



 **QUASER**

Flex

MF 700

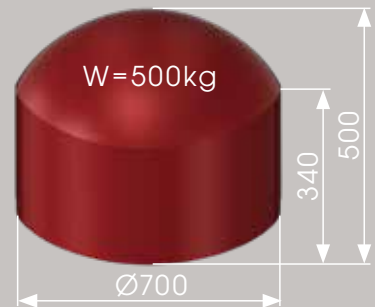


Workpiece Size & Machine Structure

5 axes positioning/ 4 axes simultaneously
0iMF PLUS, SIEMENS 828D
HEIDENHAIN TNC7 Basic

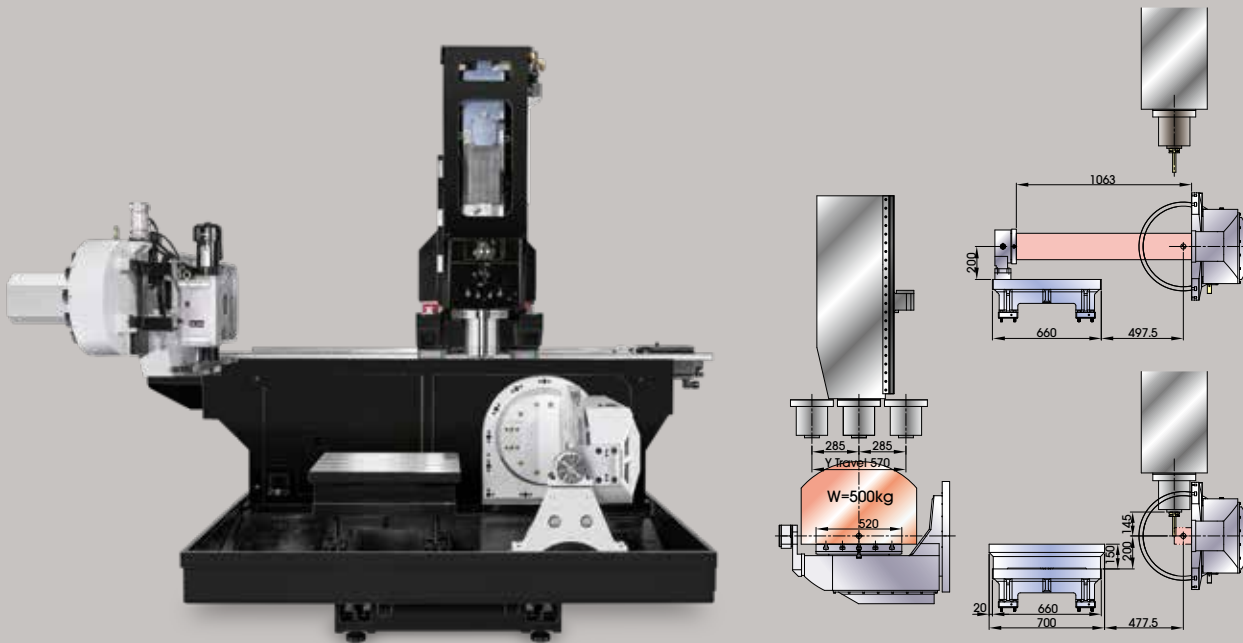
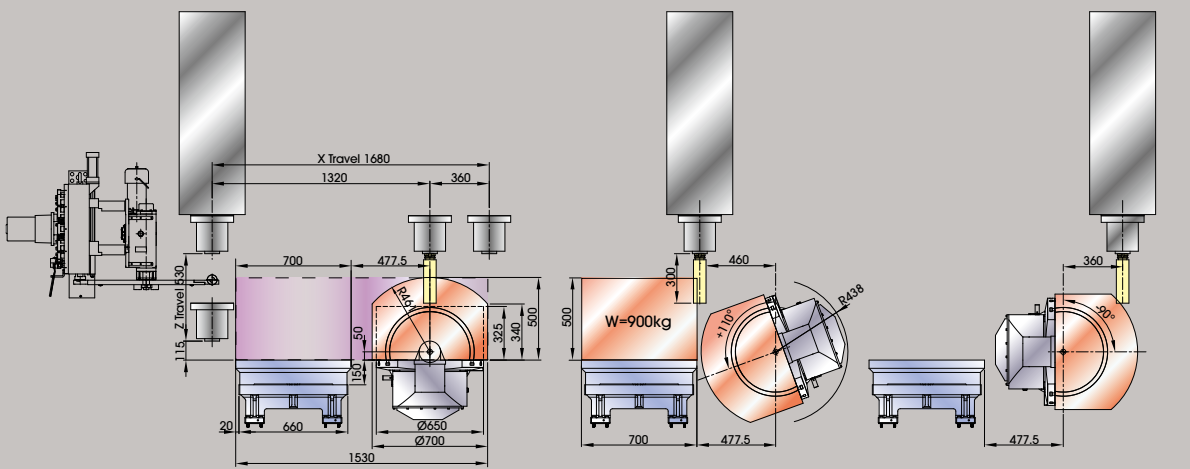
5 axes simultaneously
FANUC 31iB5, SIEMENS One,
HEIDENHAIN TNC7

 **MF700**^{Flex}



Cutting Area & Interference

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



Technical Datas		MF700 ^{Flex}				
Spindle code		12C	15C	20C ⁽¹⁾	18M	24M
Work range						
Table size (mm)		700 x 550 / Ø650				
Travel X / Y / Z (mm)		1,680 (-1,320 ~ +360) / 570 / 530				
B / C (degree)		+110° ~ -90° / 360°				
Max. swing (mm)		Ø700				
Table surface to spindle nose (mm)		115 ~ 645				
Spindle nose to tilting center at 90° (mm)		65 ~ 595				
Max. work piece size (mm)		Ø700 x H500				
Table load capacity (kg)		500				
Feed drive						
Feed force X / Y / Z (N)		15,708 / 11,519 / 11,519 (F) 26,180 / 14,137 / 14,137 (S) 19,897 / 11,310 / 11,310 (T)				
Rapid movement X / Y / Z (m/min)		36 / 36 / 36				
B / C (min ⁻¹)		B=25 / C=25				
Acceleration X / Y / Z (m/s ²)		3 / 3 / 3				
Dia. & pitch of the ball screw		X=Ø45 / YZ=Ø40 / P = 12 / 12 / 12				
Tool changer						
Tool selection		Random				
Magazine positions		48 (std.) 60 / 90 / 120 (opt.)				
Max. tool diameter w/o adjacent tool (mm)		Ø 76.2 / Ø 125				
Max. tool length (mm)		300				
Max. tool weight (kg)		7				
T to T / C to C (sec.)		2.5±0.2 (<6kg) / 10±0.2				
Coolant system						
Coolant tank capacity (Liter)		450				
Pump capacity						
-Nozzle coolant		75 L/min., 3 bar				
-Coolant through spindle		25 L / min., 20 bar				
-Wash down		75 L/min., 3 bar x 2				
Machine size						
Height (mm)		3,130				
Floor space W x D (mm)		4,660 x 4,310				
Weight (kg)		13,500(48ATC) / 13,700(60ATC) / 13,920 (90ATC) / 14,220(12ATC)				
Connections						
Main power		220V or 380V or 400V or 415V / 50Hz or 60Hz				
Power consumption (KVA)		40(F)45(T/S)	45(F/T/S)	45(F)	50(F)60(T/S)	50(F)60(T/S)

Note: ⁽¹⁾ Only for FANUC control.

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

5 FACE: (F) 0iMF Plus (S) 828D (T) TNC7 Basic 5 AXES: (F) 31iB5 (S) ONE (T) TNC7

Standard / Optional Accessories	MF700 ^{Flex}				
	12C	15C	20C ⁽¹⁾	18M	24M
Spindle code					
FANUC 0iMF PLUS (5 Faces)	○	○	○	○	○
SIEMENS 828D (5 Faces)	○	○	×	○	○
HEIDENHAIN TNC7 Basic (5 Faces)	○	○	×	○	○
FANUC 31iB5 (5 Axes)	○	○	○	○	○
SIEMENS One (5 Axes)	○	○	×	○	○
HEIDENHAIN TNC7 (5 Axes)	○	○	×	○	○
Spindle oil chiller	●	●	●	●	●
48 position tool magazine	●	●	●	●	●
60 / 90 / 120 position tool magazine	○	○	○	○	○
Balance tooling for spindle warm up	○	○	○	○	○
ATC auto door	●	●	●	●	●
X / Y / Z linear scale	○	○	○	○	○
Rotary & Tilting encoder	●	●	●	●	●
Transformer	○	○	○	○	○
Work probe ^{*1}	○	○	○	○	○
Tool length / breakage measurement ^{*1}	○	○	○	○	○
4 Port through table ^{*2}	●	●	●	●	●
6 Port through table ^{*2}	○	○	○	○	○
Coolant through spindle 20 bar	●	●	●	●	●
Scrape type Chip conveyor	●	●	●	●	●
Oil-mist collector	○	○	○	○	○
Filtration unit (paper)	○	○	○	○	○
Work light	●	●	●	●	●
Machine status light	●	●	●	●	●
Documentation (USB) ^{*3}	●	●	●	●	●
CE & EMC	●	●	●	●	●

Note: ^{*1} BLUM or RENISHAW ^{*2} Port ready only. ^{*3} Paper documentation is option.
- Machine specifications might be different from the catalog if there is any specification update.

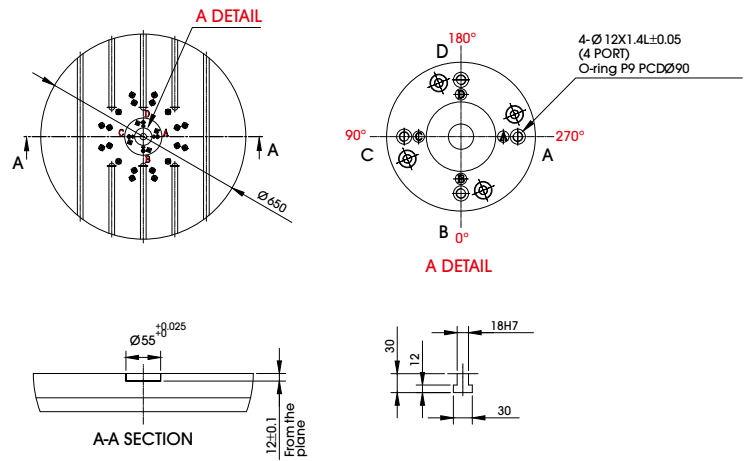
●=Standard ○=Option ×=N/A



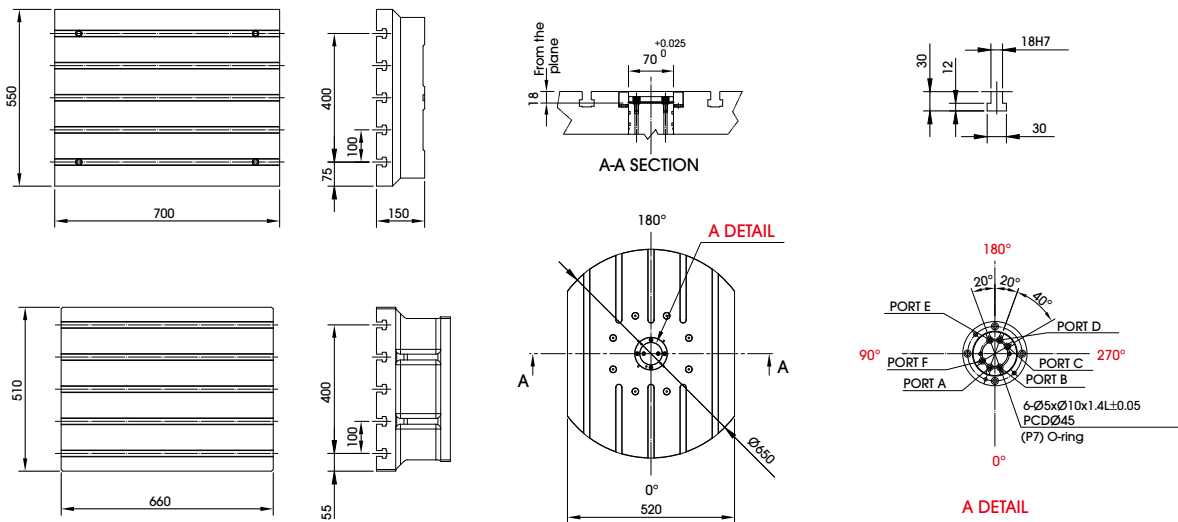
Machine Dimension

Table Dimension

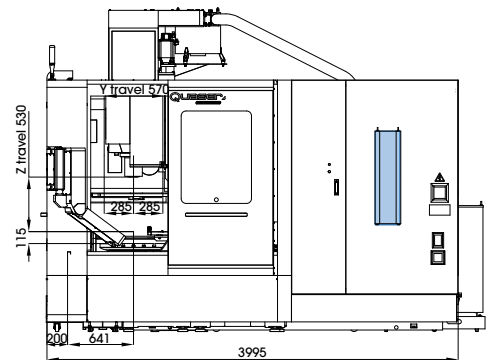
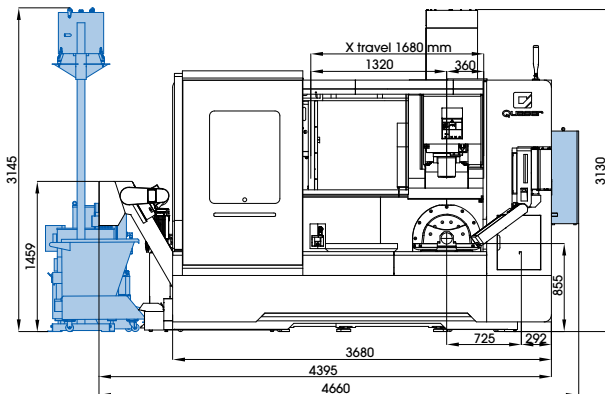
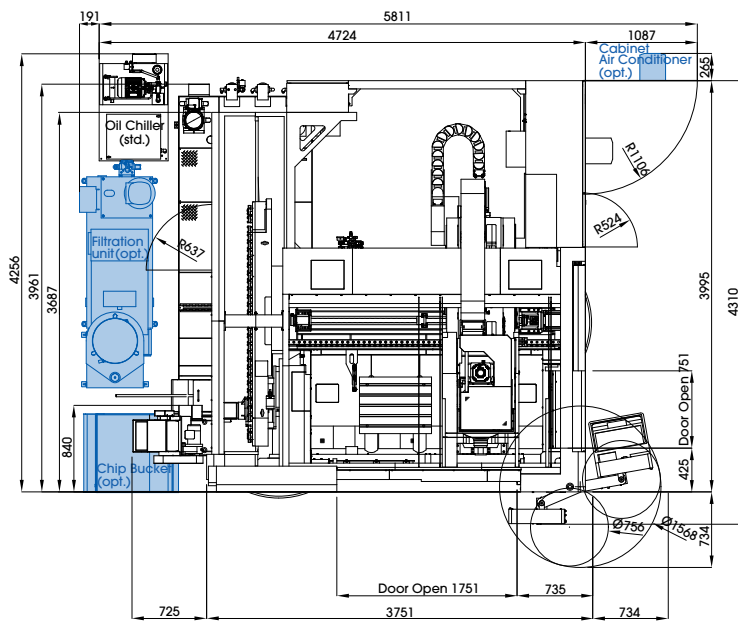
Standard



Option



Installation Dimension



Spindle	SC-4.2	MC-4.1R	MC-4.0R	MS30-20	MS30-24
Shaft diameter	Ø80 / Ø70	Ø80 / Ø65	Ø70 / Ø60	Ø80	Ø80
Spindle Taper	ISO-40	ISO-40 / HSK A63	ISO-40 / HSK A63	HSK A63	HSK A63
Bearing arrangement	<< >>	< >=	< >=	<<> >	<<> >
Ball bearing type	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
Roller bearing type	-	Steel	Ceramic	-	-
Bearing lubrication	Grease packed	Re-grease	Re-grease	Oil air	Oil air
Transmission	Coupling	Coupling	Coupling	Built-in	Built-in
Spindle Speed (min ⁻¹)	12,000	15,000	20,000	18,000	24,000
FANUC (S6-25%)					
Motor	αiIT12/12,000 (SPM15)	αiIT15/15,000 (SPM30)	αiIL8/20,000 (SPM30)	-	-
Spindle base speed (min ⁻¹)	1,500	1,400	1,500	2,420	2,650
Spindle power (kW)	18.5	26	15	31.7	32.2
Spindle torque (Nm)	118	177	125	125	116
HEIDENHAIN (S6-25%)					
Motor	QAN200UH	QAN260MH	1PH8131	-	-
Spindle base speed (min ⁻¹)	1,500	1,500	2,000	-	3,330
Spindle power (kW)	17	32	27.7	-	43.5
Spindle torque (Nm)	108	204	132	-	125
SIEMENS (S6-25%)					
Motor	1PH8133	1PH8133	-	-	-
Spindle base speed (min ⁻¹)	1,500	2,000	-	3,330	3,460
Spindle power (kW)	28.5	27.7	-	43.5	42
Spindle torque (Nm)	182	132	-	125	116
CTS Availability	●				
Available NC Adapting	(F) FANUC (T) HEIDENHAIN (S) SIEMENS				

MF700	●	●●●	●●●	●××	●●●	●●●
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● (F) = FANUC ● (T) = HEIDENHAIN ● (S) = SIEMENS