic	Performance	Super high speed
Coolant system	500		
Coolant tank capacity (Liter)	500		
Pump capacity - Nozzle coolant	60 L / min., 2.0 bar		
- Through spindle coolant	25 L / min., 20 bar		
- Wash down	60 L / min., 2.0 bar		
Machine size			
Height (mm)	2,760		3,061
Shipping height (mm)	2,470		
Floor space W x D (mm)	2,710 x 3,980		
Weight (kg)	8,500		
Connections	220V / 60 Hz, 400 V / 50 Hz		
Main power	220V / 60 Hz, 400 V / 50 Hz		
Power consumption (KVA)	25	30	35

● = Standard ○ = Option × = N / A

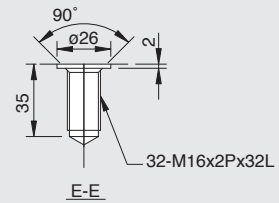
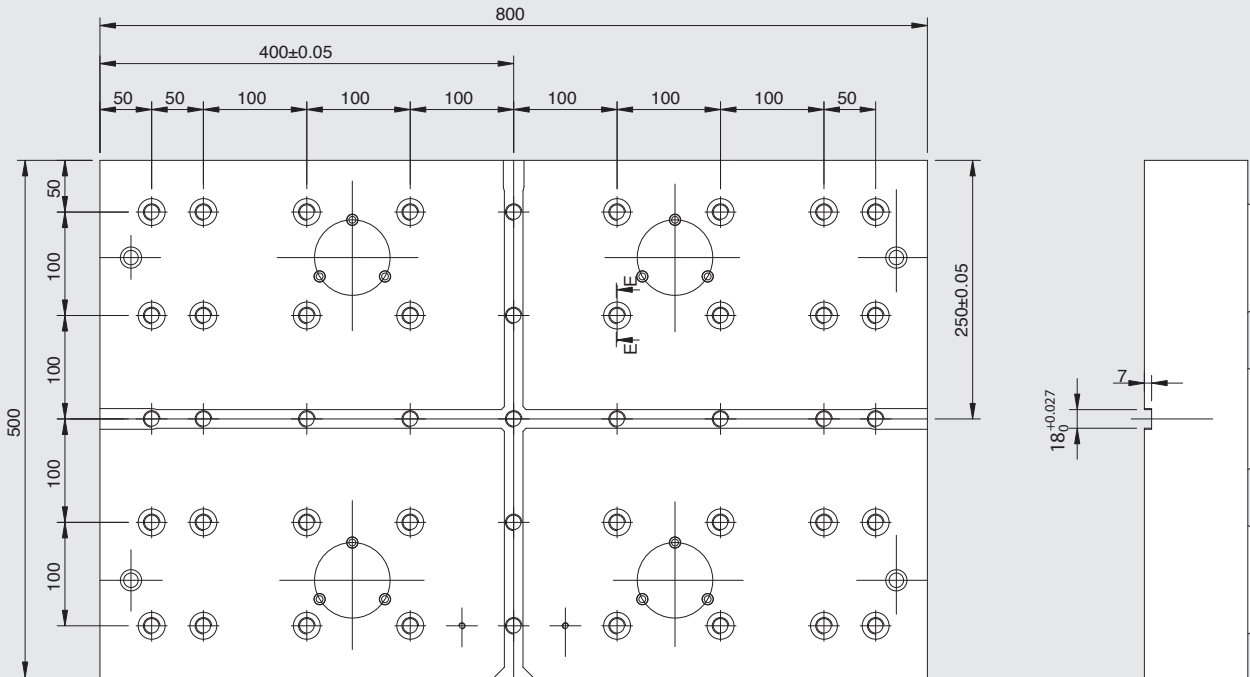
Standard / Option accessories:

	MV154APC/E Economic	MV154APC/P Performance	MV154APC/HS Super high speed
■ FANUC Oi MC	●	×	×
■ FANUC 18i MB	×	●	●
■ FANUC 3 "O" package (RISC, Data servo, AI nano HPCC)	×	○	○
■ 12,000 min ⁻¹ SKF spindle (Belt)	●	●	×
■ 15,000 min ⁻¹ SKF spindle (Belt)	×	○ (x package)	×
■ 15,000 min ⁻¹ SKF spindle (Coupling)	×	○	●
■ BBT	●	●	●
■ 32 position tool magazine	●	●	●
■ 48 position tool magazine	○	○	○
■ 60 position tool magazine	○	○	○
■ Tooling system - BT	○	○	○
- ISO	●	●	●
■ Linear encoder absolute 0.05 μm	○	○	●
■ Remote manual pulse generator	●	●	●
■ Spindle ECO cooler	●	●	×
■ Spindle oil chiller	×	○ / ●**	●
■ ø200 rotary table, 1 unit (factory mount only)	○	○	○
■ ø200 rotary table, 2 units (factory mount only)	×	○	○
■ Coolant system	●	●	●
■ 20 bar through spindle coolant	●	●	●
■ Coolant wash gun	●	●	●
■ Chip conveyor	●	●	●
■ Cutter air blast	●	●	●
■ Dust extraction	○	○	○
■ Documentation & hand tools shelf	●	●	●
■ Foundation bolts & blocks	●	●	●
■ Tools with tool box	●	●	●
■ Work light	●	●	●
■ Machine status light	●	●	●
■ CE & EMC	●	●	●

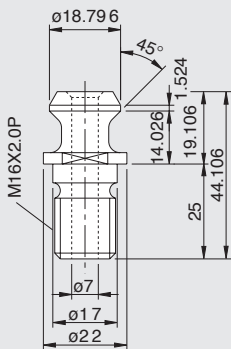
Note: * At 60 Hz

**"X package" option for MV154APC/P, include 15,000 min⁻¹ belt driving, 22 kW, 112 N.m (S6-25%) spindle & oil chiller

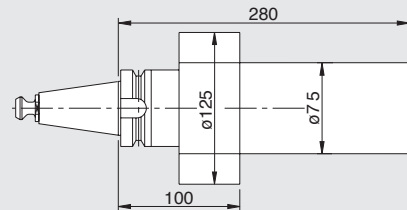
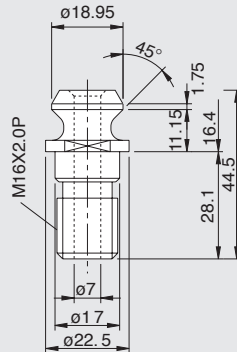
TABLE



BT 40 (QUASER SUPPLY)

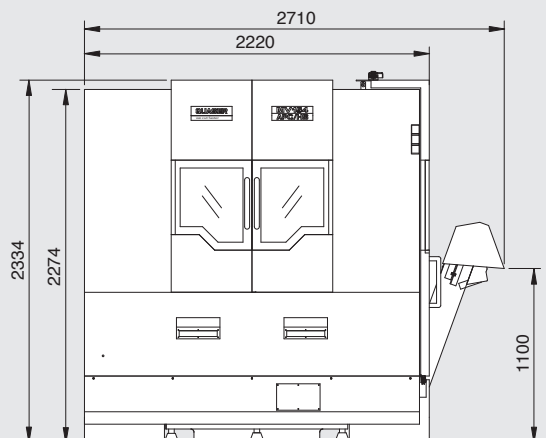
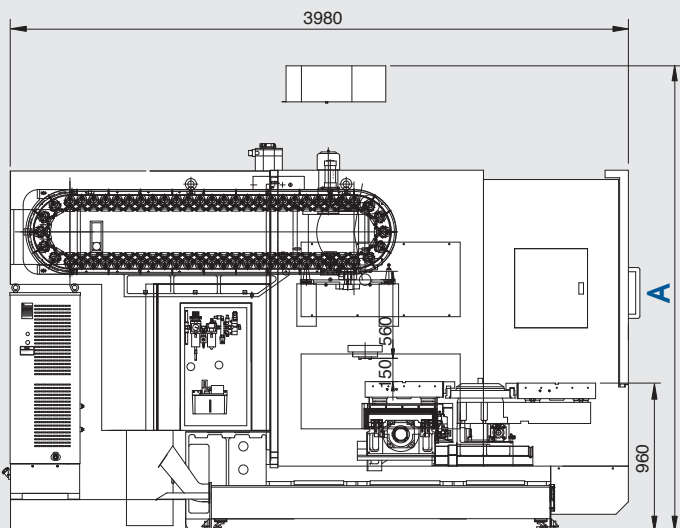
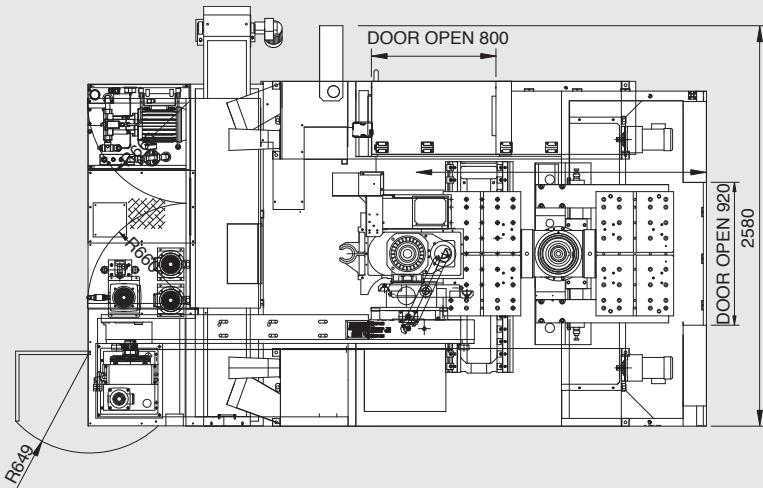


ISO 40



MV154APC

	A
MV154APC/E	2,760
MV154APC/P	2,760
MV154APC/HS	3,061





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