

QUASER

we cut faster

UX SERIES

UX series

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- 01-02 UX500 & UX500APC
- 03-04 UX630 & UX 630APC
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UX500

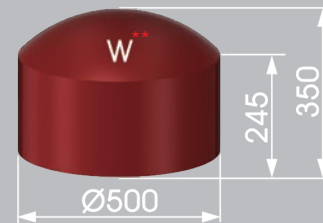
Travel

X : 712 (-400 ~ +312)

Y : 508 (-254 ~ +254)

Z : 515 mm

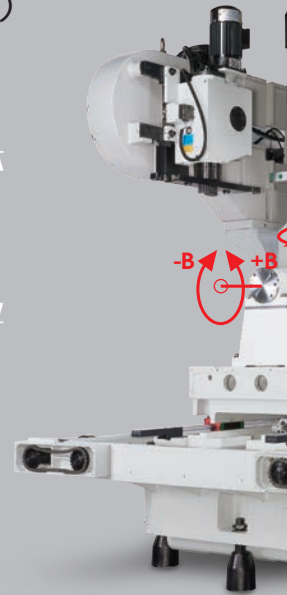
Table size: Ø410 mm
(UX500C - DETRON*)
(UX500P - HIWIN*)



Note: *rotary table brand

**UX500C=200kg

UX500P=250kg



UX500APC

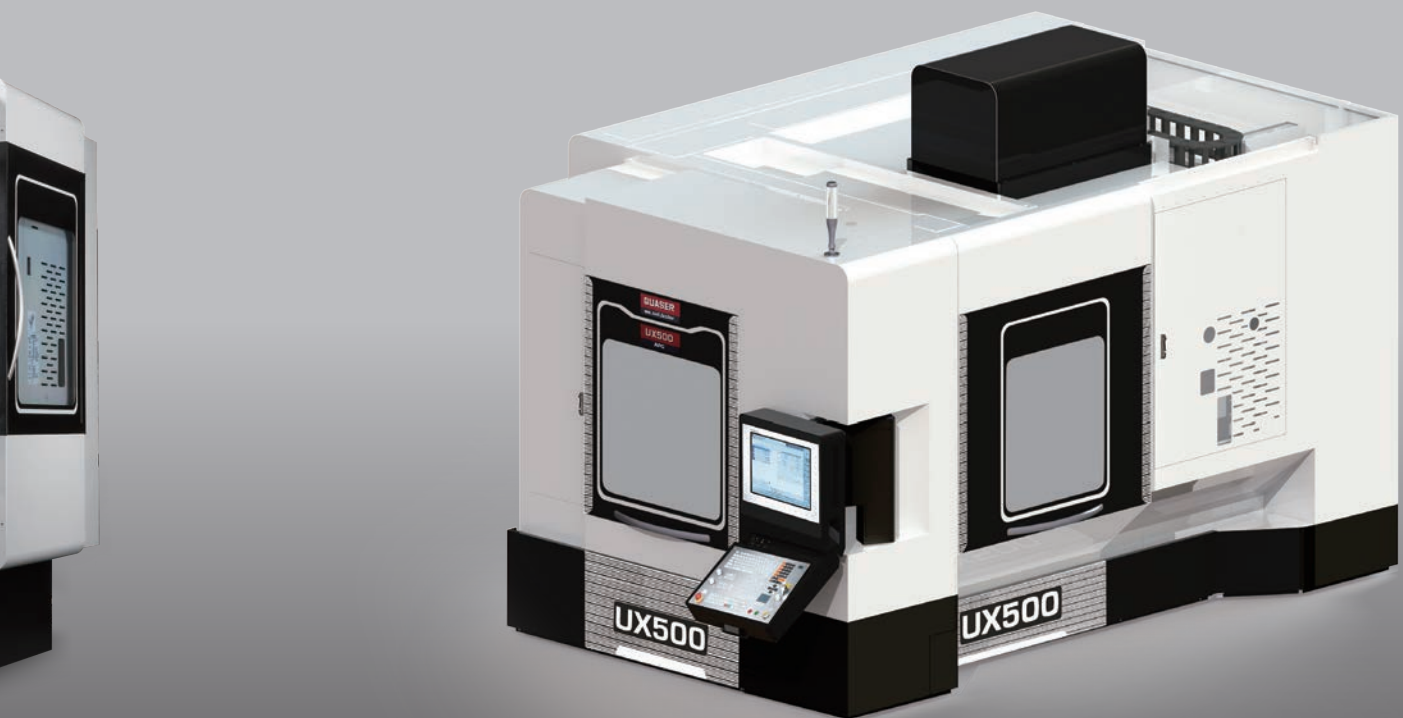
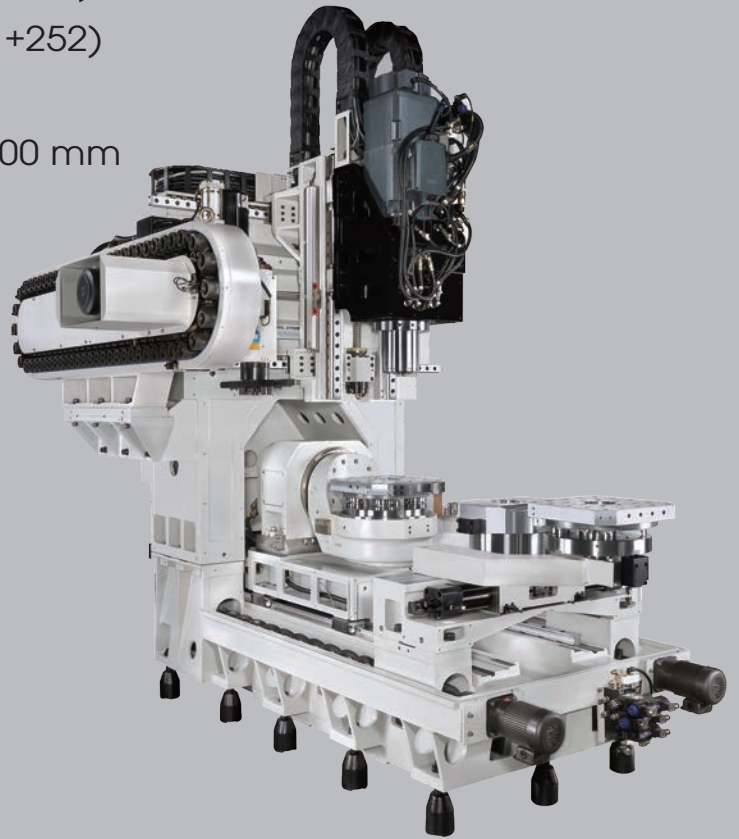
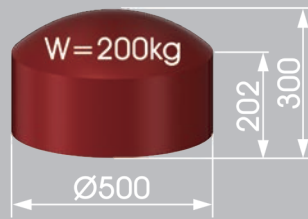
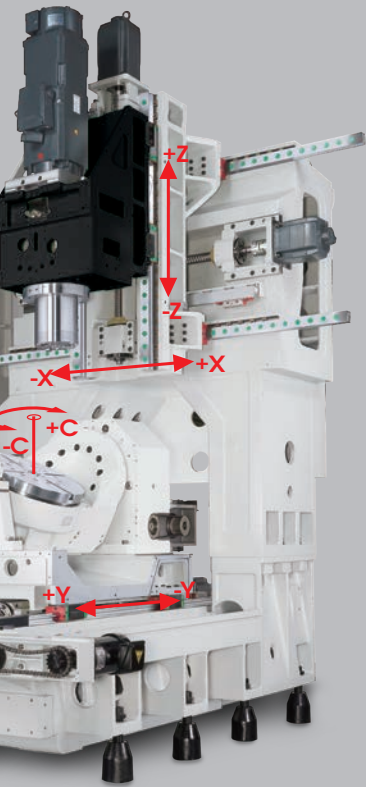
Travel

X : 712 (-400 ~ +312)

Y : 508 (-256 ~ +252)

Z : 515 mm

Table size: □400 mm



UX series

UX630P

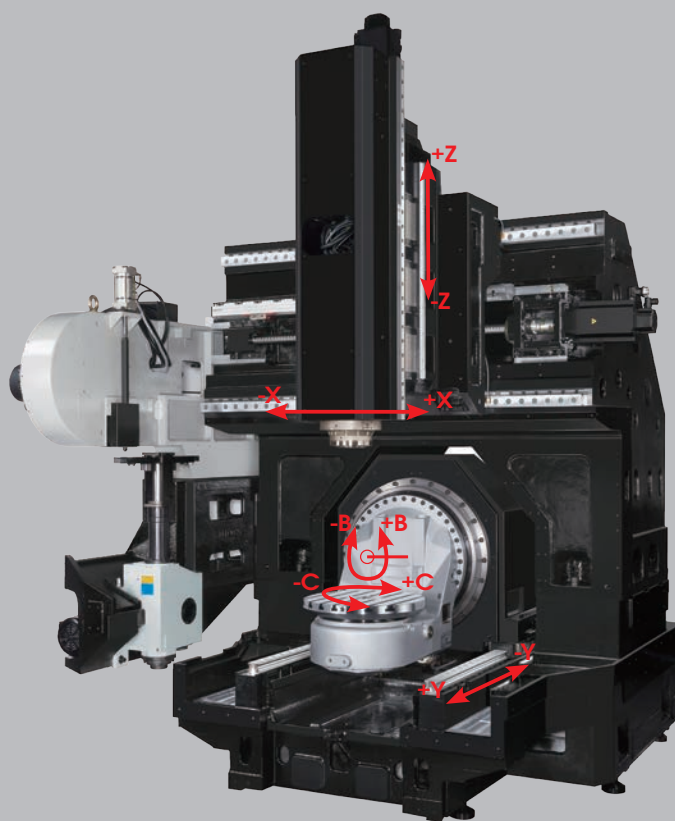
Travel

X : 900 (-450 ~ +450)

Y : 740 (-330 ~ +410)

Z : 610 mm

Table size: $\varnothing 480$ mm



UX630APC

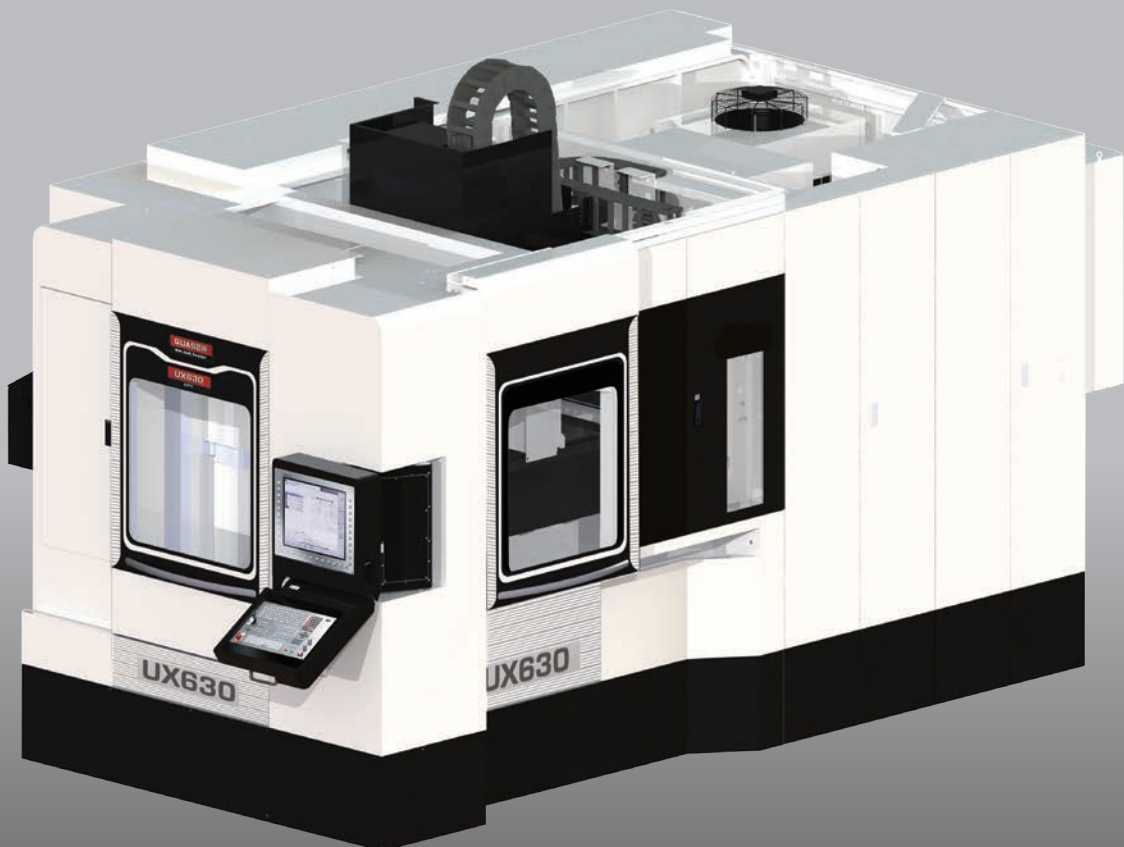
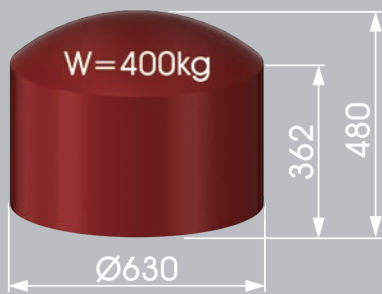
Travel

X : 900 (-450 ~ +450)

Y : 660 (-330 ~ +330)

Z : 610 mm

Table size: □500 mm



UX series

UX600

Travel

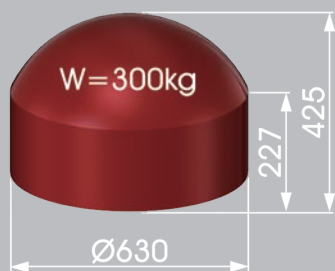
X : 885 (-580 ~ +305)

Y : 800 (+375 ~ -425)

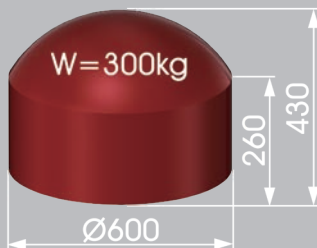
Z : 500 mm

Table size: \varnothing 500 mm (UX600C)

\varnothing 280 / \varnothing 600 x W500 (UX600P)

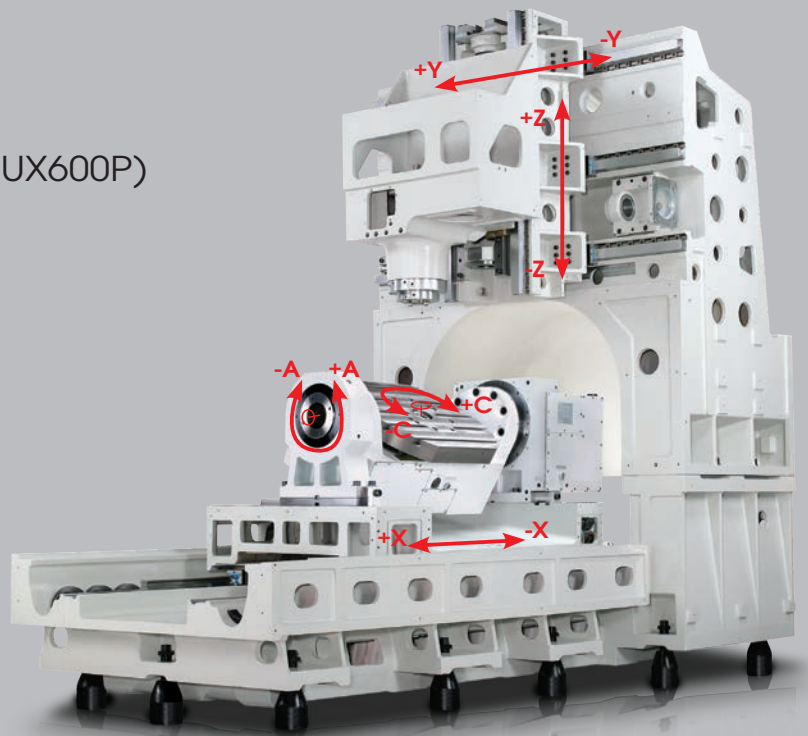


(UX600C - DETRON*)



(UX600P - MMK MATSUMOTO*)

Note: *rotary table brand



UX800P

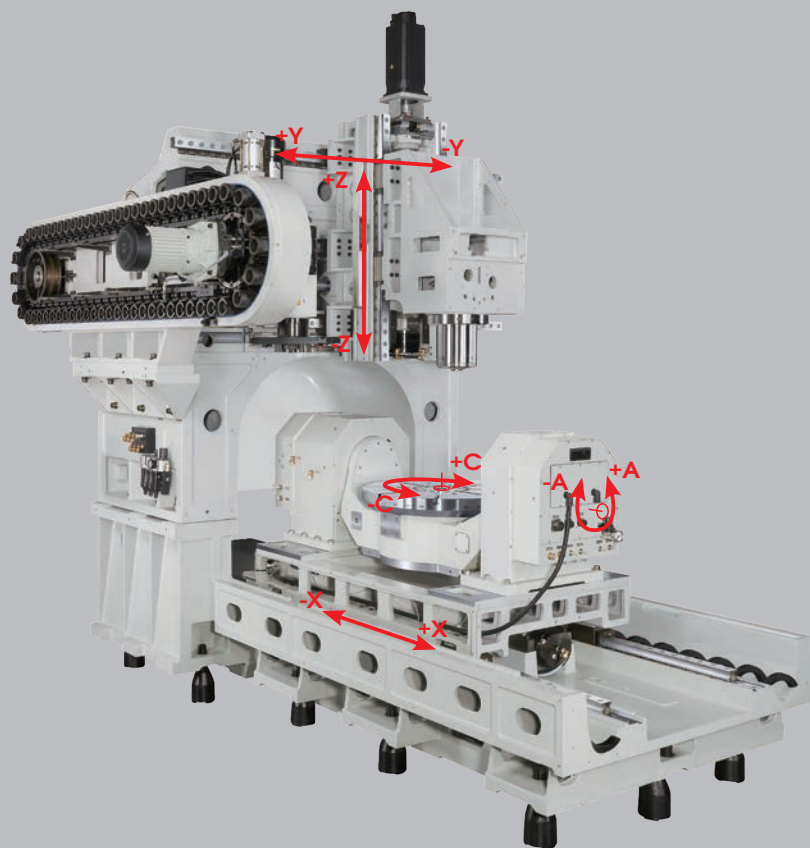
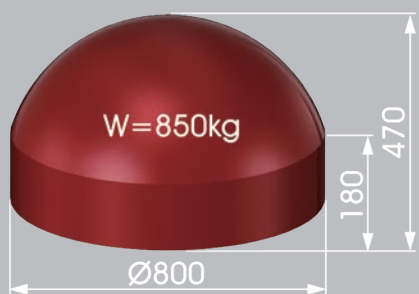
Travel

X : 995 (-625 ~ +370)

Y : 800 (+375 ~ -425)

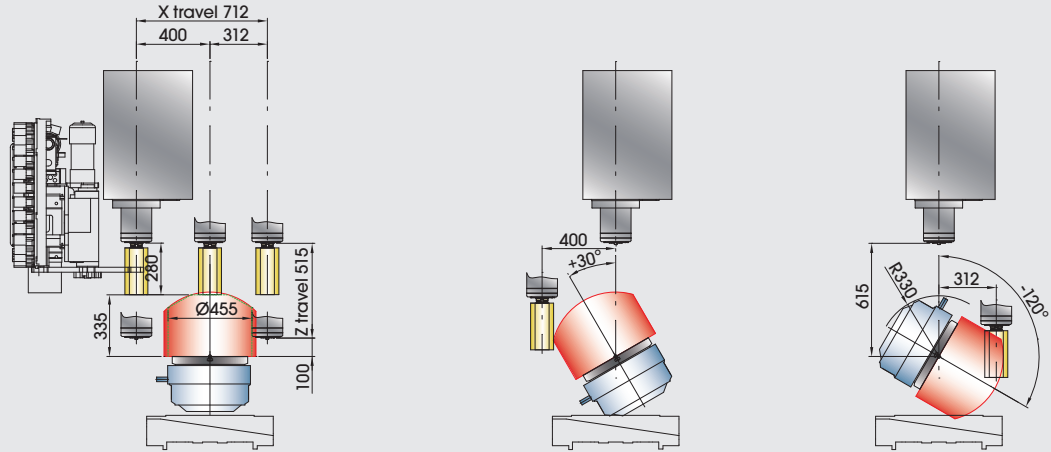
Z : 500 mm

Table size: $\varnothing 630$ mm

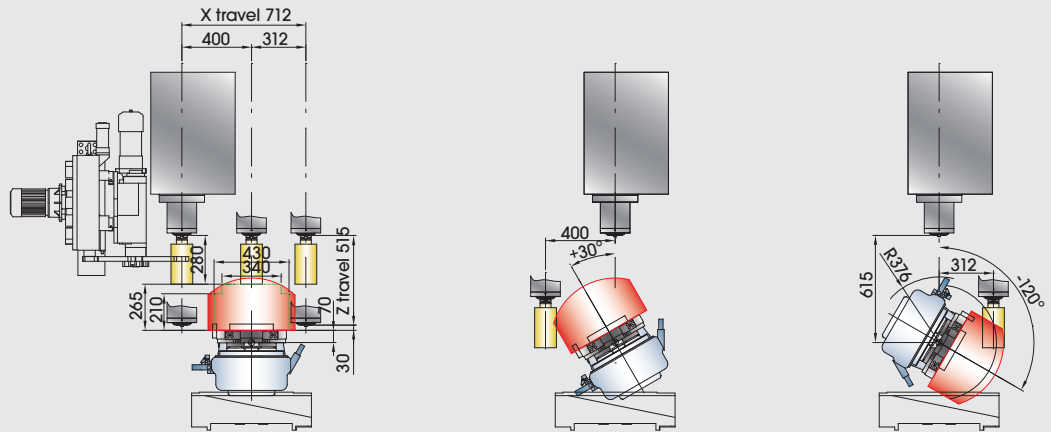


Cutting area and interference

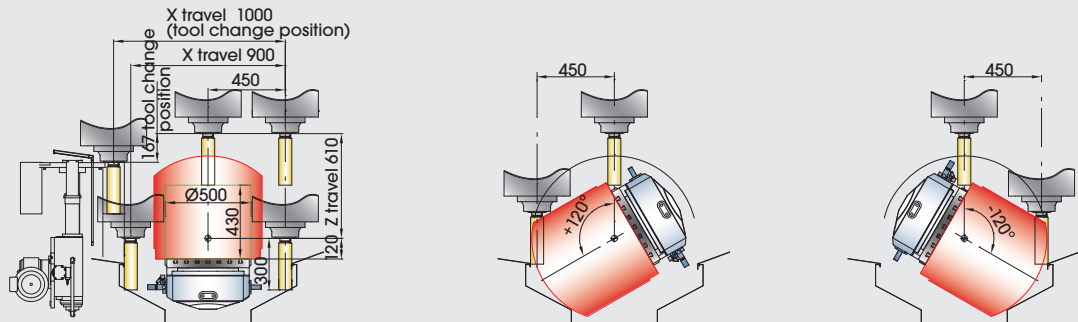
UX500



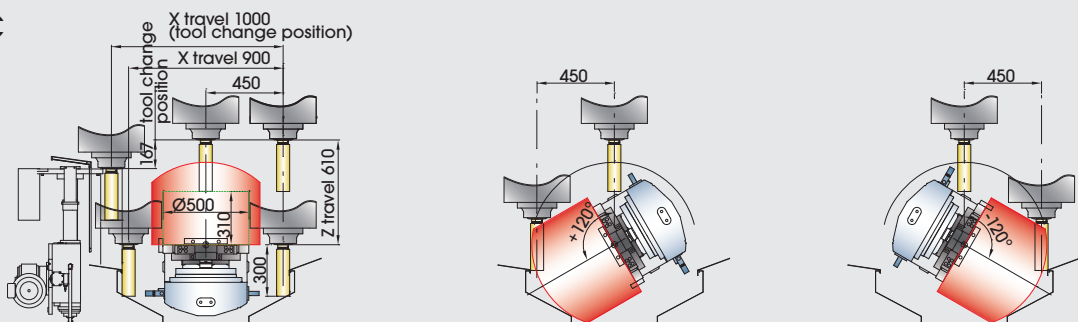
UX500APC



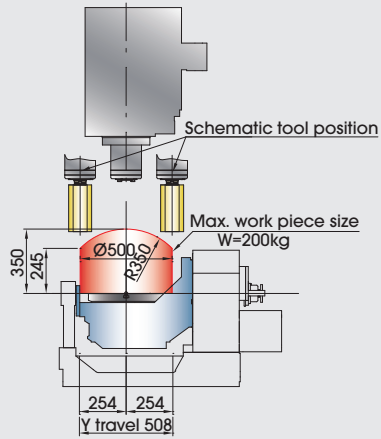
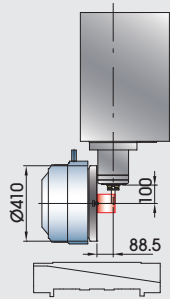
UX630P



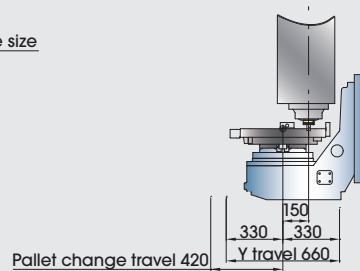
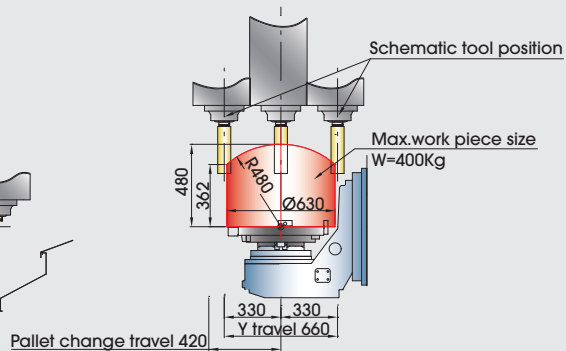
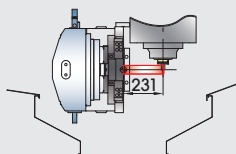
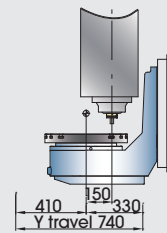
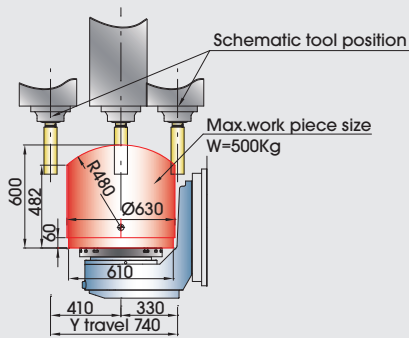
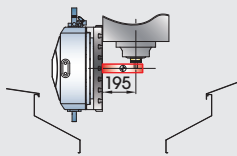
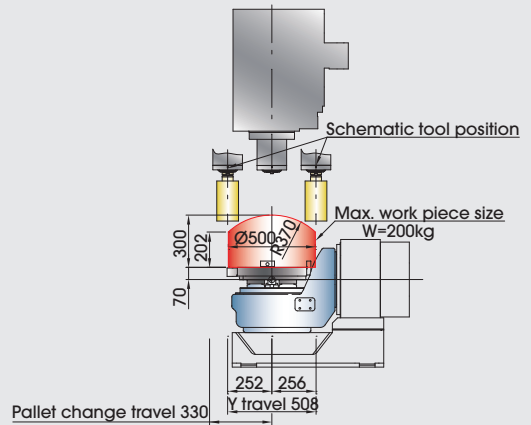
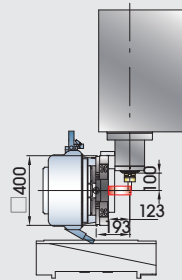
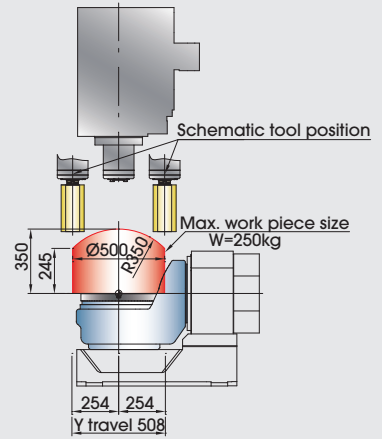
UX630APC



UX500C



UX500P



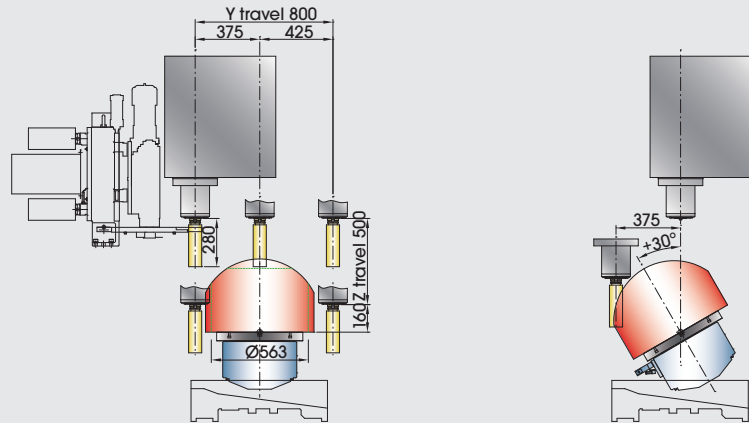
Pallet change travel 420

Pallet change travel 420

Cutting area and interference

UX600C

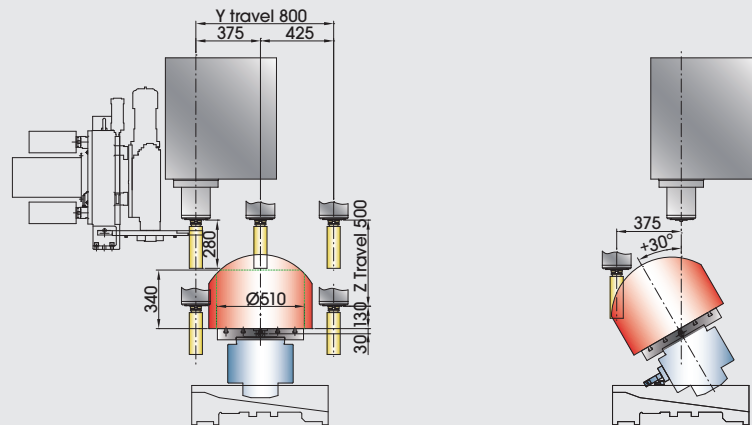
Coupling spindle



UX600P

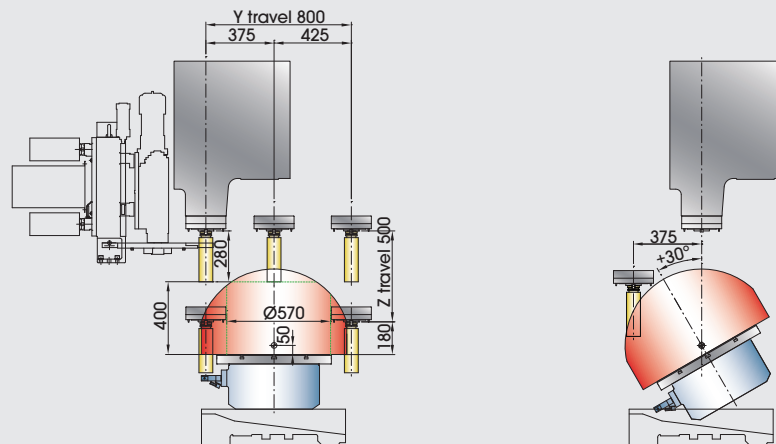
Belt spindle

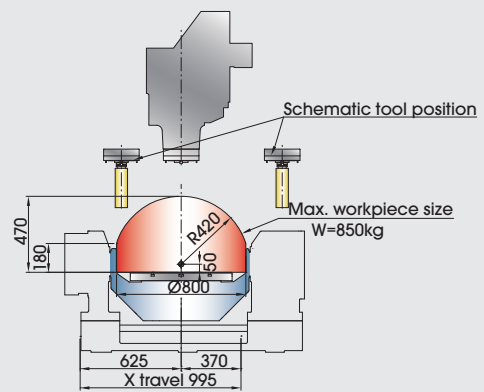
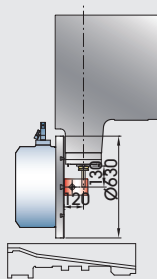
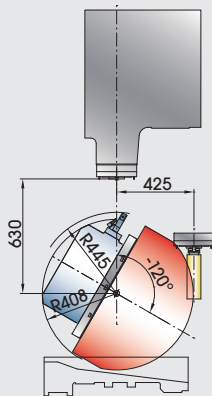
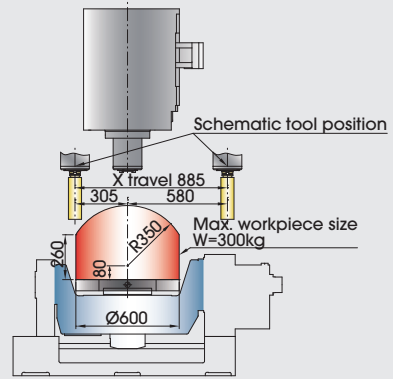
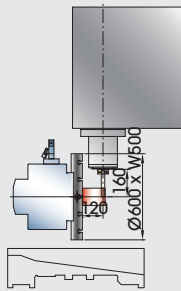
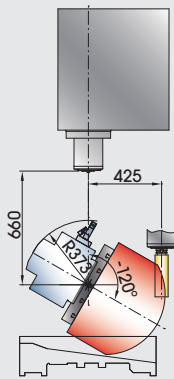
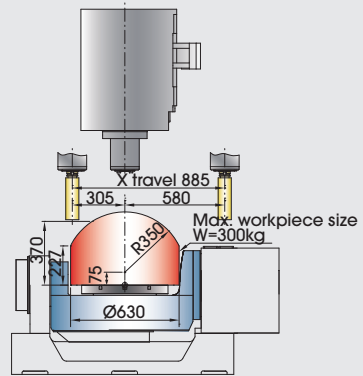
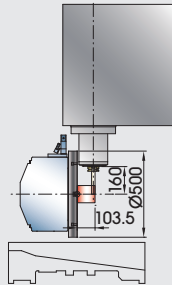
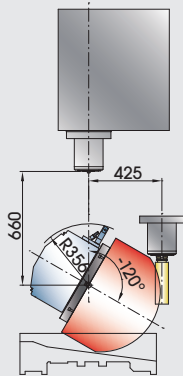
Coupling spindle



UX800P

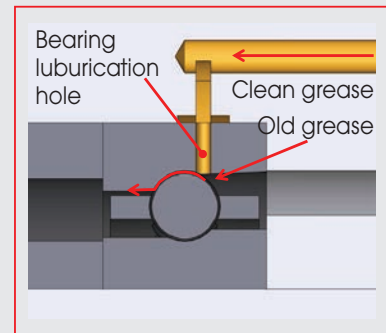
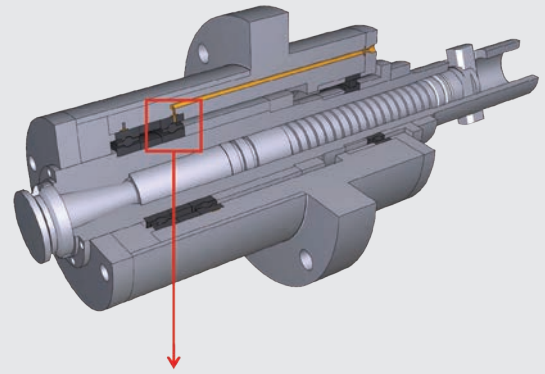
Coupling spindle





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

New spindle code	SC-4.2		MB-4.0	
Shaft diameter	Ø80 / Ø70		Ø70 / Ø65	
Spindle Taper	ISO-40		ISO-40	
Bearing arrangement	<< >>		< > =	
Ball bearing type	Ceramic		Ceramic	
Roller bearing type	-		Steel	
Bearing lubrication	Grease packed		Grease packed	
Transmission	Coupling		Belt	
Spindle Speed	12,000		9,000	12,000

FANUC				
Spindle base speed		1,500		-
Spindle output kW	(S3-25%)	18.5	15	-
Spindle output torque Nm	(S3-25%)	118	95.5	-

HEIDENHAIN					
Spindle base speed		1,500	2,000	1,125	1,500
Spindle output power kW	(S6-25%)	17	27.7	32	
Spindle output torque Nm	(S6-25%)	108	132	272	204

SIEMENS					
Spindle base speed		1,500	-	1,125	1,500
Spindle output power kW	(S6-25%)	13.3	-	28.5	
Spindle output torque Nm	(S6-25%)	85	-	242	182
CTS Availability		○*	○	●	●

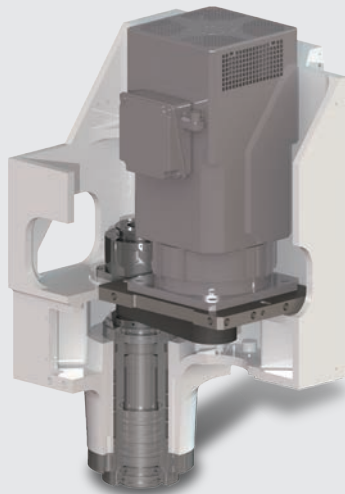
UX500C	● ● ●	●		
UX500P			● ●	● ●
UX500APC			● ●	● ●
UX630				
UX630APC				
UX600C		● ●		
UX600P			● ●	● ●
UX800P				

① S3-25% *FANUC not available

Coupling



Belt



Built-in



MC-4.1R	HM-4.0	HM-4.0A
Ø80 / Ø65	Ø80 / Ø60	Ø80 / Ø60
ISO-40 / HSK A63	ISO-40	HSK A63
< > =	<< > >	<< > >
Ceramic	Ceramic	Ceramic
Steel	-	-
Re-Grease	Grease packed	Oil-air
Coupling		Built-in
15,000	12,000	18,000
1,400	-	-
26	-	-
177	-	-
2,000	2,940	3,000
27.7	40 ⁽¹⁾	46 ⁽¹⁾
132	131.3 ⁽¹⁾	146 ⁽¹⁾
2,000	2,940	46 ⁽¹⁾
27.7	40 ⁽¹⁾	146 ⁽¹⁾
132	131.3 ⁽¹⁾	
●	●	●
● ●		
● ●		
	● ●	● ●
	● ●	● ●
● ●		
●		

Work envelope

UX500	UX500C		UX500P / UX500APC	
	Rotary Axis	Tilting Axis	Rotary Axis	Tilting Axis
	(C-axis)	(B-axis)	(C-axis)	(B-axis)
Drive method	D-D	Worm	D-D	D-D
Max. swing piece size (mm)	Ø500 x 350 / Ø500 x 300			
Table load capacity (kg)	200		250 / 200	
Maximum R.P.M	50	16.6(F/S); 22.2(T)	100 / 100	60 / 60
Indexing accuracy (sec)	8*	12*	5* / 5*	5* / 5*
Repeatability (sec)	4*	8*	4* / 4*	4* / 4*
Clamping torque (Nm)	1,800	2,500	1,800	2,500

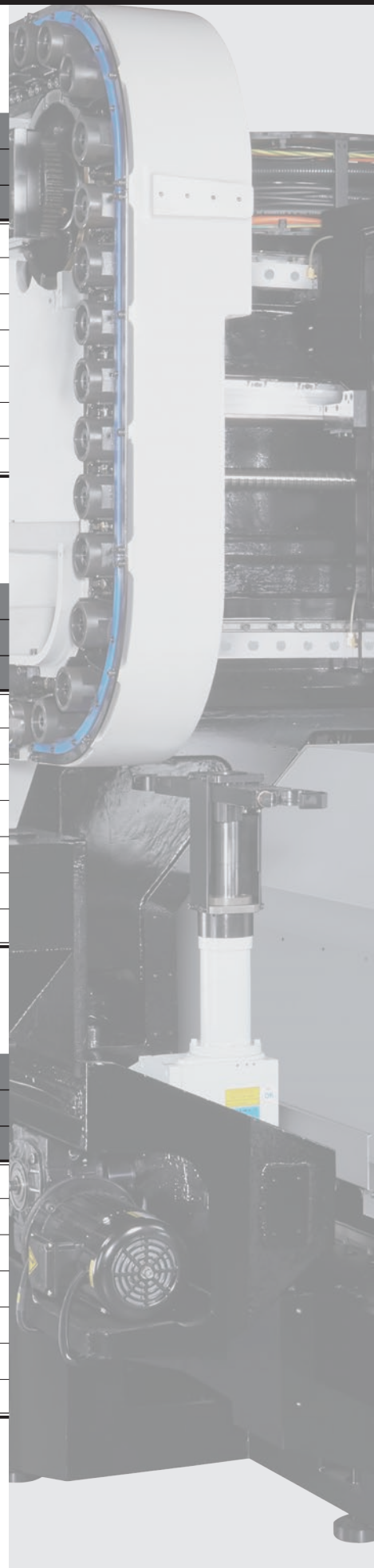
Note: *With absolute rotary encoder

UX630	UX630P		UX630APC	
	Rotary Axis	Tilting Axis	Rotary Axis	Tilting Axis
	(C-axis)	(B-axis)	(C-axis)	(B-axis)
Drive method	D-D		D-D	
Max. swing piece size (mm)	Ø630 x 600		Ø630 x 480	
Table load capacity (kg)	500		400	
Maximum R.P.M	100	60	100	60
Indexing accuracy (sec)	5*	5*	5*	5*
Repeatability (sec)	4*	4*	4*	4*
Clamping torque (Nm)	3,200	4,200	3,200	4,200

Note: *With absolute rotary encoder

UX	UX600C / UX600P		UX800P	
	Rotary Axis	Tilting Axis	Rotary Axis	Tilting Axis
	(C-axis)	(A-axis)	(C-axis)	(A-axis)
Drive method	Worm		D-D	
Max. swing (mm)	Ø630 x Ø600		Ø800	
Table load capacity (kg)	300		850	
Maximum R.P.M (min ⁻¹)	16.6 / 33.3	11.1 / 25	100	60
Indexing accuracy (sec)	20(12*)/14(10*)	12* / 10*	5*	5*
Repeatability (sec)	12(5*) / 4(2*)	8* / 5*	2*	5*
Clamping torque (Nm)	2,000 / 1,666	2,500 / 2,156	2,400	2,400 x 2

Note: *With absolute rotary encoder





Model UX500



Model UX630



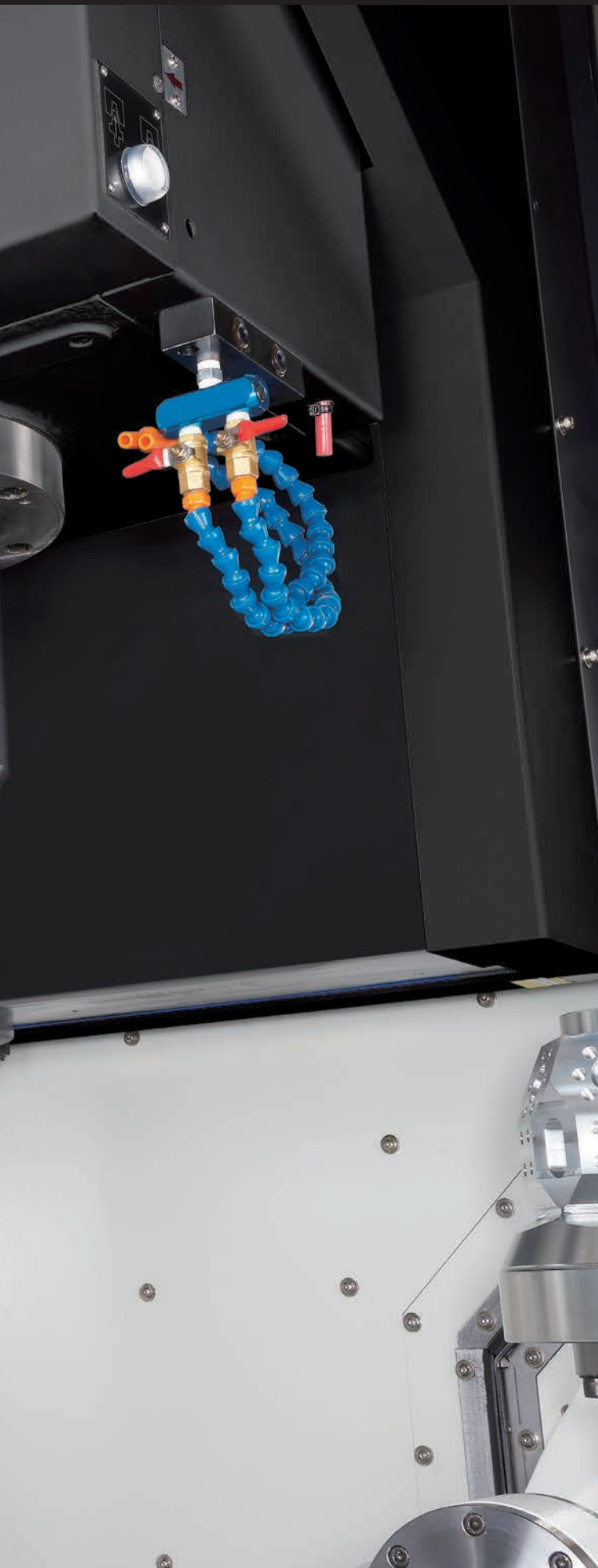
Model UX600



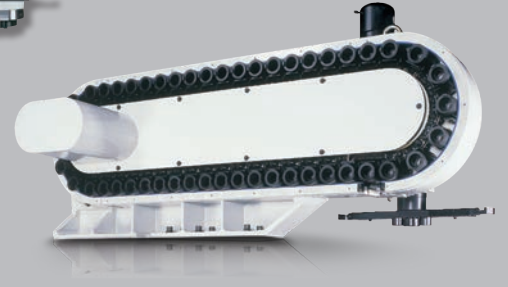
Model UX800

ATC system



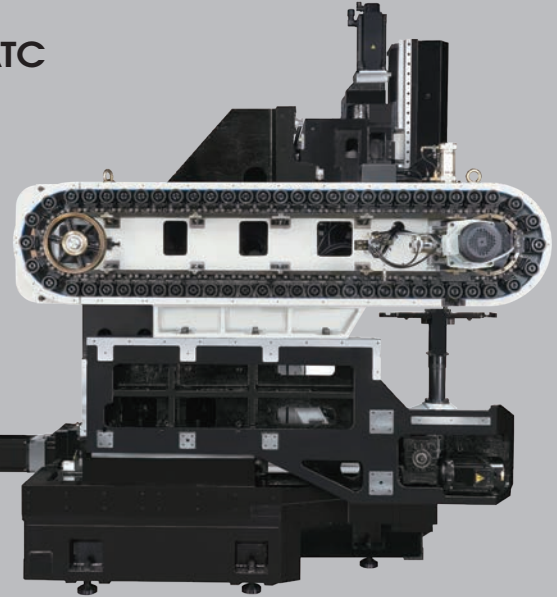


30ATC

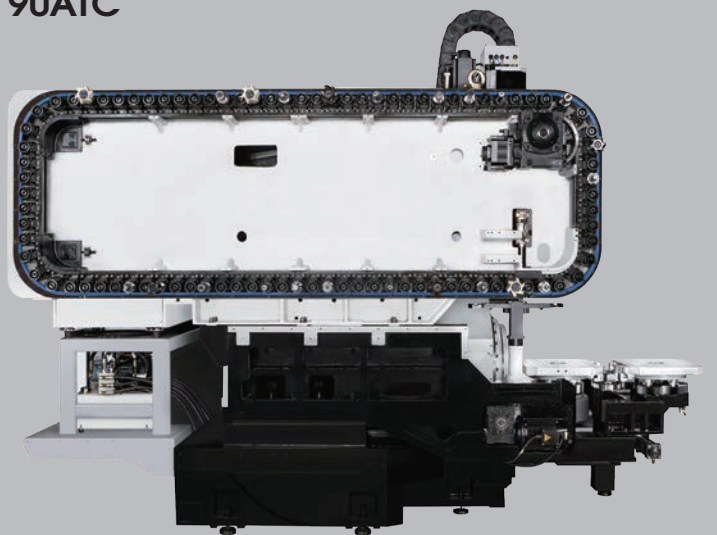


48ATC

60ATC



90ATC

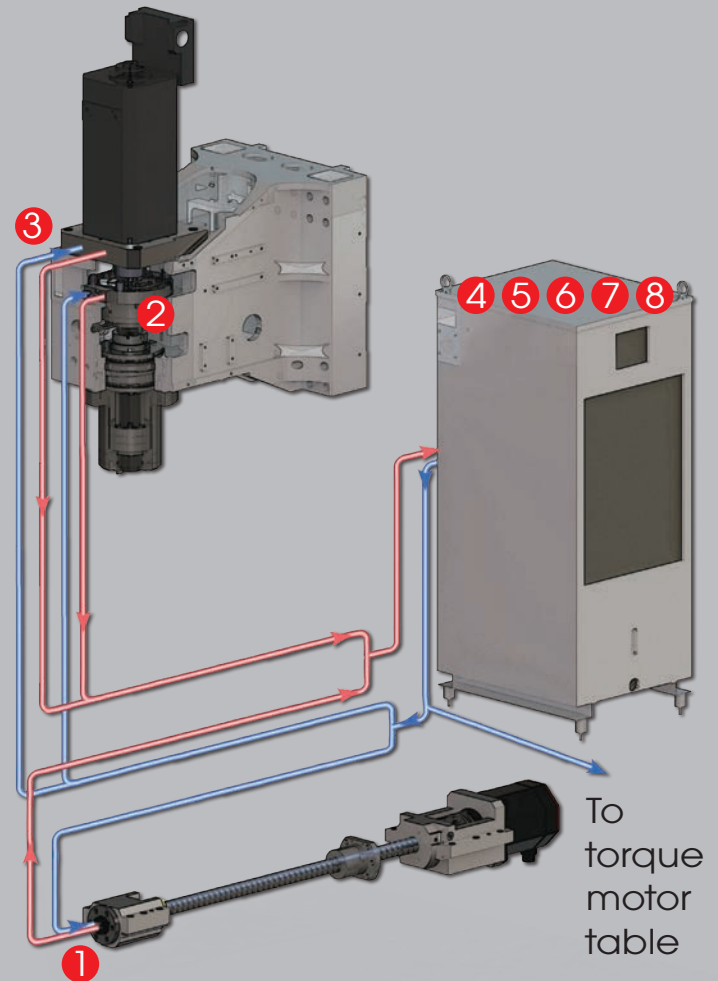


Thermal management

To meet more and more severe "WORKING ACCURACY" requirements, our "THERMAL MANAGEMENT" :

LEVEL I - Standard

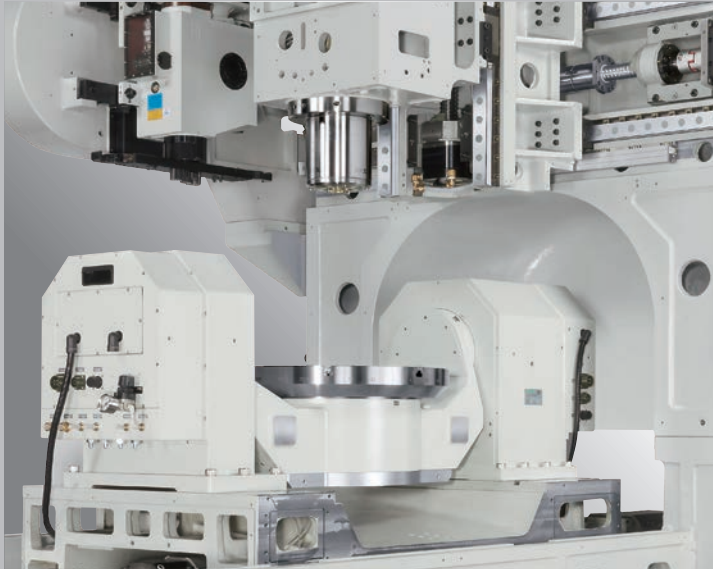
- 1 Coolant through ball screw.
To keep
 - a). Under $\pm 10 \mu m$ repeatability on X, Y & Z
 - b). Stable rigidity on ball screw system
- 2 Spindle cooling circuit
- 3 Motor mountingblock cooling circuit (for coupling spindle)
- 4 Oil chiller 6,000 BTU
- 5 Oil chiller 12,000 BTU
- 6 Oil chiller 24,000 BTU
- 7 Oil chiller 48,000 BTU
- 8 Water chiller



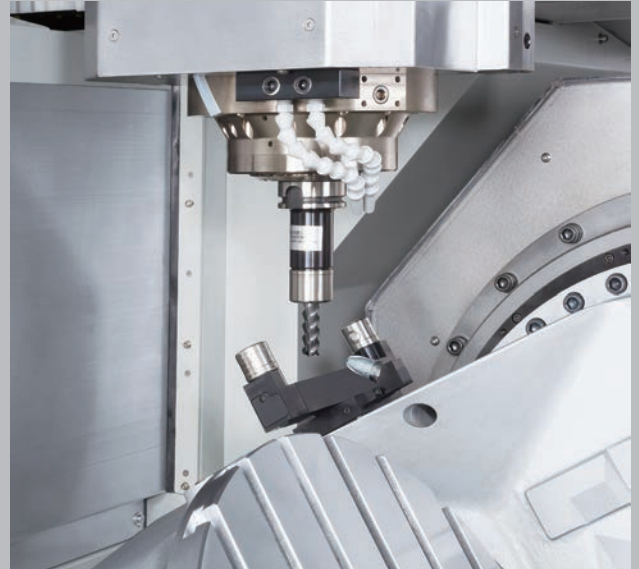
	UX500C	UX500P / UX500APC		UX630P / UX630APC	UX600C	UX600P		UX800P
	Coupling	Belt	Coupling	Built-in	Coupling	Belt	Coupling	Coupling
1	○	●	●	●	○	●	●	●
2	●	●	●	●	●	●	●	●
3	●	×	●	×	●	×	●	●
4	●	×	×	×	●	×	×	×
5	○	×	×	×	○	●	●	×
6	×	●	●	×	×	×	○	×
7	×	×	×	×	×	×	×	●
8	×	×	×	●	×	×	×	×

LEVEL II

- 9 Scale on X, Y, Z & C
(Scale on A axis as standard)



- 10 Tool length / breakage measurement (opt.)



LEVEL III

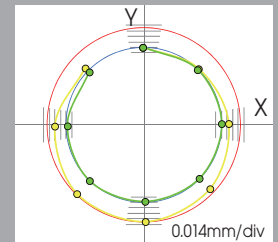
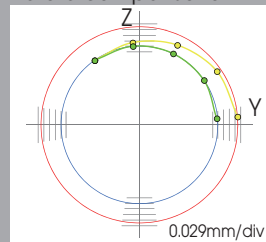
- 11 Thermal comp with probe



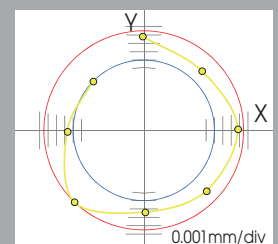
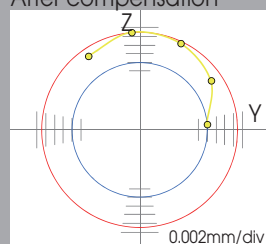
- 12 Touch probe cycles for automatic measurement of rotary axes (opt.)



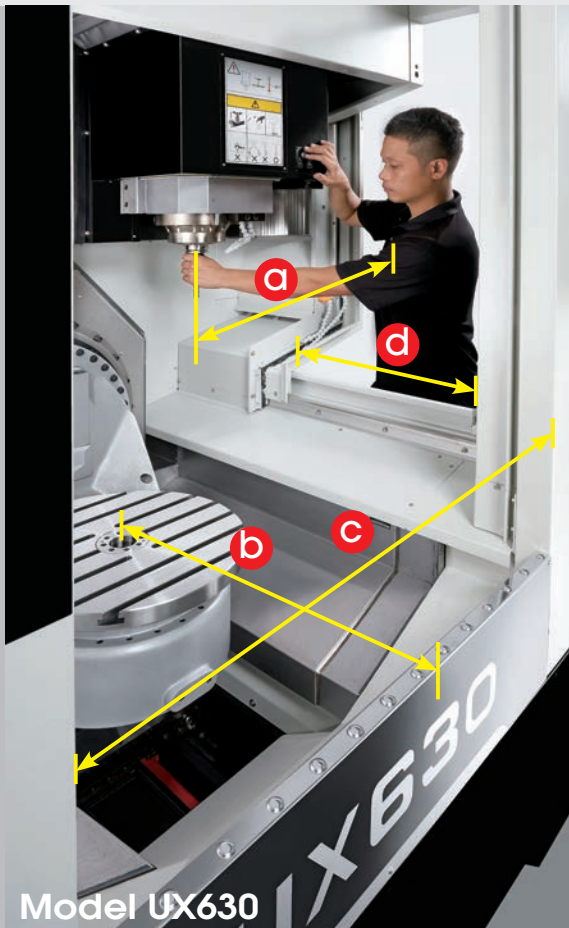
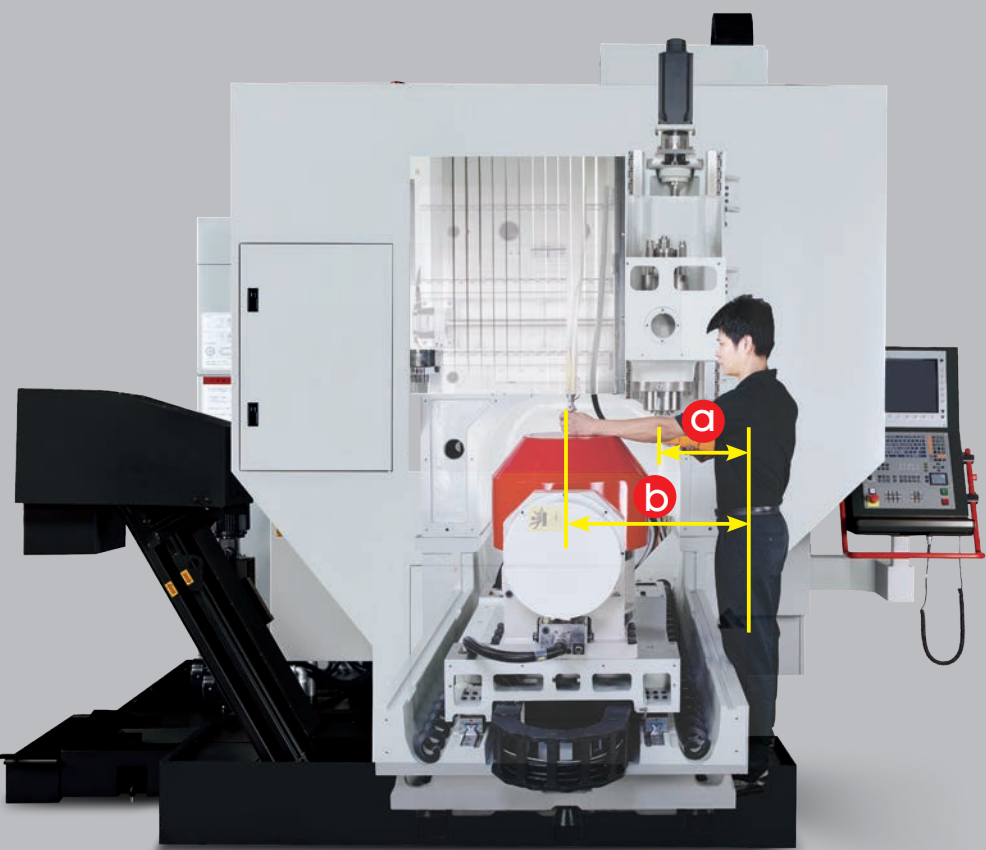
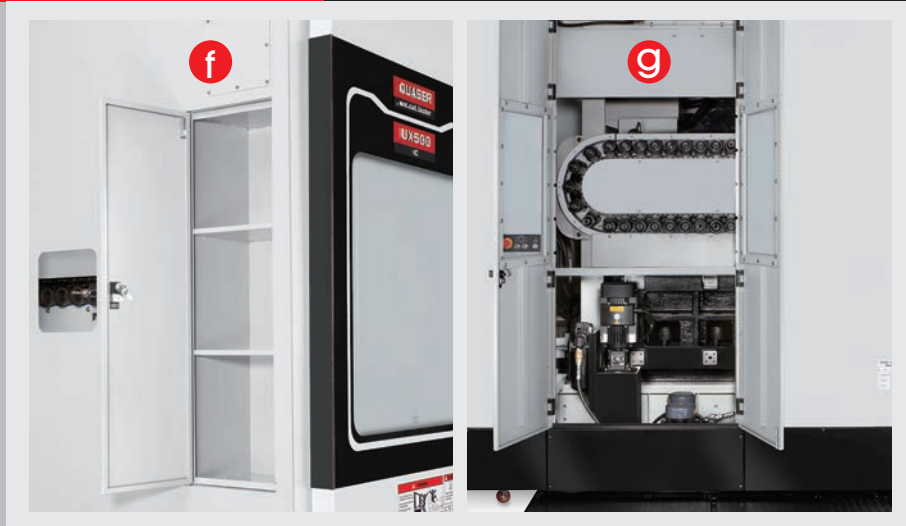
Before compensation



After compensation



Ergonomic operation



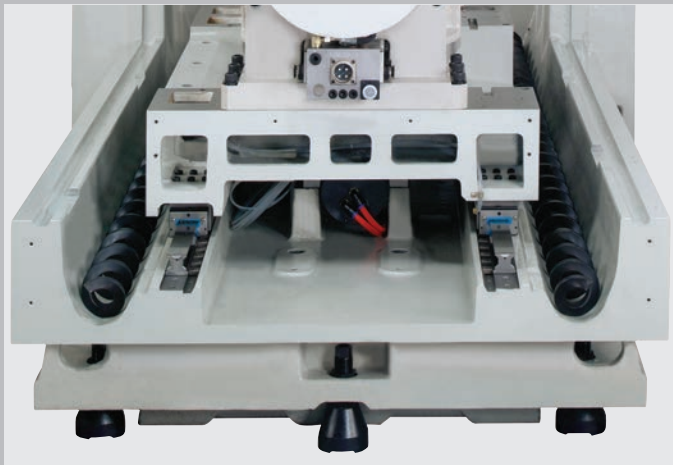
Model UX600 Model UX630

		UX500 / UX500APC	UX630 / UX630APC	UX600 / UX800
a	Convenient distance from operator to the spindle (mm)	434 / 458	356	200
b	From center of table to front door (mm)	670 / 367	565 / 438	625
c	Max. size when front door open (mm)	800 / 850	950 / 900	830
d	Side door opening (mm)	840 / 1,050	750 / 790	-
e	Ergonomic operation panel with adjustable angle	Std.		-
f	Documentation & hand tool shelf	Std.		-
g	Tool loading / unloading on magazine side	Std.		-
h	Centralized configuration of lubrication and pneumatic panel	Std.		-
i	Our hydraulic and oil chiller are integrated into the machine design for clean appearance, minimal floor requirement and easy access for service.	-	Std.	-



Coolant & chip management

	UX500C	UX500P / UX500APC	UX630P / UX630APC	UX600C	UX600P	UX800P
Coolant tank	450 L		400 L	400 L		
Coolant through spindle	Opt.	20 bar	20 bar	20 bar		
Nozzle coolant	3 bar		3.5 bar	3.5 bar		
Wash gun	Std.		Std.	Std.		
Chip augers	Std.		-	Std.		
Ceiling wash down	Std.		Std.	-		
wash down	3 bar		3.5 bar	3 bar		



Model UX500



Model UX630



Model UX600



Model UX500

Chips fall directly to avoid thermal effects on structure (model UX630)



Contorl: (F) = FANUC (T) = HEIDENHAIN (S) = SIEMENS

Technical data	UX500		UX500 / UX500APC		
	C		P		
	Multi face	5 axes	5 axes		
Spindle code	12C		9B	12B	15C
Work range					
Table size (mm)	Ø410		Ø410 / □400		
Travel X / Y / Z (mm)	712 (-400 ~ +312) / 508 (-254 ~ +254) / 515 712 (-400 ~ +312) / 508 (-256 ~ +252) / 515				
B / C (degree)	+30° ~ -120° / 360° (Continuous)				
Max. swing (mm)	Ø500				
Table surface to spindle nose (mm)	100 ~ 615		100 ~ 615 / 30 ~ 545		
Spindle nose to tilting center at 90° (mm)	100 ~ 615		100 ~ 615		
Max. work piece size (mm)	Ø500 x 350 ⁽¹⁾		Ø500 x 350 ⁽¹⁾ / Ø500 x 300		
Table load capacity (kg)	200		250 / 200		
Feed drive	6,283 / 6,283 / 11,519 (F) 6,283 / 6,283 / 10,472 (S) 9,268 / 9,268 / 11,310 (T)		10,472 / 10,472 / 14,137 (S) 11,310 / 11,310 / 13,666 (T)		
Feed force X / Y / Z (N)					
Rapid movement X / Y / Z (m / min)	36 / 36 / 36				
B / C (min ⁻¹)	B=22.2 (F;T) 16.6 (F;S) / C=50		B=60 / C=100		
Acceleration X / Y / Z (m/s ²)	3 / 3 / 2.5 (F)(S)(T)		5 / 5 / 5 (S)(T)		
Dia. & pitch of the ball screw	Ø40 / P = 12 / 12 / 12				
Accuracy Positioning / Repeatability					
ISO 230-2	0.008 / 0.004				
JIS 6338 (300 mm)	±0.003 / ±0.002				
VDI3441	0.008 / 0.004				
Main spindle					
Spindle taper	BBT 40				
Max. spindle speed	12,000		9,000	12,000	15,000
Tool changer					
Tool selection	Random				
Magazine positions	30 (std.) 48 / 60 (opt.)		48 (std.) 60 (opt.)		
Max. tool diameter w/o adjacent tool (mm)	Ø76.2 / Ø125				
Max. tool length (mm)	280				
Max. tool weight (kg)	7				
Tool to tool time (sec.)	1.7				
Chip to chip time (sec.)	9.1		8.9		
Pallet changer					
Number of pallet	-		- / 2		
Method of pallet changer	-		- / Swing type		
Pallet change time (sec.)	-		- / 12		
Pallet changing repeatability	-		- / 0.01		
Coolant system					
Coolant tank capacity (Liter)	450				
Pump capacity	75 L / min., 3 bar				
- Nozzie coolant	75 L / min., 3 bar				
- Coolant through spindle	Opt.		25 L / min., 20 bar		
- Wash down	75 L / min., 3 bar		75 L / min., 3 bar		
Machine size					
Height (mm)	3,350		3,350		
Floor space W x D (mm)	2,720 x 3,900		2,720 x 3,900 3,900 x 4,480		
Weight (kg)	8,430(30ATC) 8,730(48ATC) 8,930(60ATC) 10,300(48ATC) 10,500(60ATC)				
Connections					
Main power	220V / 60Hz or 400V / 50Hz				
Power consumption (KVA)	27(F) 25(S) 30(T)		38(S) 40(T)		

Note: ⁽¹⁾Please refer to actual max. workpiece interference diagram.

Contorl: (T) = HEIDENHAIN (S) = SIEMENS

Technical data	UX630		UX630APC	
	P			
	5 axes			
Spindle code	12M	18M	12M	18M
Work range				
Table size (mm)	Ø480		□500	
Travel	X / Y / Z (mm)	900(-450~+450)/740(-330~+410)/610		900(-450~+450)/660(-330~+330)/610
	B / C (degree)	± 120° / 360° (Continuous)		
Max. swing (mm)	Ø630 ⁽¹⁾			
Table surface to spindle nose (mm)	120 ~ 730		0 ~ 610	
Spindle nose to tilting center at 90° (mm)	0 ~ 610		0 ~ 610	
Max. work piece size (mm)	Ø630 x 600 ⁽¹⁾		Ø630 x 480 ⁽¹⁾	
Table load capacity (kg)	500		400	
Feed drive				
Feed force	X / Y / Z (N)	10,249 / 18,692 / 10,249 (T)		10,603 / 14,137 / 10,603 (S)
Rapid movement	X / Y / Z (m / min)	48 / 48 / 48		
	B / C (min ⁻¹)	B=60 / C=100		
Acceleration	X / Y / Z (m/s ²)	8 / 7 / 10 (T) 6 / 4.1 / 4 (S)		
Dia. & pitch of the ball screw	Ø40 / P = 16 / 16 / 16			
Accuracy Positioning / Repeatability				
ISO 230-2	0.008 / 0.004			
JIS 6338 (300 mm)	± 0.003 / ± 0.002			
VDI3441	0.008 / 0.004			
Main spindle				
Spindle taper	BBT 40	HSK A63	BBT 40	HSK A63
Max. spindle speed	12,000	18,000	12,000	18,000
Tool changer				
Tool selection	Random			
Magazine positions	48 (std.) 60 / 90 (opt.)			
Max. tool diameter w/o adjacent tool (mm)	Ø76.2 / Ø125			
Max. tool length (mm)	300			
Max. tool weight (kg)	7			
Tool to tool time (sec.)	1.7 (< 6kg)			
Chip to chip time (sec.)	7.2			
Pallet changer				
Number of pallet	-		2	
Method of pallet changer	-		Swing type	
Pallet change time (sec.)	-		12.1	
Pallet changing repeatability (mm)	-		0.01	
Coolant system				
Coolant tank capacity (Liter)	400			
Pump capacity				
- Nozzie coolant	75 L / min., 3.5 bar			
- Coolant through spindle	25 L / min., 20 bar			
- Wash down	75 L / min., 3.5 bar		125 L / min	
Machine size				
Height (mm)	3,520			
Floor space W x D (mm)	48 / 60 / 90ATC	3,920 x 4,810		3,920 x 5,245
Weight (kg)	48ATC	15,350		16,250
	60 / 90ATC	15,500 / 16,300		16,400 / 17,200
Connections				
Main power	220V / 60Hz or 400V / 50Hz			
Power consumption (KVA)	72(T) 69(S)			

Note: ⁽¹⁾Please refer to actual max. workpiece interference diagram.

● = Standard ○ = Option x = N / A

Standard / Option accessories	UX500		UX500 / UX500APC		
	C		P		
	Multi face	5 axes	5 axes		
Spindle code	12C		9B	12B	15C
■ QUASER mill i (4+1 Axes)	●	x	x	x	x
■ HEIDENHAIN TNC620 (4+1 Axes)	○	x	x	x	x
■ HEIDENHAIN TNC640 (5 Axes)	x	○	○	●	○
HEIDENHAIN advanced function set2	x	○	○	●	○
■ SIEMENS 828D (PPU290)	○	x	x	x	x
■ SIEMENS 840D	x	x	○	○	○
■ Oil chiller	●	●	●	●	●
■ 40 taper / 30 position tool magazine	●	●	x	x	x
■ 40 taper / 48 position tool magazine	○	○	●	●	●
■ 40 taper / 60 position tool magazine	○	○	○	○	○
■ Pull stud for BT tooling	○	○	●	●	●
■ Balance tooling for spindle warm up	○	○	●	●	●
■ BBT spindle attachment (Simultaneous contact)	●	●	●	●	●
■ ATC auto door	●	●	●	●	●
■ X / Y / Z linear scale	○	○	○	○	○
■ Rotary encoder on B & C axes	●	●	●	●	●
■ Remote manual pulse generator	●	●	●	●	●
■ Transformer ⁽¹⁾	○	○	○	○	○
■ Work probe receive OMI-2T	●	●	●	●	●
■ Work probe OMP-40	○	○	●	●	●
■ Reference rod (for thermal comp with probe)	●	●	●	●	●
■ Tool length / breakage measurement ⁽²⁾	○	○	○	○	○
■ 5 Port through table ⁽³⁾	○	○	● / x	● / x	● / x
■ Air pressure detector for pallet clamping	x	x	x / ●	x / ●	x / ●
■ 4 port through pallet ^{(3) (4)}	x	x	x / ○	x / ○	x / ○
■ Coolant system	●	●	●	●	●
■ Coolant through ball screw	○	○	●	●	●
■ Coolant through spindle 20 bar	○	○	●	●	●
■ Coolant wash gun	●	●	●	●	●
■ Coolant wash down	●	●	●	●	●
■ Air gun	○	○	○	○	○
■ Chip conveyor	●	●	●	●	●
■ Chip augers	●	●	●	●	●
■ Cutter air blast	●	●	●	●	●
■ Oil-mist collector	○	○	○	○	○
■ Bag filtration	○	○	○	○	○
■ Filtration unit	○	○	○	○	○
■ Documentation (CD-ROM) ⁽⁵⁾	●	●	●	●	●
■ Total Enclosure Guard (with Top side cover)	●	●	●	●	●
■ Work light	●	●	●	●	●
■ Machine status light	●	●	●	●	●
■ CE & EMC ⁽⁶⁾ / GB	○	○	○	○	○

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

⁽²⁾ APC only laser type. ⁽³⁾ Without Solenoid valve and control. ⁽⁴⁾ Factory mounted only.

⁽⁵⁾ Paper documentation is option. ⁽⁶⁾ As standard for Europe area.

- Machine specification might be different from the catalog if any specification update.

Standard / Option accessories	UX630	UX630APC
	P	
	5 axes	
Spindle code	12M/18M	12M/18M
■ HEIDENHAIN TNC640 (5 Axes)	●	●
HEIDENHAIN advanced function set2	●	●
■ SIEMENS 840D (5 Axes)	○	○
■ Water chiller	●	●
■ 40 taper / 48 position tool magazine	●	●
■ 40 taper / 60 position tool magazine	○	○
■ 40 taper / 90 position tool magazine	○	○
■ Balance tooling for spindle warm up	●	●
■ BBT spindle attachment (Simultaneous contact)	●	●
■ ATC auto door	●	●
■ X / Y / Z linear scale	○	○
■ Rotary encoder on B / C axes	●	●
■ Remote manual pulse generator	●	●
■ Transformer ⁽¹⁾	○	○
■ Work probe receive RMI-Q	●	●
■ Work probe RMP-40	●	●
■ Reference rod (for thermal comp with probe)	●	●
■ Tool length / breakage measurement ⁽²⁾	○	○
■ 5 Port through table ⁽³⁾	●	✕
■ Air pressure detector for pallet clamping	✕	●
■ 4 port through pallet ^{(3) (4)}	✕	○
■ Coolant system	●	●
■ Coolant through ball screw	●	●
■ Coolant through spindle 20 bar	●	●
■ Coolant through spindle 50 bar	○	○
■ Coolant wash gun	●	●
■ Coolant wash down	●	●
■ Air gun	○	○
■ Chip conveyor	●	●
■ Cutter air blast	●	●
■ Oil-mist collector	○	○
■ Filtration unit	○	○
■ Documentation (CD-ROM) ⁽⁵⁾	●	●
■ Total Enclosure Guard (with Top side cover)	●	●
■ Work light	●	●
■ Machine status light	●	●
■ CE & EMC ⁽⁶⁾	○	○

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

⁽²⁾ Only laser type. ⁽³⁾ Without Solenoid valve and control. ⁽⁴⁾ Factory mounted only.

⁽⁵⁾ Paper documentation is option.

⁽⁶⁾ As standard for Europe area.

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

Contorl: (F) = FANUC (T) = HEIDENHAIN (S) = SIEMENS

Technical data	UX600					UX800
	C		P			P
	Multi face	5 axes	5 axes			
Spindle code	12C		9B	12B	15C	15C
Work range						
Table size (mm)	Ø500		Ø280 / Ø600 x W500			Ø630
Travel	X (mm)	885 (-580 ~ +305)	885 (-580 ~ +305)			995 (-625~+370)
	Y (mm)	800 (+375 ~ -425)	800 (+375 ~ -425)			800 (+375~-425)
	Z (mm)	500	500			500
	A (degree)	+30° ~ -120°	+30° ~ -120°			+30° ~ -120°
	C (degree)	360° (Continuous)	360° (Continuous)			360° (Continuous)
Max. swing (mm)	Ø630		Ø600			Ø800
Table surface to spindle nose (mm)	160 ~ 660		130 ~ 630			180 ~ 680
Spindle nose to tilting center at 90°	160 ~ 660		160 ~ 660			130 ~ 630
Max. work piece size (mm)	Ø630 x 425		Ø600 x 430			Ø800 x 470
Table load capacity (kg)	300		300			850
Feed drive	11,519 / 11,519 / 11,519 (F)		13,666 / 13,666 / 13,666 (T)			19,897/13,666/13,666(T)
Feed force	X / Y / Z (N)	13,666 / 13,666 / 13,666 (T)	14,137 / 14,137 / 14,137 (S)			
Rapid movement	X / Y / Z (m / min)	36 / 36 / 36	36			36
	A / C (min ⁻¹)	A=11.1 / C=16.6	A=25 / C=33.3			A=60 / C=100
Acceleration	X / Y / Z (m/s ²)	3 / 4 / 4 (F) 3 / 4.5 / 4.5 (T)	5 / 5.5 / 5.5 (T)(S)			5 / 5.5 / 5.5 (T)
Dia. & pitch of the ball screw	Ø45 / P = 12 / 12 / 12					
Accuracy Positioning / Repeatability						
ISO 230-2	0.008 / 0.004					
JIS 6338 (300 mm)	±0.003 / ±0.002					
VDI3441	0.008 / 0.004					
Main spindle						
Spindle taper	BBT 40					
Max. spindle speed	12,000	9,000	12,000	15,000	15,000	
Tool changer						
Tool selection	Random					
Magazine positions	30 (std.) 48 & 60 (opt.)	48 (std.) 60 (opt.)				
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.)	7.2 (F) 6.9 (T)	6.7				
Coolant system						
Coolant tank capacity (Liter)	400					
Pump capacity						
- Nozzie coolant	60 L / min., 3.5 bar					
- Through spindle coolant	25 L / min., 20 bar					
- Wash down	60 L / min., 3 bar					
Machine size						
Height (mm)	3,280					
Floor space W x D (mm)	4,150 x 3,800					
Weight (kg)	11,680 (30ATC) 11,960 (48ATC) 12,100 (60ATC) 12,820 (90ATC)					
Connections						
Main power	220V or 380V or 400V or 415V / 50Hz or 60Hz					
Power consumption (KVA)	30(F) 35(T)	38(T) 41.3(S)			53(T)	

● = Standard ○ = Option x = N / A

Standard / Option accessories	UX600		UX600			UX800
	C		P			P
	Multi face	5 axes	5 axes			
Spindle code	12C		9B	12B	15C	15C
■ QUASER mill I (4+1 Axes)	●	x	x	x	x	x
■ HEIDENHAIN TNC620 (4+1 Axes)	○	x	x	x	x	x
■ HEIDENHAIN TNC640 5 Axes)	x	●	○	●	○	●
HEIDENHAIN advanced function set2	x	●	○	●	○	●
■ SIEMENS 840D	x	x	○	○	○	x
■ Oil chiller	●	●	●	●	●	●
■ 40 taper / 30 position tool magazine	●	●	x	x	x	x
■ 40 taper / 48 position tool magazine	○	○	●	●	●	●
■ 40 taper / 60 position tool magazine	○	○	○	○	○	○
■ 40 taper / 90 position tool magazine	○	○	○	○	○	○
■ Pull stud for BT tooling system	○	○	●	●	●	●
■ Balance tooling for spindle warm up	○	○	●	●	●	●
■ BBT spindle attachment (Simultaneous contact)	●	●	●	●	●	●
■ ATC auto door	●	●	●	●	●	●
■ X / Y / Z linear scale & C rotary encoder	○	○	○	○	○	●
■ Rotary encoder on A axes	●	●	●	●	●	●
■ Remote manual pulse generator	●	●	●	●	●	●
■ Transformer ⁽¹⁾	○	○	○	○	○	○
■ Work probe receive OMI-2T	●	●	●	●	●	●
■ Work probe OMP-40	○	○	●	●	●	●
■ Tool length / breakage measurement	○	○	○	○	○	○
■ Reference rod (for thermal comp with probe)	●	●	●	●	●	●
■ 2 Port through table ⁽²⁾	○	○	●	●	●	●
■ Coolant system	●	●	●	●	●	●
■ Coolant through ball screw	○	○	●	●	●	●
■ Coolant through spindle 20 bar	●	●	●	●	●	●
■ Coolant wash gun	●	●	●	●	●	●
■ Coolant wash down	●	●	●	●	●	●
■ Air gun	○	○	○	○	○	○
■ Chip conveyor	●	●	●	●	●	●
■ Chip augers	●	●	●	●	●	●
■ Cutter air blast	●	●	●	●	●	●
■ Stainless steel chip pan & chip channel	●	●	●	●	●	●
■ Oil-mist collector	○	○	○	○	○	○
■ Bag filtration	○	○	○	○	○	○
■ Filtration unit	○	○	○	○	○	○
■ Documentation (CD-ROM) ⁽³⁾	●	●	●	●	●	●
■ Total Enclosure Guard (with Top side cover)	●	●	●	●	●	●
■ Work light	●	●	●	●	●	●
■ Machine status light	●	●	●	●	●	●
■ CE & EMC ⁽⁴⁾ / GB	○	○	○	○	○	○

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

⁽²⁾ UX800-5 port through table . ⁽³⁾ Paper documentation is option. ⁽⁴⁾ As standard for Europe area.

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

UX500APC Layout

Installation dimension

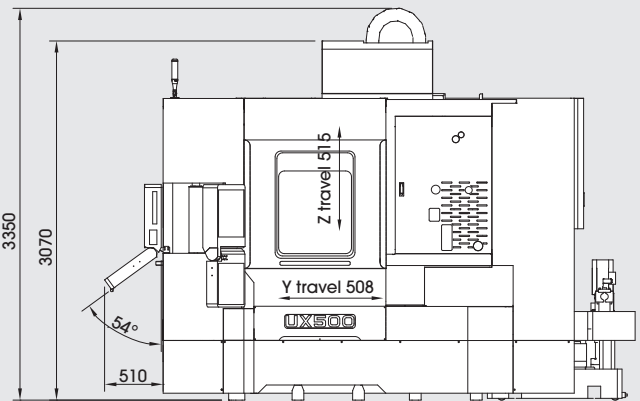
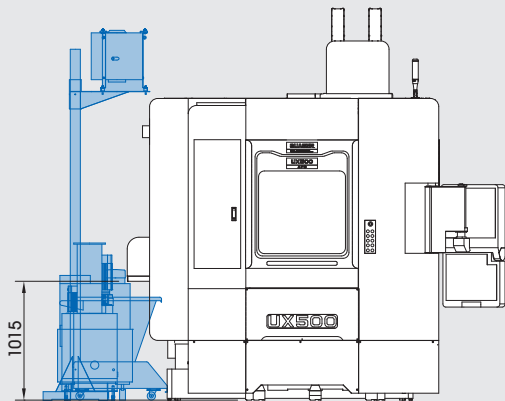
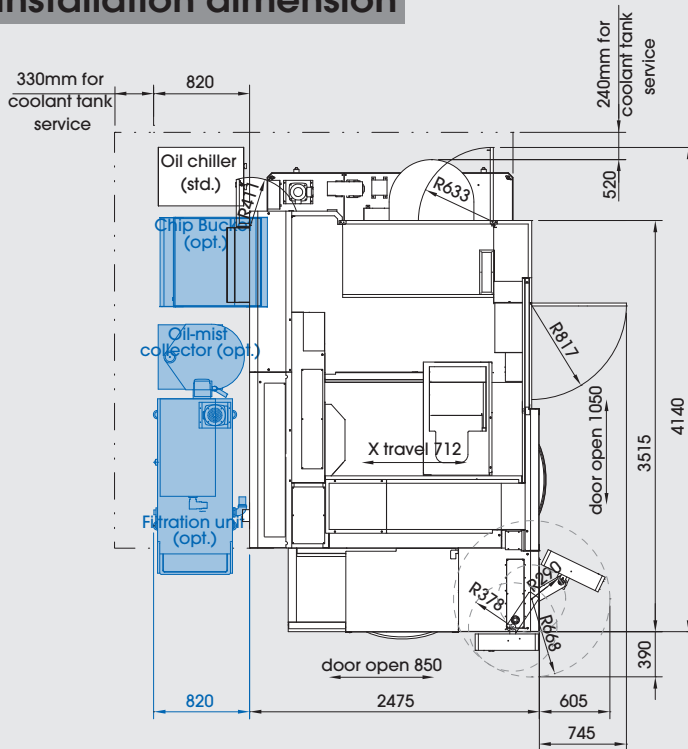
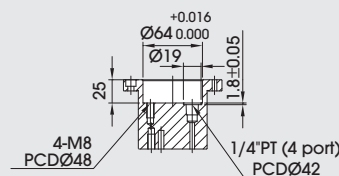
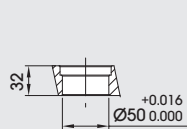
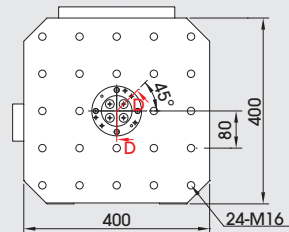
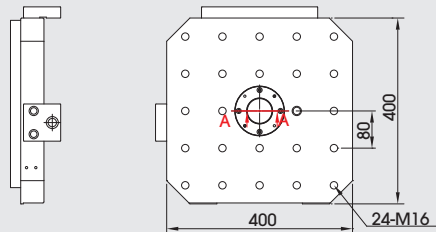
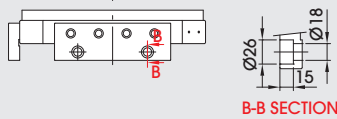


Table dimension



A-A SECTION

D-D SECTION

UX630 Layout

Installation dimension

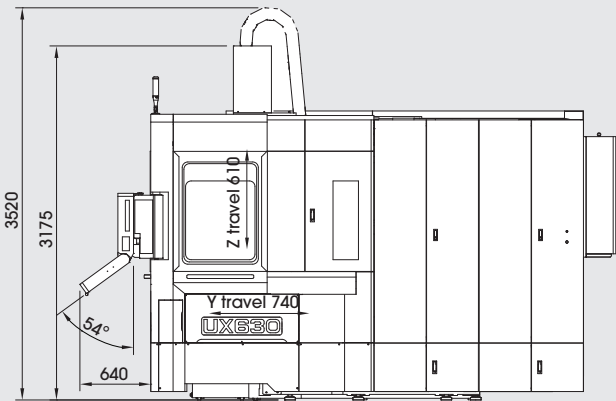
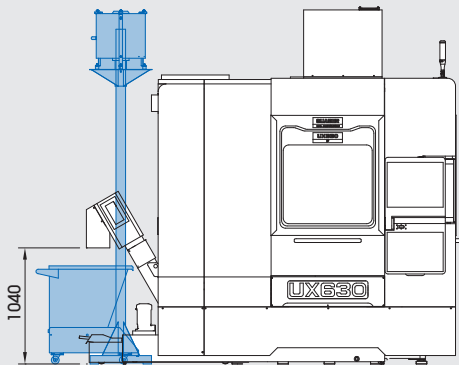
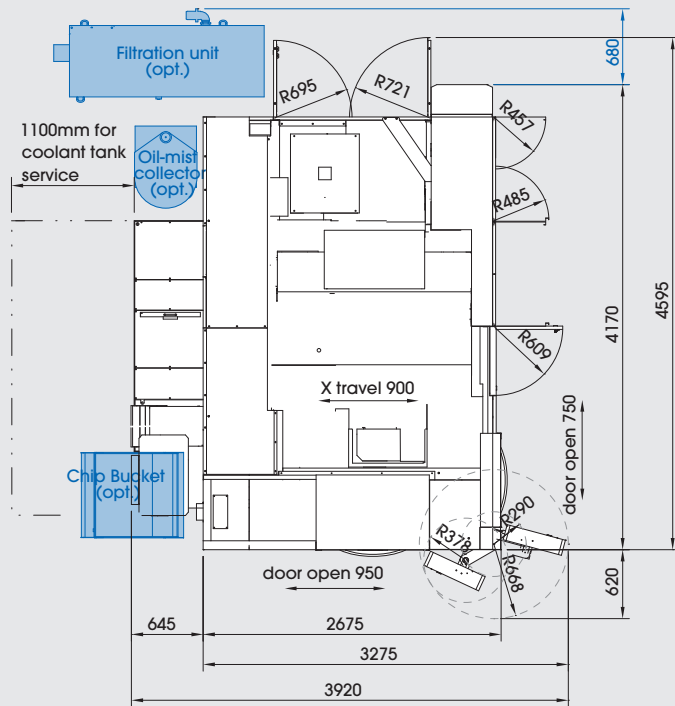
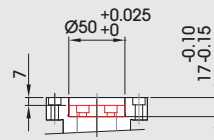
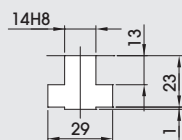
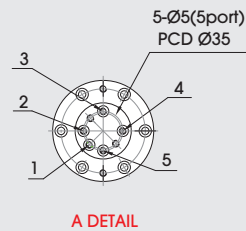
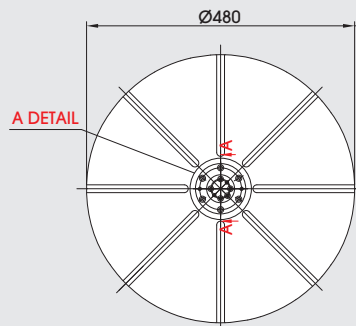


Table dimension



A-A SECTION

UX630APC Layout

Installation dimension

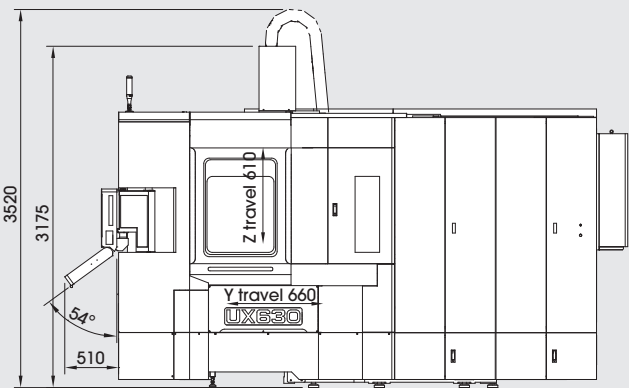
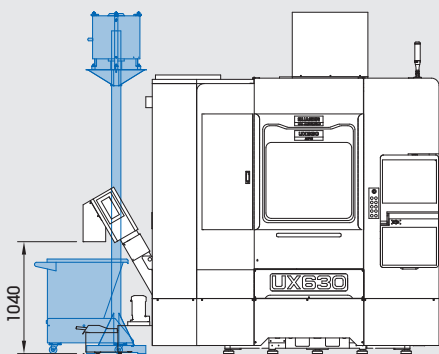
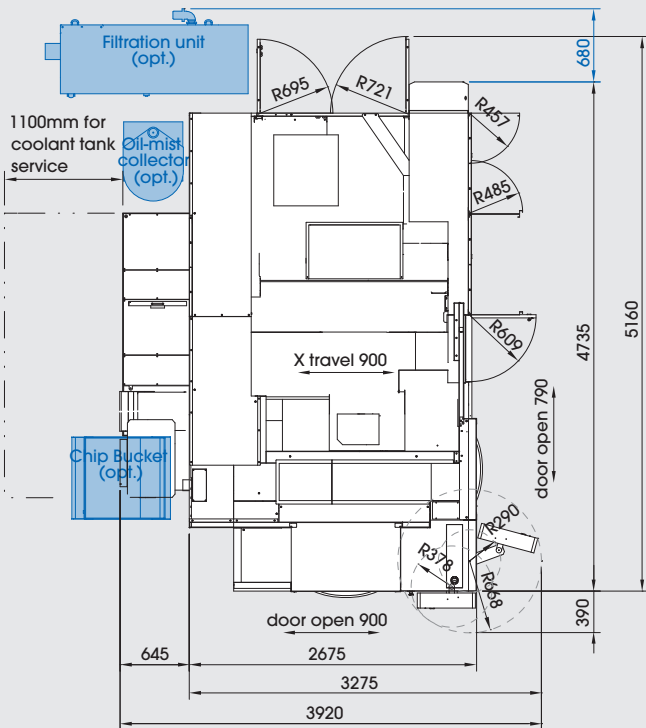
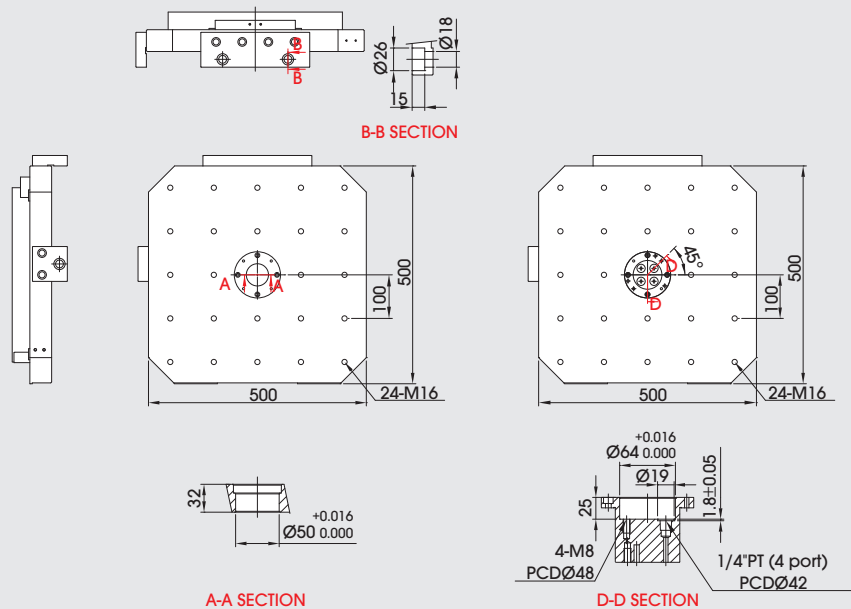
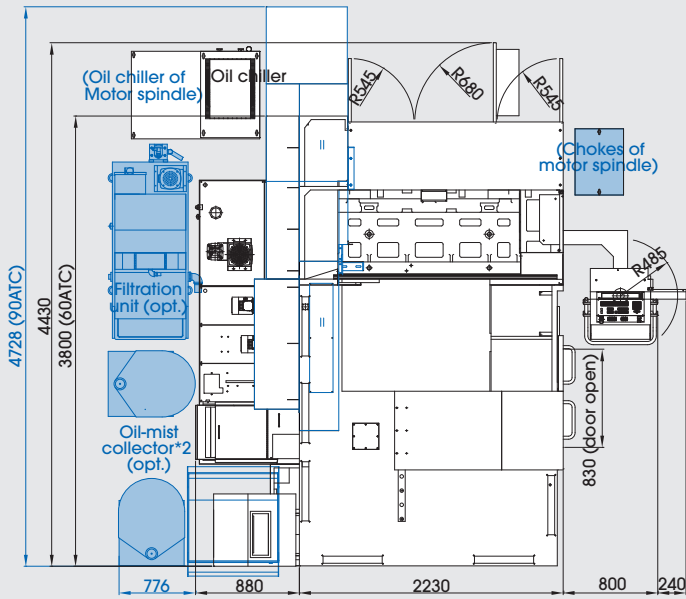


Table dimension



UX600 / UX800 Layout

Installation dimension



	UX600	UX800
A	1,024	978

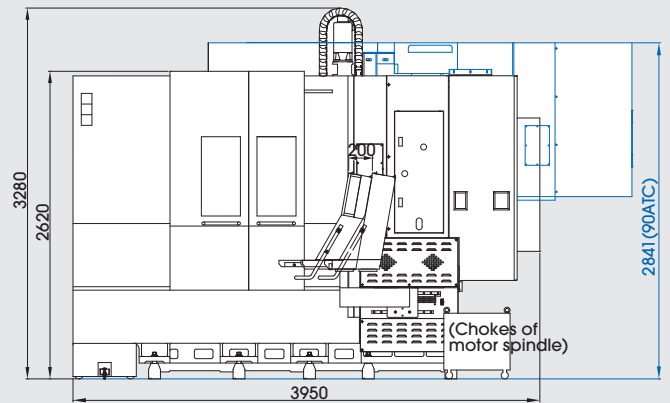
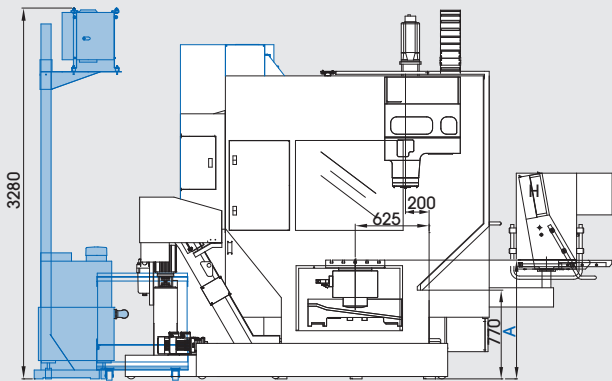
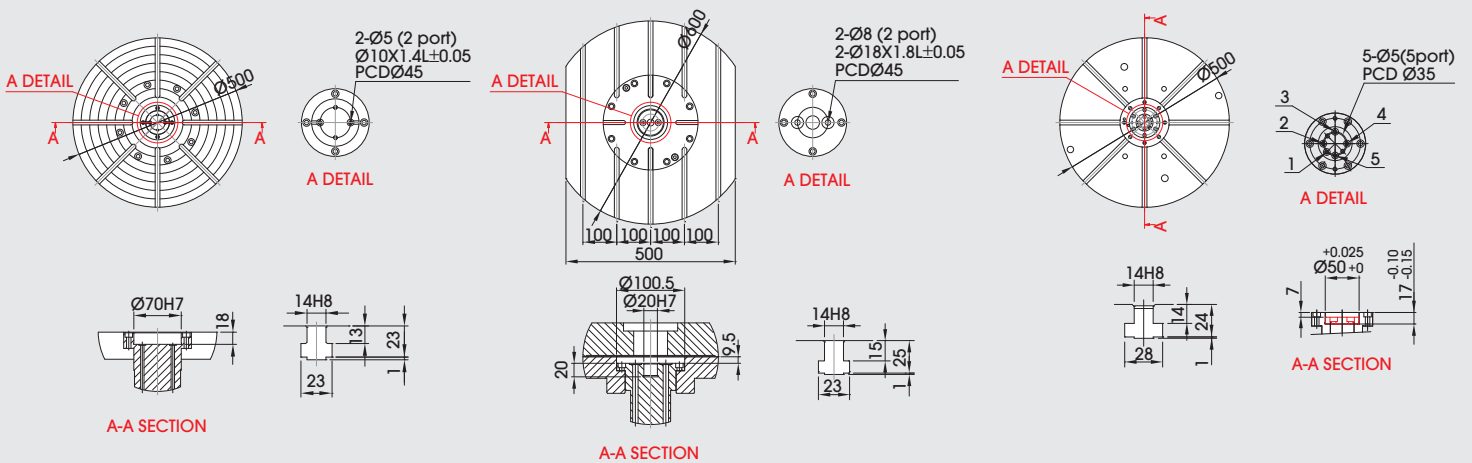


Table dimension



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