

**QUASER**

*we cut faster*

# UX SERIES

# UX series

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## UX500

### Travel

X : 712 (-400 ~ +312)

Y : 508 (-254 ~ +254)

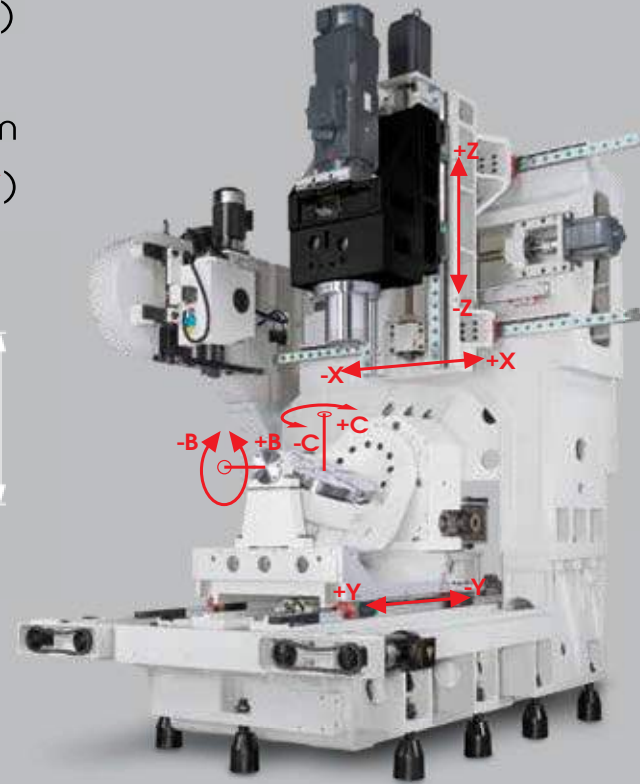
Z : 515 mm

Table size:  $\varnothing$ 410 mm  
(UX500C - DETRON\*)

(UX500P - HIWIN\*)



Note: \*rotary table brand  
\*\*UX500C=200kg  
UX500P=250kg



## UX500APC

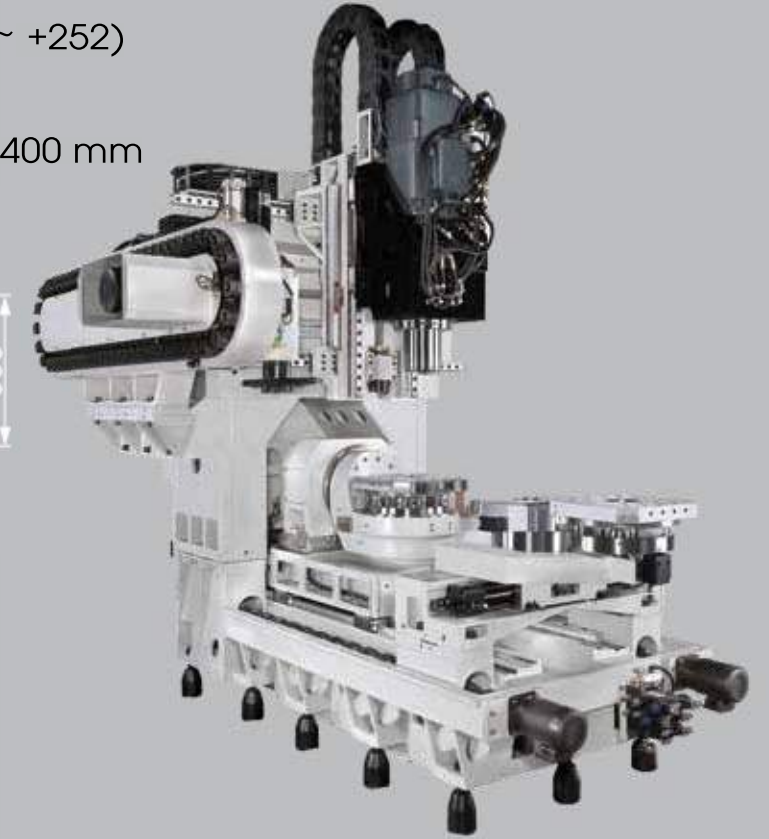
### Travel

X : 712 (-400 ~ +312)

Y : 508 (-256 ~ +252)

Z : 515 mm

Table size:  $\square$ 400 mm



# UX series

## UX630P

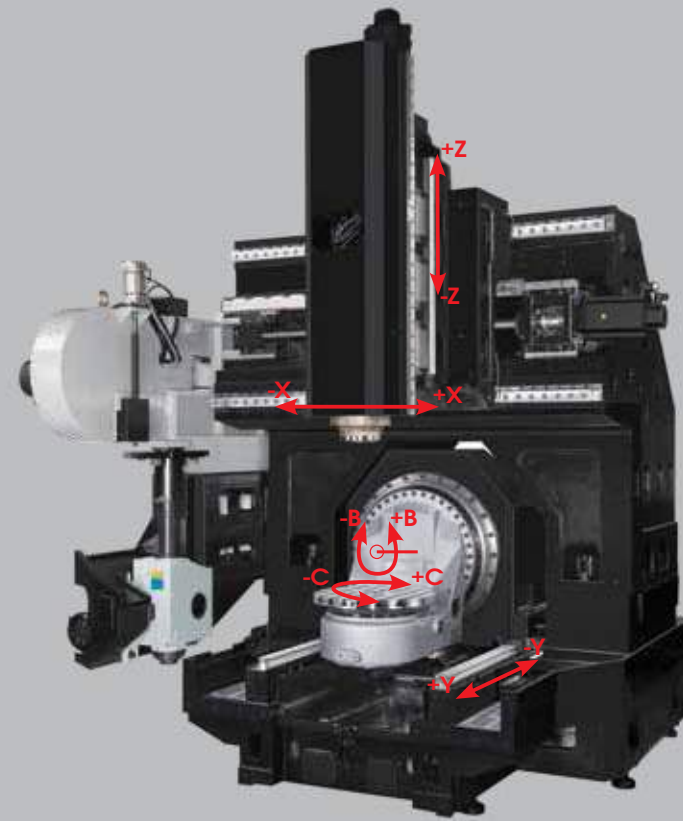
Travel

X : 900 (-450 ~ +450)

Y : 740 (-330 ~ +410)

Z : 610 mm

Table size:  $\varnothing$ 480 mm



## UX630APC

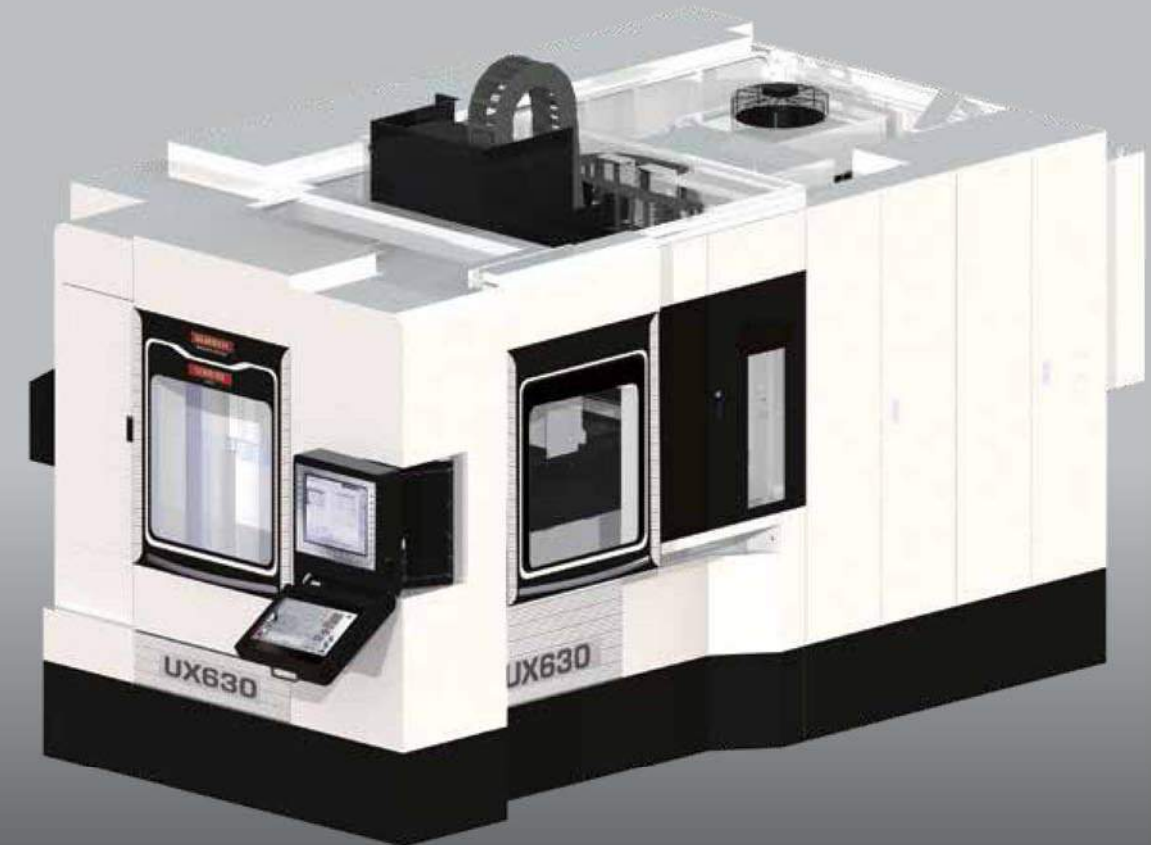
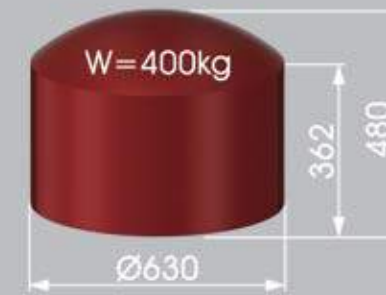
Travel

X : 900 (-450 ~ +450)

Y : 660 (-330 ~ +330)

Z : 610 mm

Table size:  $\square$ 500 mm





# UX series

## UX600

Travel

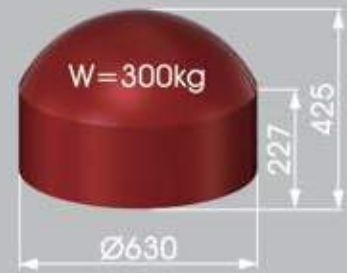
X : 885 (-580 ~ +305)

Y : 800 (+375 ~ -425)

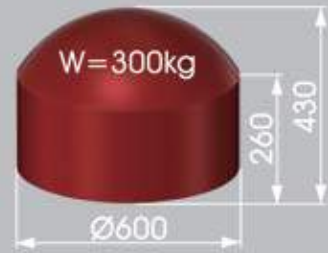
Z : 500 mm

Table size:  $\text{Ø}500$  mm (UX600C)

$\text{Ø}280$  /  $\text{Ø}600$  x W500 (UX600P)

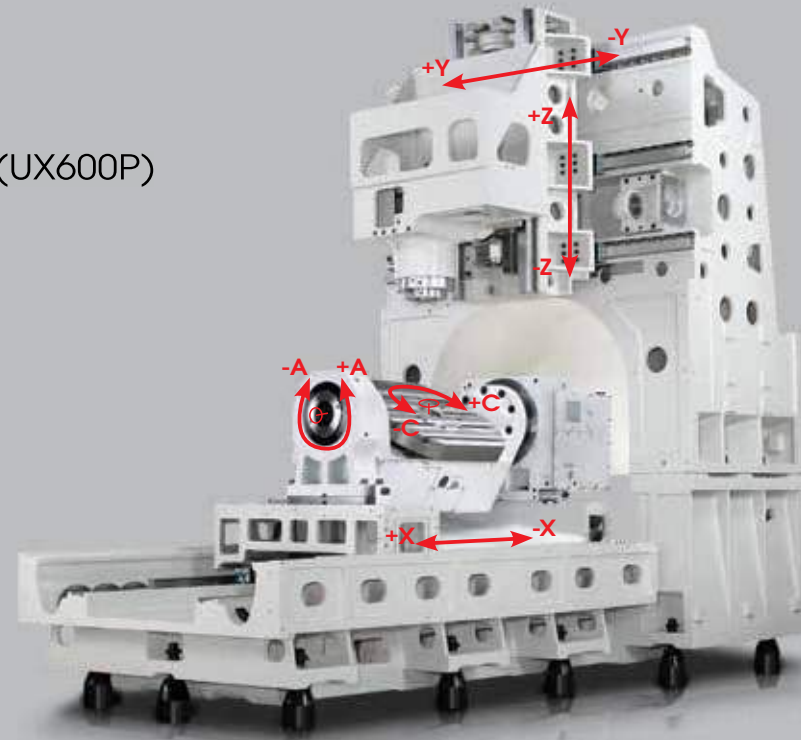


(UX600C - DETRON\*)



(UX600P - MMK MATSUMOTO\*)

Note: \*rotary table brand



## UX800P

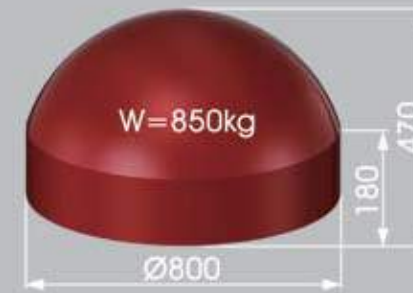
Travel

X : 995 (-625 ~ +370)

Y : 800 (+375 ~ -425)

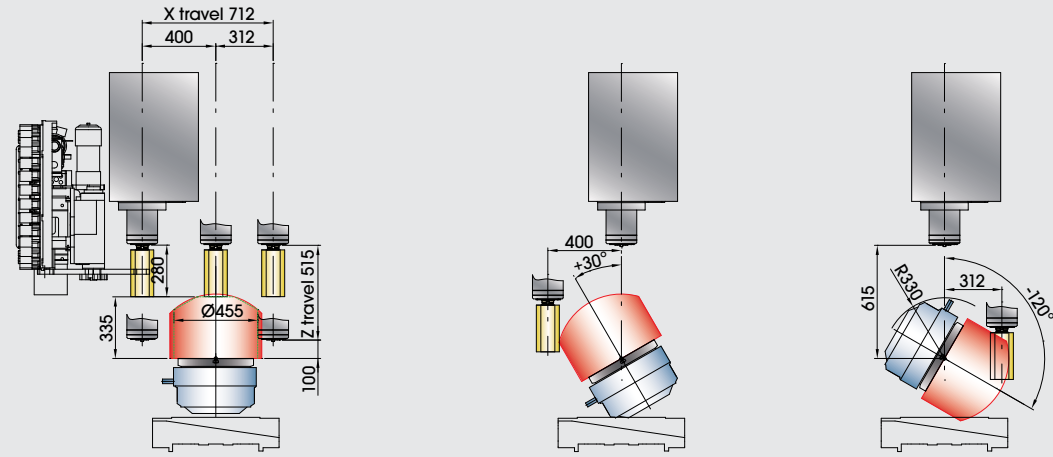
Z : 500 mm

Table size:  $\text{Ø}630$  mm

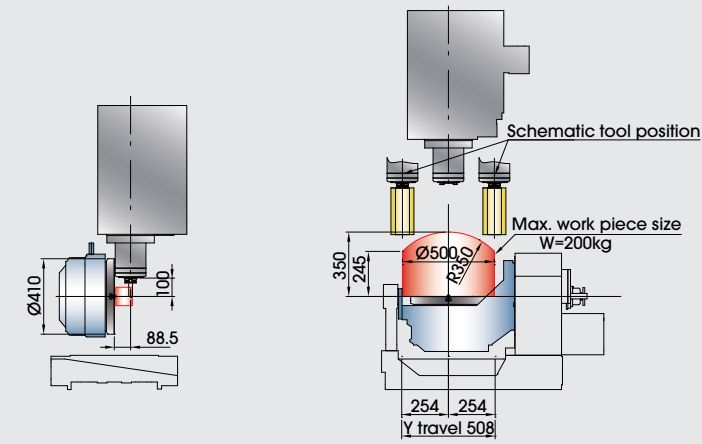


# Cutting area and interference

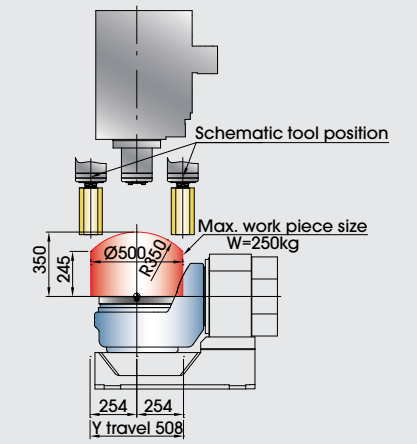
UX500



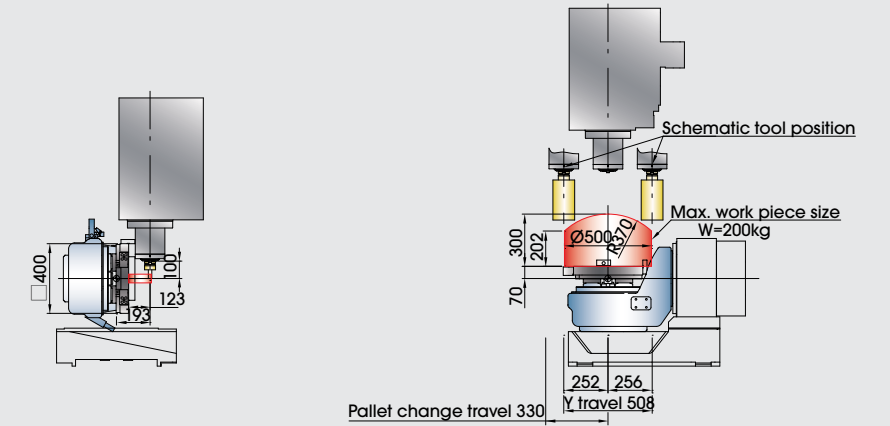
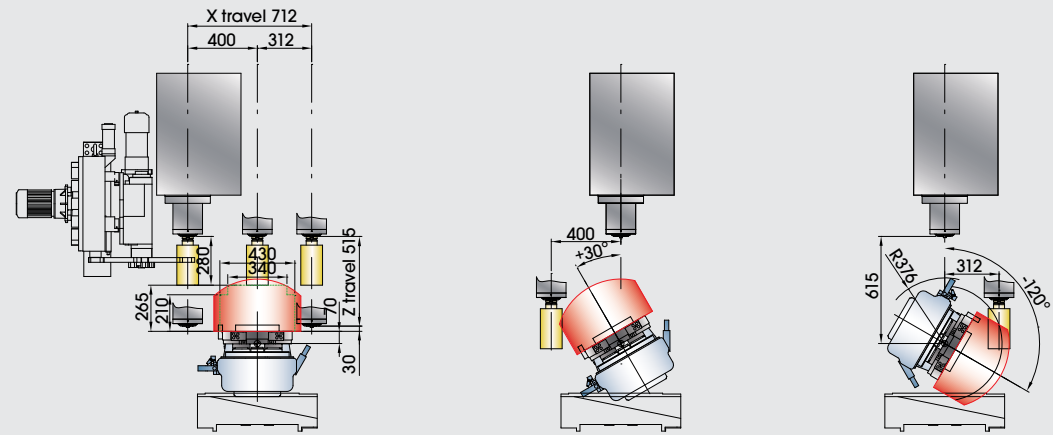
UX500C



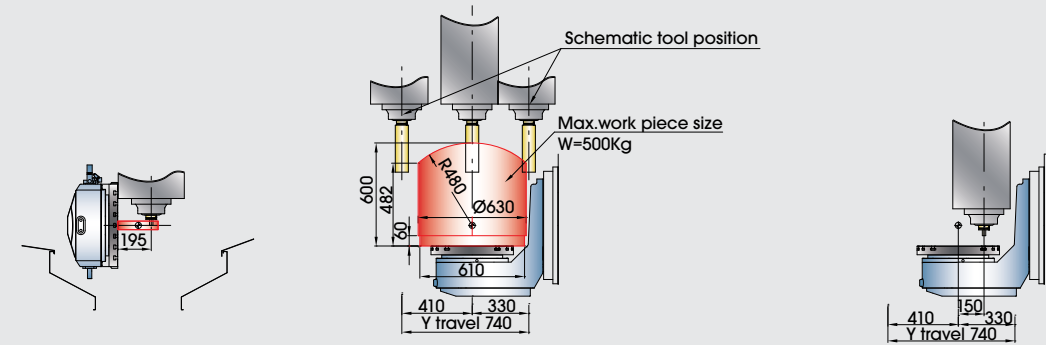
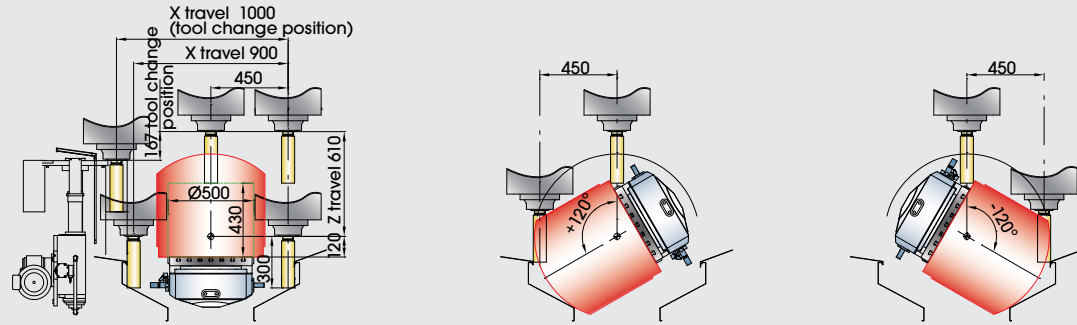
UX500P



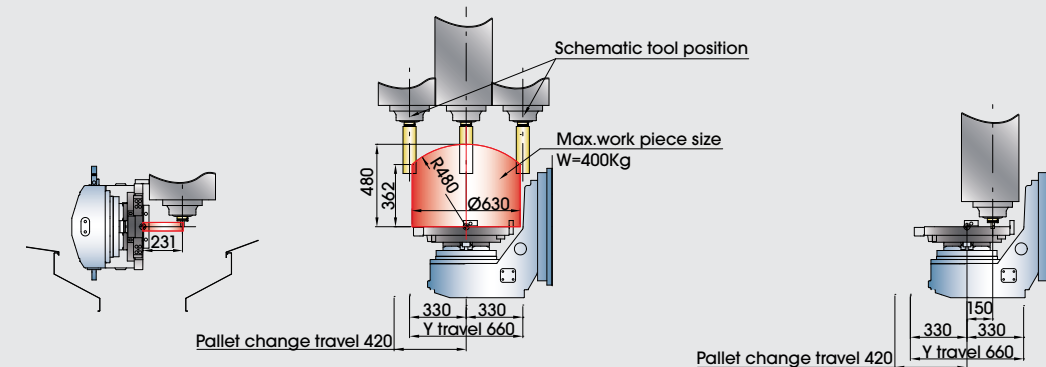
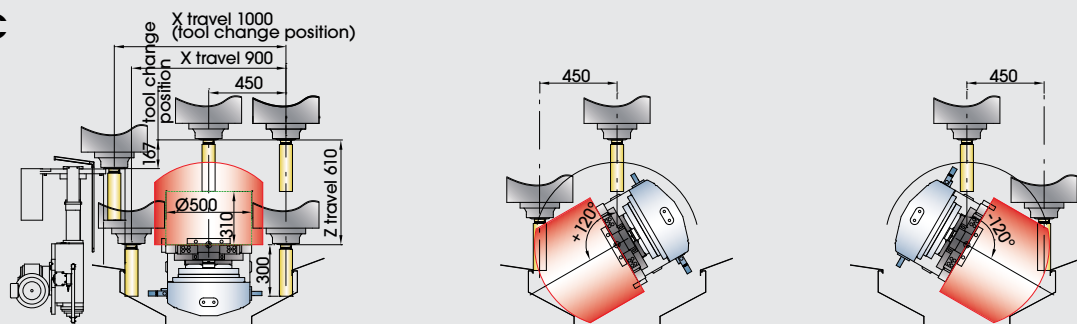
UX500APC



UX630P



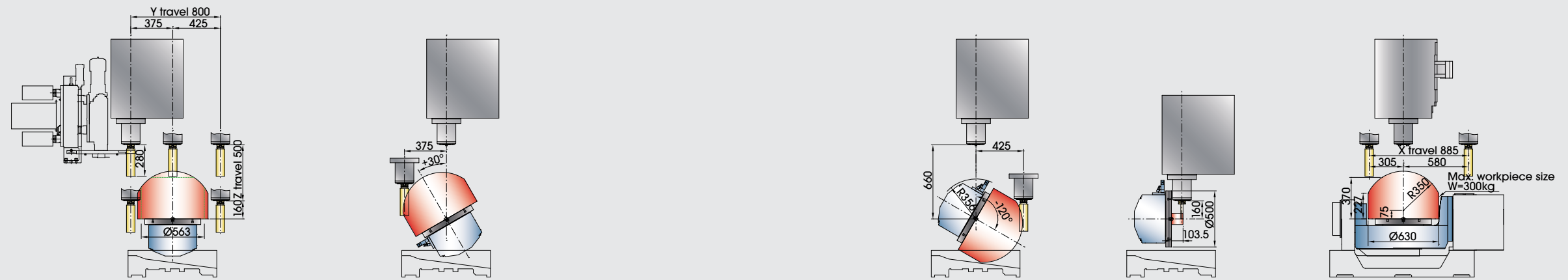
UX630APC



# Cutting area and interference

## UX600C

### Coupling spindle



## UX600P

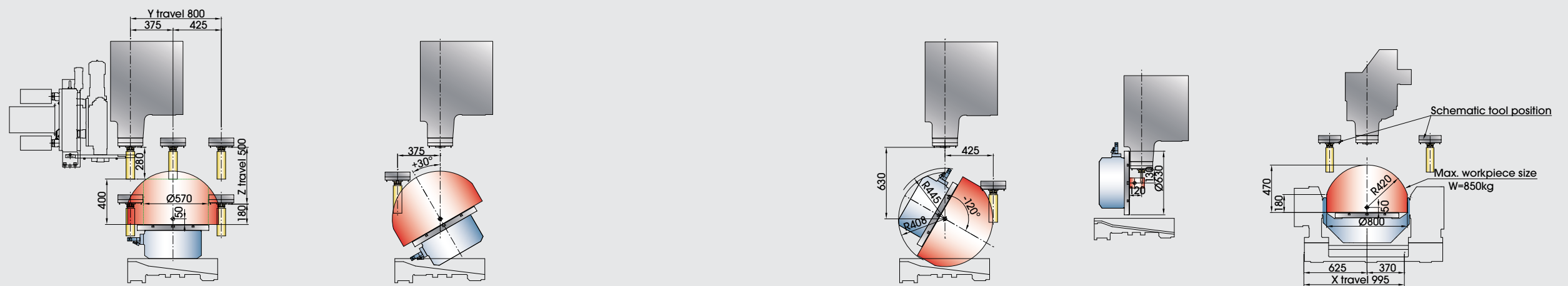
### Belt spindle

### Coupling spindle



## UX800P

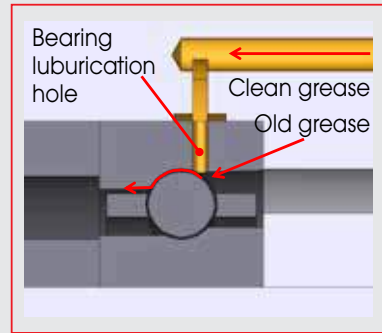
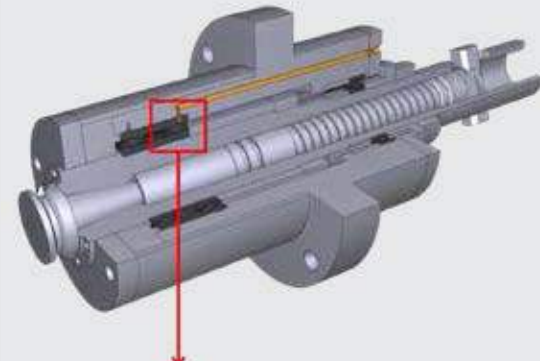
### Coupling spindle





# Unique spindle technology

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

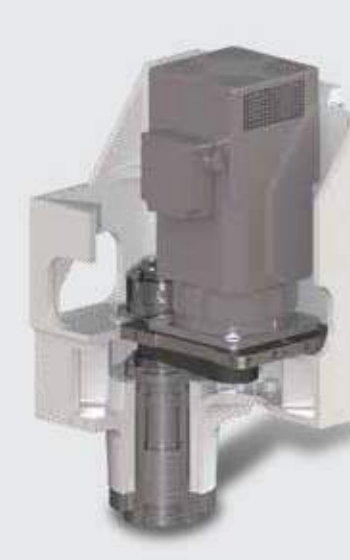


- Standard on all models

Coupling



Belt



Built-in



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
<b>FANUC</b>				
Spindle base speed	1,500		-	
Spindle output kW (S3-25%)	18.5	15	-	
Spindle output torque Nm (S3-25%)	118	95.5	-	
<b>HEIDENHAIN</b>				
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
<b>SIEMENS</b>				
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

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
<b>FANUC</b>		
1,400	-	-
26	-	-
177	-	-
<b>HEIDENHAIN</b>		
2,000	2,940	3,000
27.7	40 <sup>(1)</sup>	46 <sup>(1)</sup>
132	131.3 <sup>(1)</sup>	146 <sup>(1)</sup>
<b>SIEMENS</b>		
2,000	2,940	
27.7	40 <sup>(1)</sup>	46 <sup>(1)</sup>
132	131.3 <sup>(1)</sup>	146 <sup>(1)</sup>
●	●	●
● ●		
● ●		
	● ●	● ●
	● ●	● ●
● ●		
●		

# Work envelope

UX500	UX500C		UX500P / UX500APC	
	Rotary Axis (C-axis)	Tilting Axis (B-axis)	Rotary Axis (C-axis)	Tilting 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 (C-axis)	Tilting Axis (B-axis)	Rotary Axis (C-axis)	Tilting 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 (C-axis)	Tilting Axis (A-axis)	Rotary Axis (C-axis)	Tilting 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 <sup>-1</sup> )	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



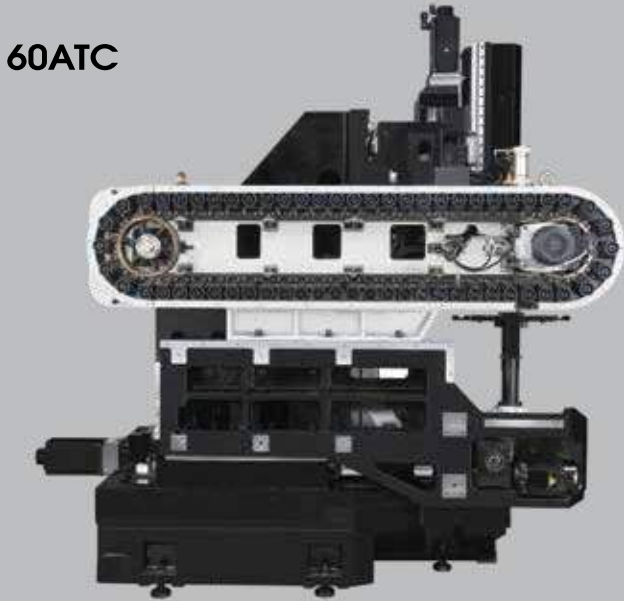
# ATC system



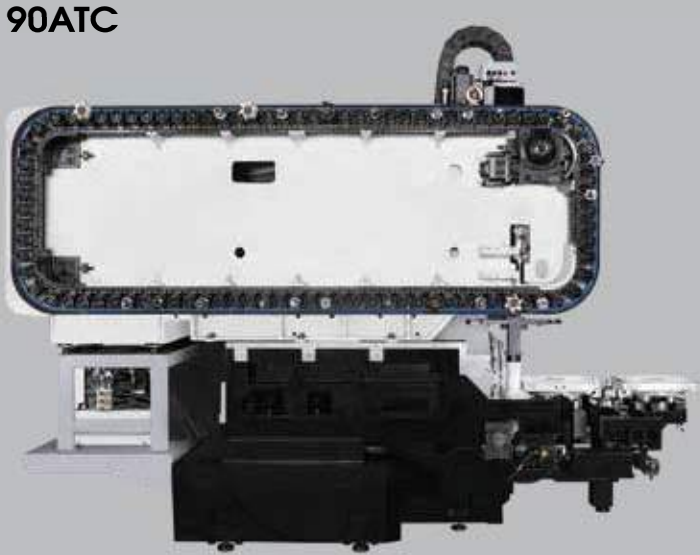
30ATC



48ATC



60ATC



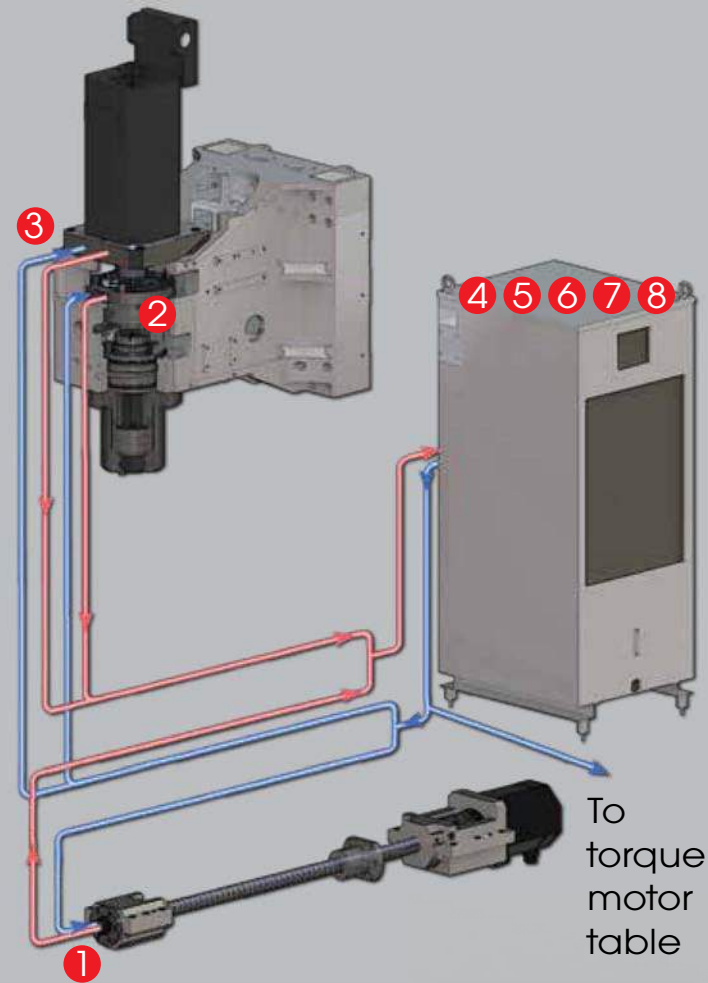
90ATC

# Thermal management

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

## LEVEL I - Standard

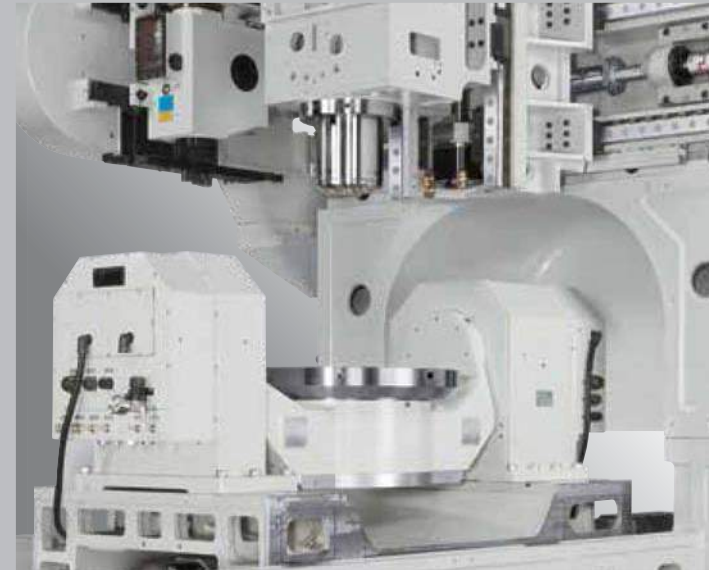
- 1 Coolant through ball screw.  
To keep
  - a). Under  $\pm 10 \mu m$  repeatability on X, Y & Z
  - b). Stable rigidity on ball screw system
- 2 Spindle cooling circuit
- 3 Motor mountingblock cooling circuit (for coupling spindle)
- 4 Oil chiller 6,000 BTU
- 5 Oil chiller 12,000 BTU
- 6 Oil chiller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

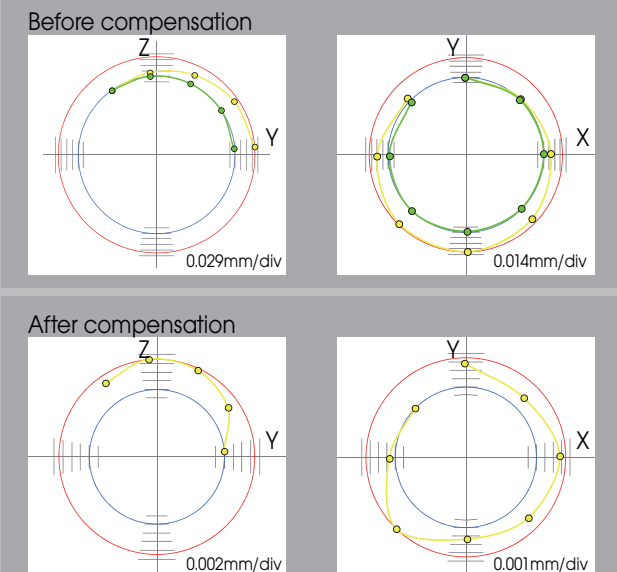


## LEVEL III

- 11 Thermal comp with probe

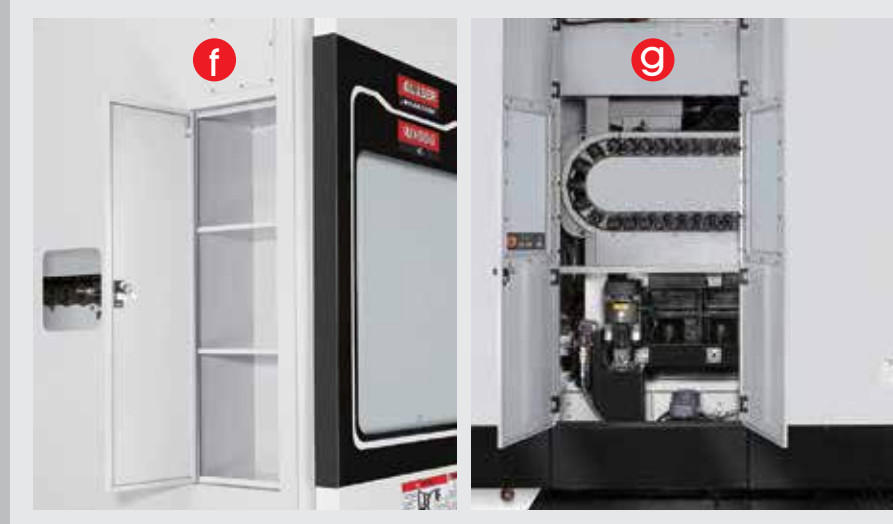


- 12 Touch probe cycles for automatic measurement of rotary axes (opt.)

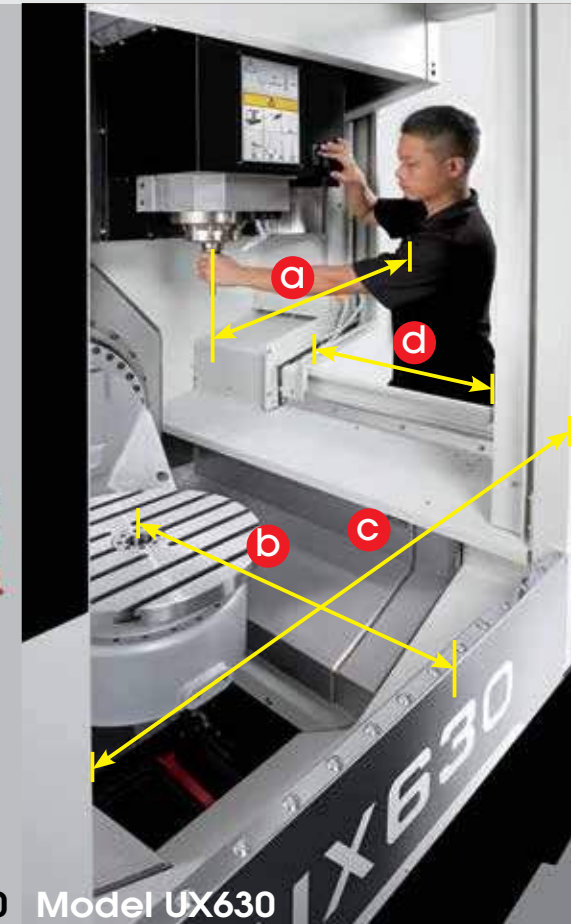
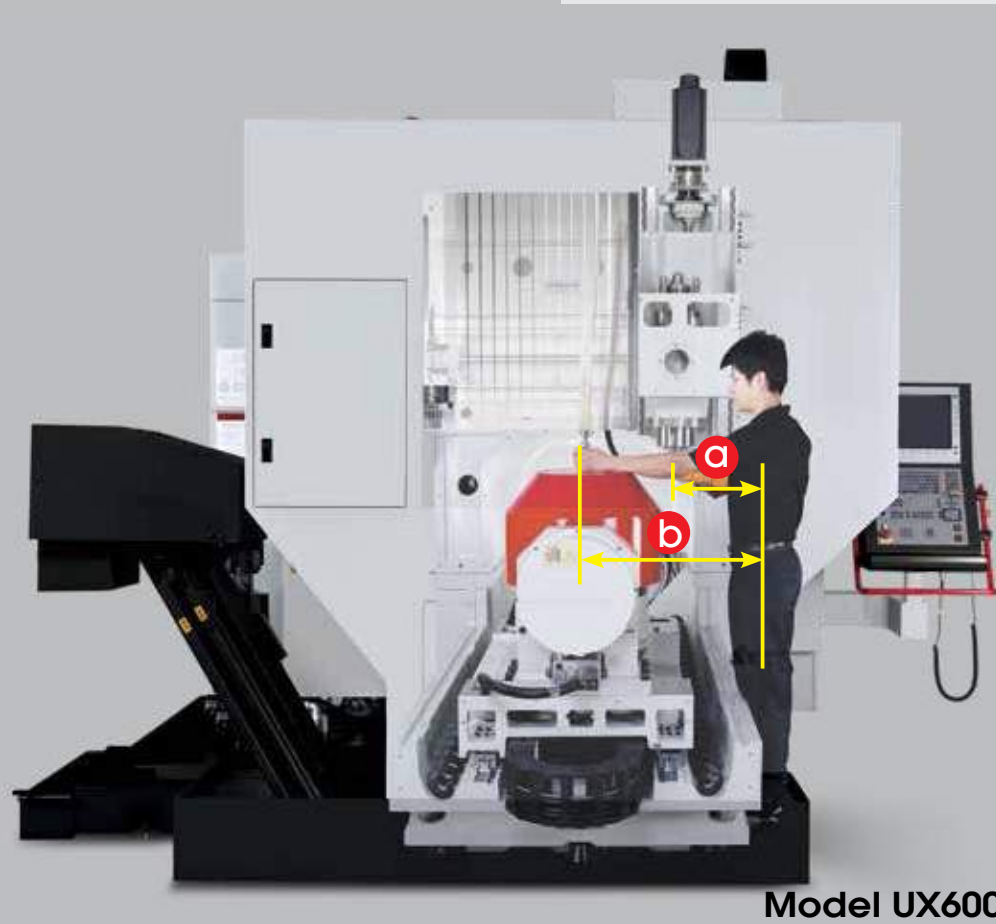




# Ergonomic operation



	UX500 / UX500APC	UX630 / UX630APC	UX600 / UX800
<b>a</b>	434 / 458	356	200
<b>b</b>	670 / 367	565 / 438	625
<b>c</b>	800 / 850	950 / 900	830
<b>d</b>	840 / 1,050	750 / 790	-
<b>e</b>	Std.		-
<b>f</b>	Std.		-
<b>g</b>	Std.		-
<b>h</b>	Std.		-
<b>i</b>	-	Std.	-



Model UX600 Model UX630





# Coolant & chip management

	UX500C	UX500P / UX500APC	UX630P / UX630APC	UX600C	UX600P	UX800P
Coolant tank	450 L	400 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



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

Model UX500

Technical data	UX500		UX500 / UX500APC		
	C		P		
	Multi face	5 axes	5 axes		
Spindle code	12C		9B	12B	15C
<b>Work range</b>	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 <sup>(1)</sup>		Ø500 x 350 <sup>(1)</sup> / Ø500 x 300		
Table load capacity (kg)	200		250 / 200		
<b>Feed drive</b>	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)	36 / 36 / 36				
Rapid movement X / Y / Z (m / min)	B=22.2 (F;T) 16.6 (F;S) / C=50				
B / C (min <sup>-1</sup> )	B=60 / C=100				
Acceleration X / Y / Z (m/s <sup>2</sup> )	3 / 3 / 2.5 (F)(S)(T)		5 / 5 / 5 (S)(T)		
Dia. & pitch of the ball screw	Ø40 / P = 12 / 12 / 12				
<b>Accuracy Positioning / Repeatability</b>	0.008 / 0.004				
ISO 230-2	±0.003 / ±0.002				
JIS 6338 (300 mm)	0.008 / 0.004				
VDI3441					
<b>Main spindle</b>	BBT 40				
Spindle taper	BBT 40				
Max. spindle speed	12,000	9,000	12,000	15,000	
<b>Tool changer</b>	Random				
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			
<b>Pallet changer</b>	- / 2				
Number of pallet	-	- / Swing type			
Method of pallet changer	-	- / 12			
Pallet change time (sec.)	-	- / 0.01			
Pallet changing repeatability	-				
<b>Coolant system</b>	450				
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			
<b>Machine size</b>	3,350				
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)		
<b>Connections</b>	220V / 60Hz or 400V / 50Hz				
Main power	220V / 60Hz or 400V / 50Hz				
Power consumption (KVA)	27(F) 25(S) 30(T)		38(S) 40(T)		

Note: <sup>(1)</sup>Please refer to actual max. workpiece interference diagram.

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

Note: <sup>(1)</sup>Please refer to actual max. workpiece interference diagram.



● = Standard ○ = Option ✕ = 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)	●	✕	✕	✕	✕
■ HEIDENHAIN TNC620 (4+1 Axes)	○	✕	✕	✕	✕
■ HEIDENHAIN TNC640 (5 Axes)	✕	○	○	●	○
HEIDENHAIN advanced function set2	✕	○	○	●	○
■ SIEMENS 828D (PPU290)	○	✕	✕	✕	✕
■ SIEMENS 840D	✕	✕	○	○	○
■ Oil chiller	●	●	●	●	●
■ 40 taper / 30 position tool magazine	●	●	✕	✕	✕
■ 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 <sup>(1)</sup>	○	○	○	○	○
■ Work probe receive OMI-2T	●	●	●	●	●
■ Work probe OMP-40	○	○	●	●	●
■ Reference rod (for thermal comp with probe)	●	●	●	●	●
■ Tool length / breakage measurement <sup>(2)</sup>	○	○	○	○	○
■ 5 Port through table <sup>(3)</sup>	○	○	● / ✕	● / ✕	● / ✕
■ Air pressure detector for pallet clamping	✕	✕	✕ / ●	✕ / ●	✕ / ●
■ 4 port through pallet <sup>(3) (4)</sup>	✕	✕	✕ / ○	✕ / ○	✕ / ○
■ 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) <sup>(5)</sup>	●	●	●	●	●
■ Total Enclosure Guard (with Top side cover)	●	●	●	●	●
■ Work light	●	●	●	●	●
■ Machine status light	●	●	●	●	●
■ CE & EMC <sup>(6)</sup> / GB	○	○	○	○	○

Note: <sup>(1)</sup> Transformer as standard or option item will be varied according to control system and power supply condition.  
<sup>(2)</sup> APC only laser type. <sup>(3)</sup> Without Solenoid valve and control. <sup>(4)</sup> Factory mounted only.  
<sup>(5)</sup> Paper documentation is option. <sup>(6)</sup> As standard for Europe area.  
 - Machine specification might be different from the catalog if any specification update.

● = Standard ○ = Option ✕ = N / A

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 <sup>(1)</sup>	○	○
■ Work probe receive RMI-Q	●	●
■ Work probe RMP-40	●	●
■ Reference rod (for thermal comp with probe)	●	●
■ Tool length / breakage measurement <sup>(2)</sup>	○	○
■ 5 Port through table <sup>(3)</sup>	●	✕
■ Air pressure detector for pallet clamping	✕	●
■ 4 port through pallet <sup>(3) (4)</sup>	✕	○
■ 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) <sup>(5)</sup>	●	●
■ Total Enclosure Guard (with Top side cover)	●	●
■ Work light	●	●
■ Machine status light	●	●
■ CE & EMC <sup>(6)</sup>	○	○

Note: <sup>(1)</sup> Transformer as standard or option item will be varied according to control system and power supply condition.  
<sup>(2)</sup> Only laser type. <sup>(3)</sup> Without Solenoid valve and control. <sup>(4)</sup> Factory mounted only.  
<sup>(5)</sup> Paper documentation is option. <sup>(6)</sup> As standard for Europe area.  
 - Machine specification might be different from the catalog if there is any specification update.



Technical data	UX600				UX800
	C		P		P
	Multi face	5 axes	5 axes		
Spindle code	12C		9B	12B	15C
<b>Work range</b>	Ø500		Ø280 / Ø600 x W500		Ø630
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
<b>Feed drive</b>	11,519 / 11,519 / 11,519 (F)		13,666 / 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)		19,897/13,666/13,666(T)
Rapid movement	X / Y / Z (m / min)	36 / 36 / 36	36		36
	A / C (min <sup>-1</sup> )	A=11.1 / C=16.6	A=25 / C=33.3		A=60 / C=100
Acceleration	X / Y / Z (m/s <sup>2</sup> )	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				
<b>Accuracy Positioning / Repeatability</b>					
ISO 230-2	0.008 / 0.004				
JIS 6338 (300 mm)	±0.003 / ±0.002				
VDI3441	0.008 / 0.004				
<b>Main spindle</b>					
Spindle taper	BBT 40				
Max. spindle speed	12,000	9,000	12,000	15,000	15,000
<b>Tool changer</b>					
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			
<b>Coolant system</b>					
Coolant tank capacity (Liter)	400				
Pump capacity					
- Nozzle coolant	60 L / min., 3.5 bar				
- Through spindle coolant	25 L / min., 20 bar				
- Wash down	60 L / min., 3 bar				
<b>Machine size</b>					
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)				
<b>Connections</b>					
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 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)	●	✕	✕	✕	✕	✕
■ HEIDENHAIN TNC620 (4+1 Axes)	○	✕	✕	✕	✕	✕
■ HEIDENHAIN TNC640 5 Axes)	✕	●	○	●	○	●
HEIDENHAIN advanced function set2	✕	●	○	●	○	●
■ SIEMENS 840D	✕	✕	○	○	○	✕
■ Oil chiller	●	●	●	●	●	●
■ 40 taper / 30 position tool magazine	●	●	✕	✕	✕	✕
■ 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 <sup>(1)</sup>	○	○	○	○	○	○
■ Work probe receive OMI-2T	●	●	●	●	●	●
■ Work probe OMP-40	○	○	●	●	●	●
■ Tool length / breakage measurement	○	○	○	○	○	○
■ Reference rod (for thermal comp with probe)	●	●	●	●	●	●
■ 2 Port through table <sup>(2)</sup>	○	○	●	●	●	●
■ 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) <sup>(3)</sup>	●	●	●	●	●	●
■ Total Enclosure Guard (with Top side cover)	●	●	●	●	●	●
■ Work light	●	●	●	●	●	●
■ Machine status light	●	●	●	●	●	●
■ CE & EMC <sup>(4)</sup> / GB	○	○	○	○	○	○

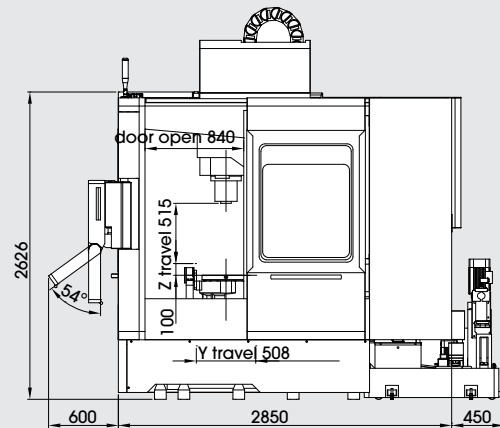
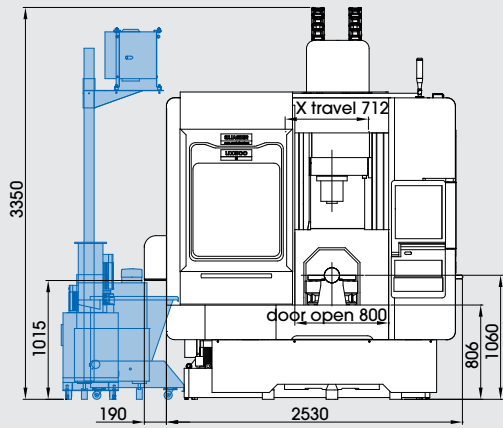
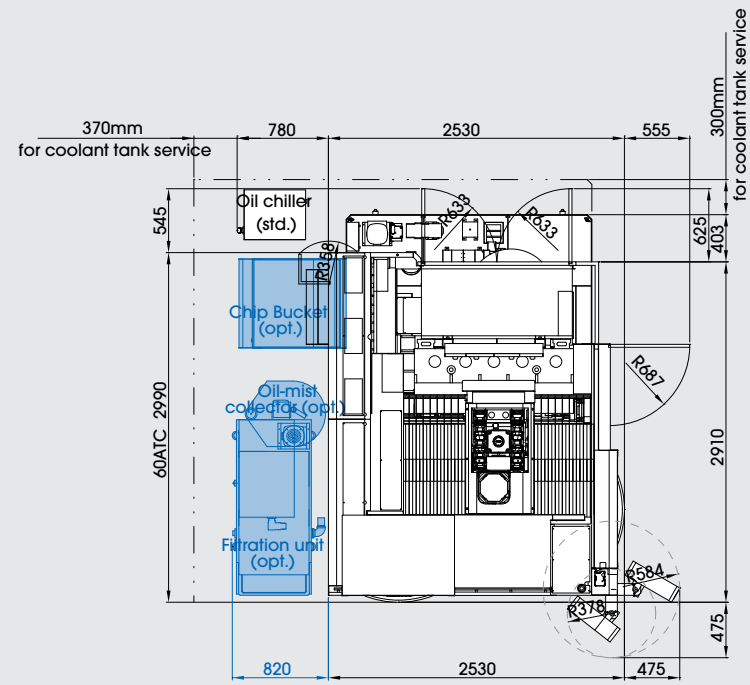
Note: <sup>(1)</sup> Transformer as standard or option item will be varied according to control system and power supply condition.

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

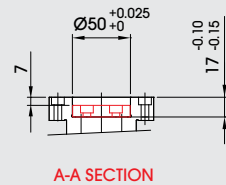
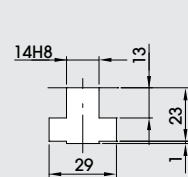
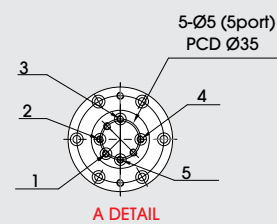
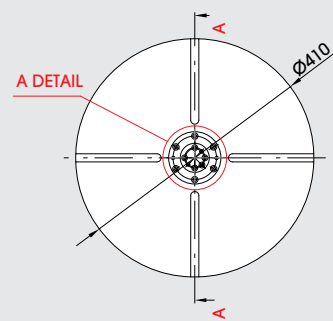
- Machine specification might be different from the catalog if there is any specification update.

# UX500 Layout

## Installation dimension

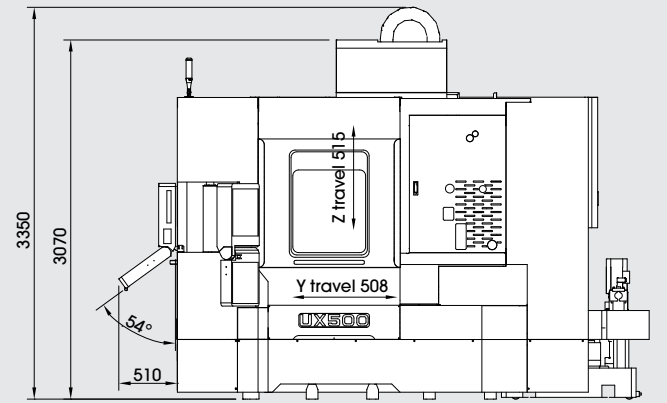
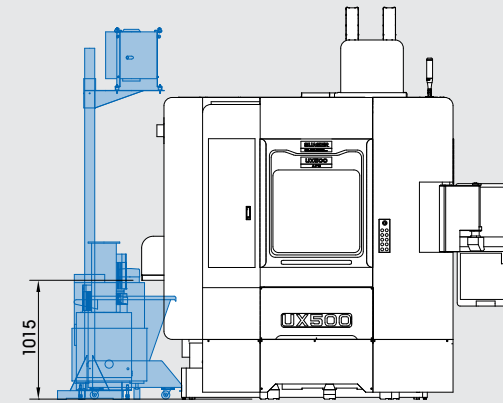
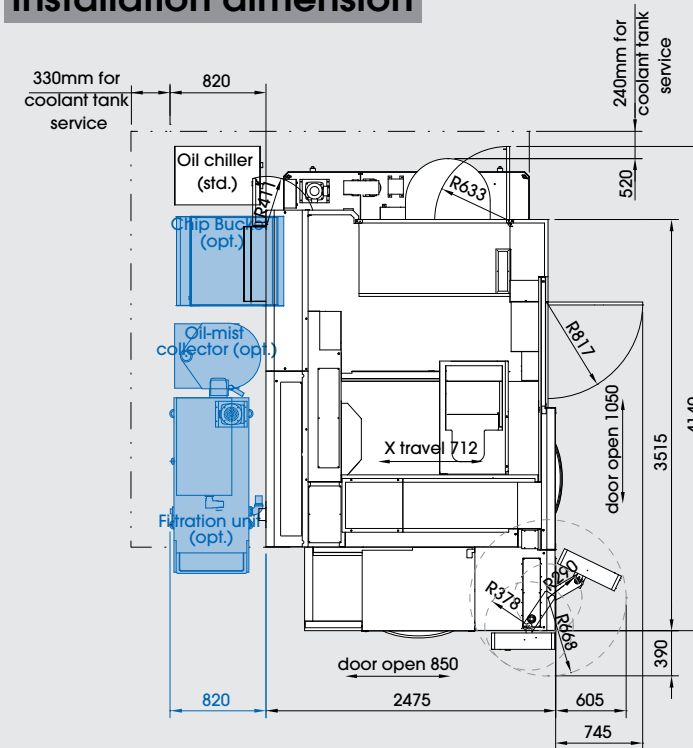


## Table dimension

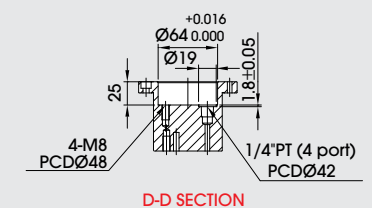
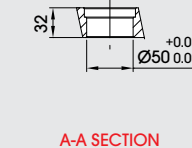
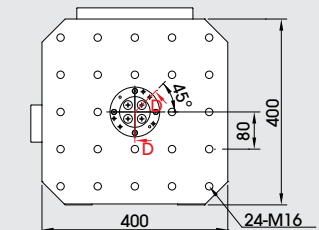
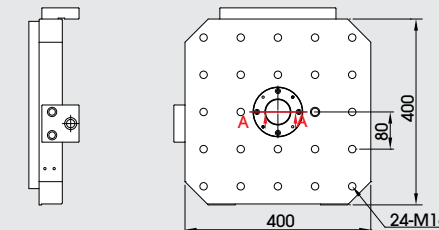
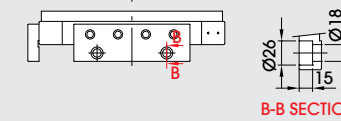


# UX500APC Layout

## Installation dimension

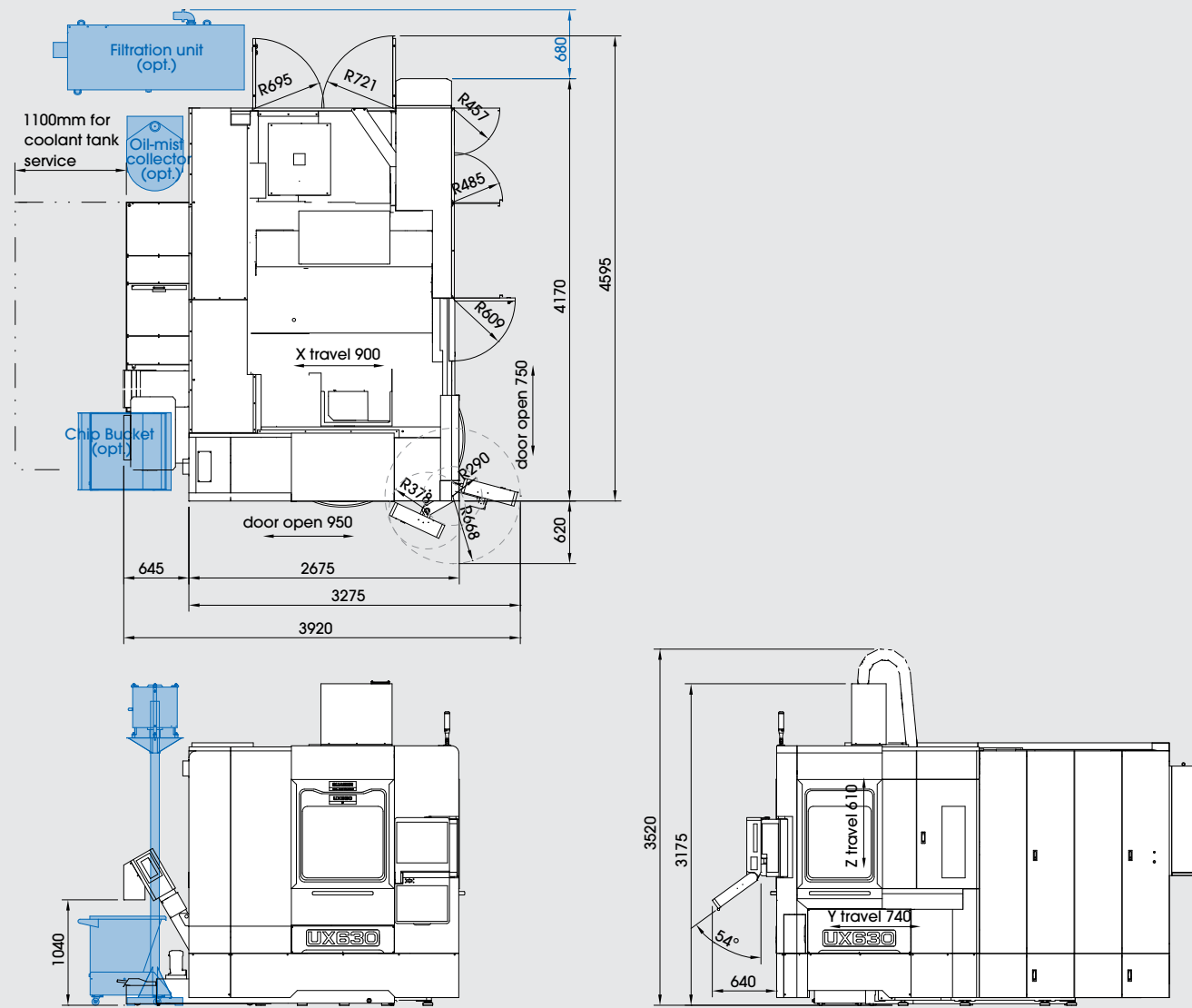


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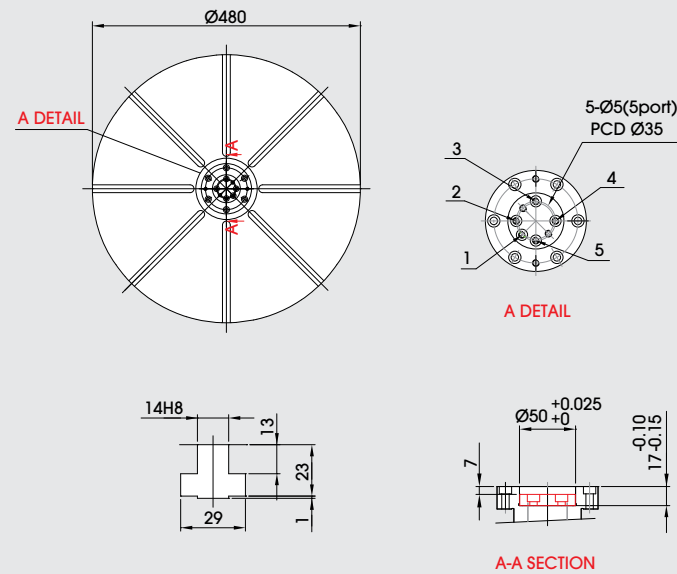


# UX630 Layout

## Installation dimension

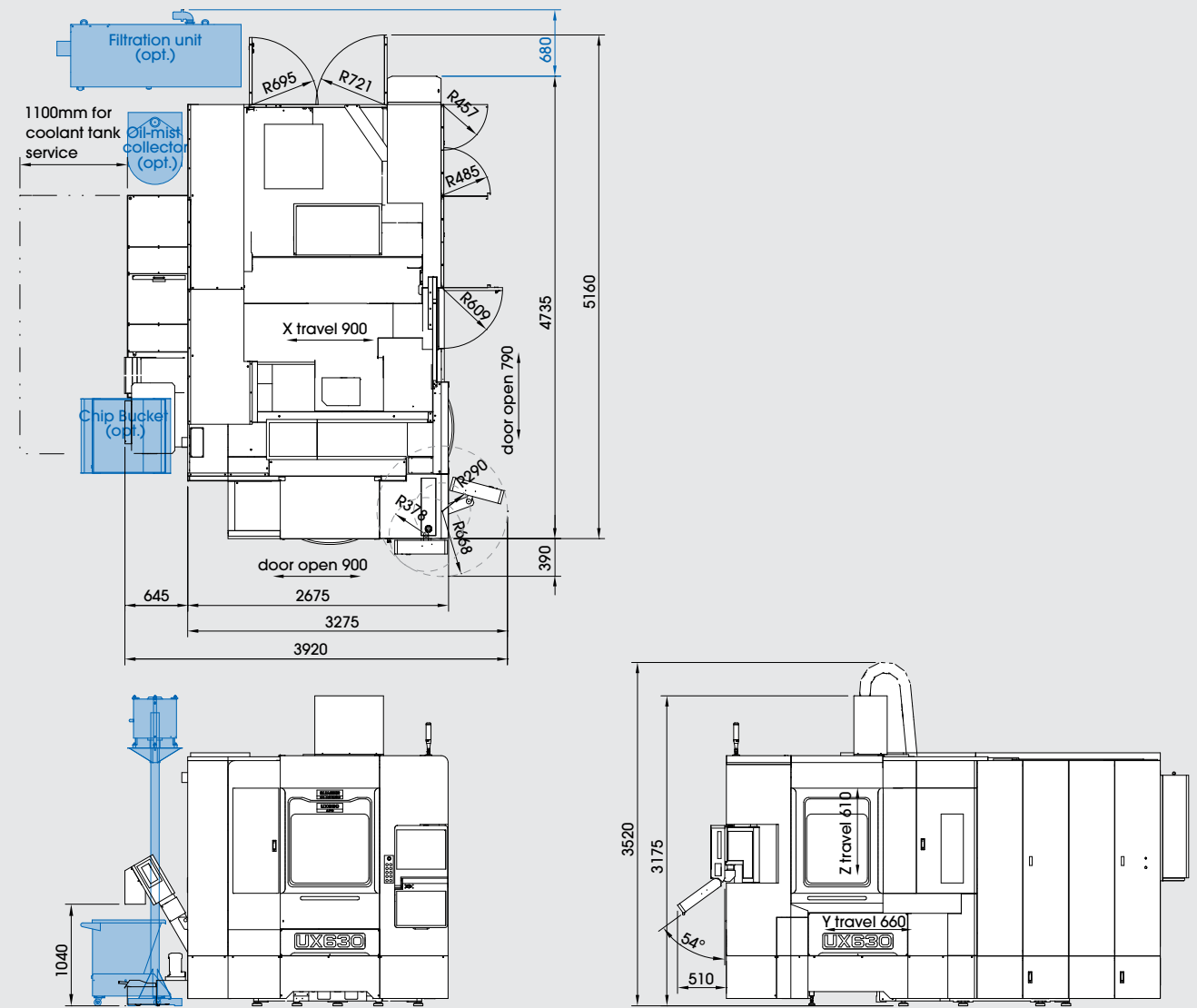


## Table dimension

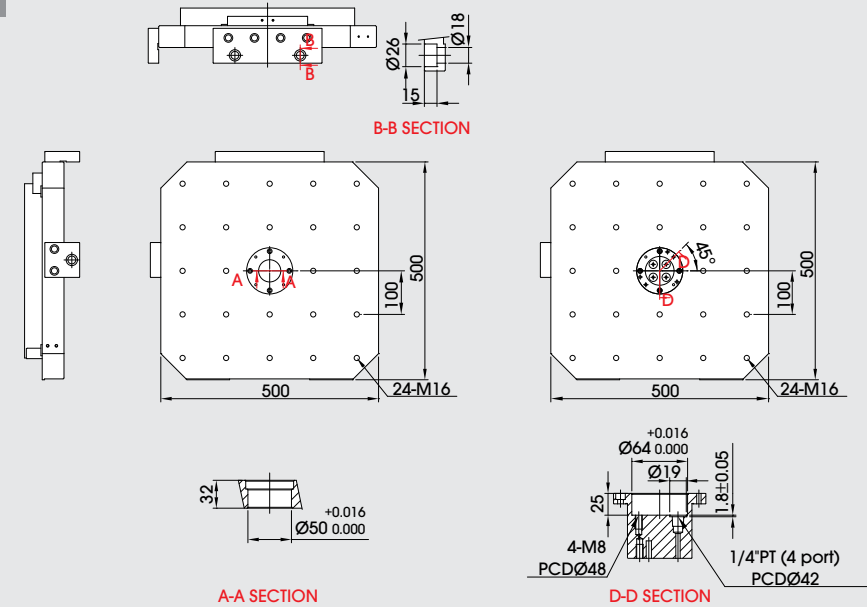


# UX630APC Layout

## Installation dimension



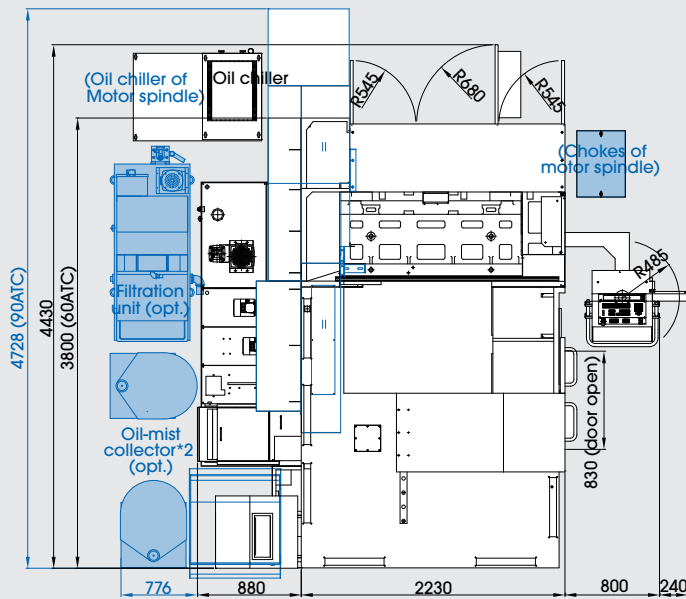
## Table dimension



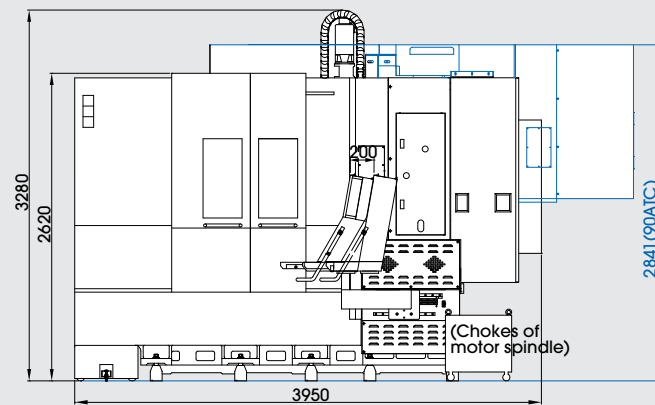
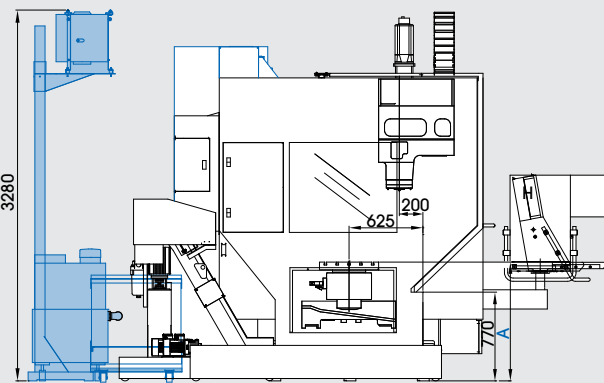


# UX600 / UX800 Layout

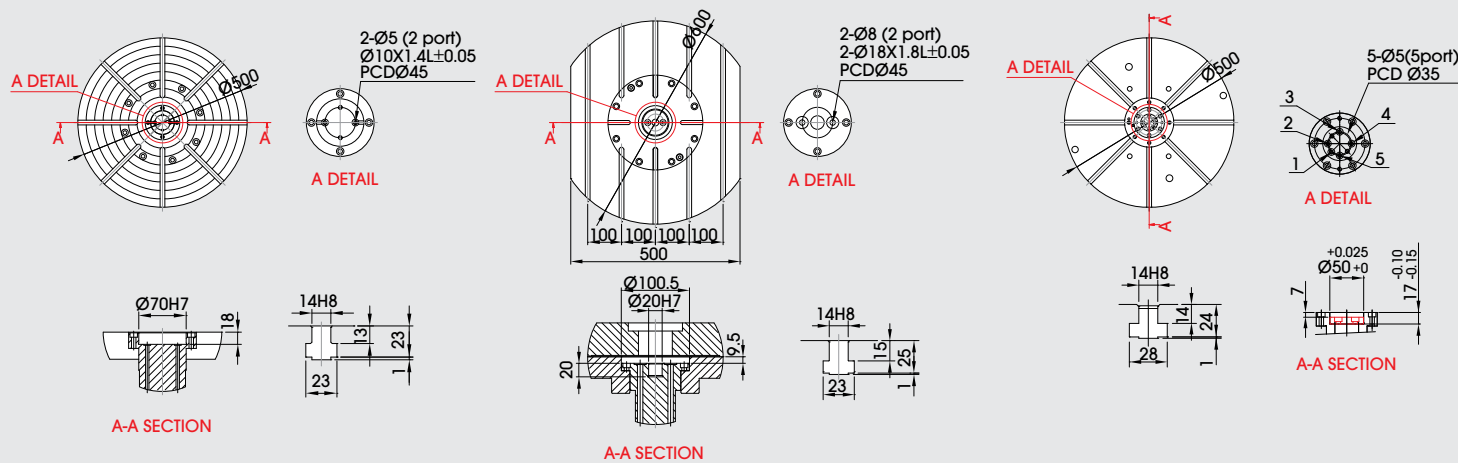
## Installation dimension



	UX600	UX800
A	1,024	978



## Table dimension



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