

EX-900 SERIES Twin Spindle with Y-axis Turning Center

FEATURES

- 12 STATION LIVE TOOLING
- BUILT-IN TWIN SPINDLE MOTOR
- Y AXIS TOOLING SYSTEM WITH 160mm(± 80 mm) STORK
- FANUC 18i-TB CONTROLLER



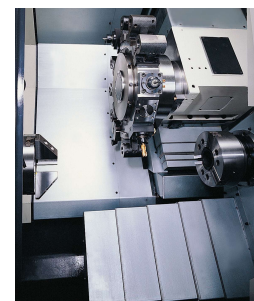
SPECIFICATION

unit: mm(inch)

	Item	UNIT	EX-710	EX-910	
				MAIN SPINDLE	SUB-SPINDLE
CAPACITY	Swing over bed	mm	600	680	
	Max. turning diameter	mm	340	340	
	Max. turning length	mm	660	660	
	Max.Swing(on front door)	mm	815	815	
	Bar Capacity	mm	75	75	52
SPINDLE	Number of head stock		1	2	
	Spindle speeds	rpm	4000	4000	4000
	Number of spindle speed range		1	1	1
	Min. spindle indexing angles		0.001	0.001	0.001
	Spindle nose		JIS. A-8	JIS. A2-8	JIS. A2-6
	Through hole diameter	mm	86	86	63
	Spindle bearing inner diameter	mm	120	120	100
HEADSTOCK	Number of head stock		1	2	
	Travel of head stock (B axis)	mm	-		710
	Rapid traverse (B axis)	mm/min	-		20000
	Feed rate	mm/min	-		20000
	Jog feed rate	mm/min	-		0-1260
TOOL SLIDE	Number of turret		1	1	
	Type of tool slide		12 station drum type	12 station drum type	
	Travel of tool slide X axis	mm	245	245	
	Travel of tool slide Y axis	mm	160 (80 + 80)	160 (80 + 80)	
	Travel of tool slide Z axis	mm	710	710	
	Rapid traverse X/Y axis	mm/min	16000	16000	
	Rapid traverse Z axis	mm/min	20000	20000	
	Feed rate X/Y axis	mm/min	16000	16000	
	Feed rate Z axis	mm/min	20000	20000	
	Jog feed rate	mm/min	0-1260	0-1260	
	Number of tools on turret		12	12	
	Square shank heigh	mm	25	25	
	Shank diameter of boring bar	mm	40	40	
	Indexing time	sec.	0.35	0.35	
ROTARY TOOL	Number of rotary tools		Max. 12	Max. 12	
	Rotational speed	rpm	4000	4000	
	Max.. diameter of tool shank	mm	20	20	
	Tool spindle bearing inner diameter	mm	35	35	
MOTOR	Main spindle motor	kw	22	22	18.5
	Rotary tool spindle motor	kw	5.5(β 3 / 10000i)	5.5(β 3 / 10000i)	
	Feed motor B axis B	kw	3.0(α C22 / 2000i)	3.0(α C22 / 2000i)	
	Feed motor Xaxis X	kw	1.8(β 12 / 3000is)	1.8(β 12 / 3000is)	
	Feed motor Yaxis Y	kw	1.2(α C8 / 2000i)	1.2(α C8 / 2000i)	
	Feed motor Zaxis Z	kw	3.0(α C22 / 2000i)	3.0(α C22 / 2000i)	
	Turret indexing motor	kw	1.2(β 8 / 3000is)	1.2(β 8 / 3000is)	
	Hydraulic pump motor	kw	1.5	1.5	
	Lubricant pump motor	kw	0.004	0.004	
	Coolant pump moto	kw	0.4	0.4	
POWER SOURCES	Required electric power	kVA	50	50	
	Required electric voltage	V	200/220/230/380/415/440/460 + 10%	200/220/230/380/415/440/460 + 10%	
	Required electric frequsncy	Hz	50/60	50/60	
	Compressed air pressurs	Mpa	0.5	0.5	
	Compressed air flow rate	L/min	10	10	
TANK CAPACITY	Hydraulic oil tank	L	40	40	
	Lubricant tank	L	2	2	
	Coolant tank	L	200	200	
	Oil controller unit	L	200	200	
DIMENSION	Height of machine	mm	2300	2300	
	Height from floor to spindle center	mm	1200	1200	
	Floor space	mm_mm	3250 X 1840	3250 X 1840	
	Mass of machine	kg	6400	6500	

• We reserve the right to change description in this brochure without notice.

Machine Accessories



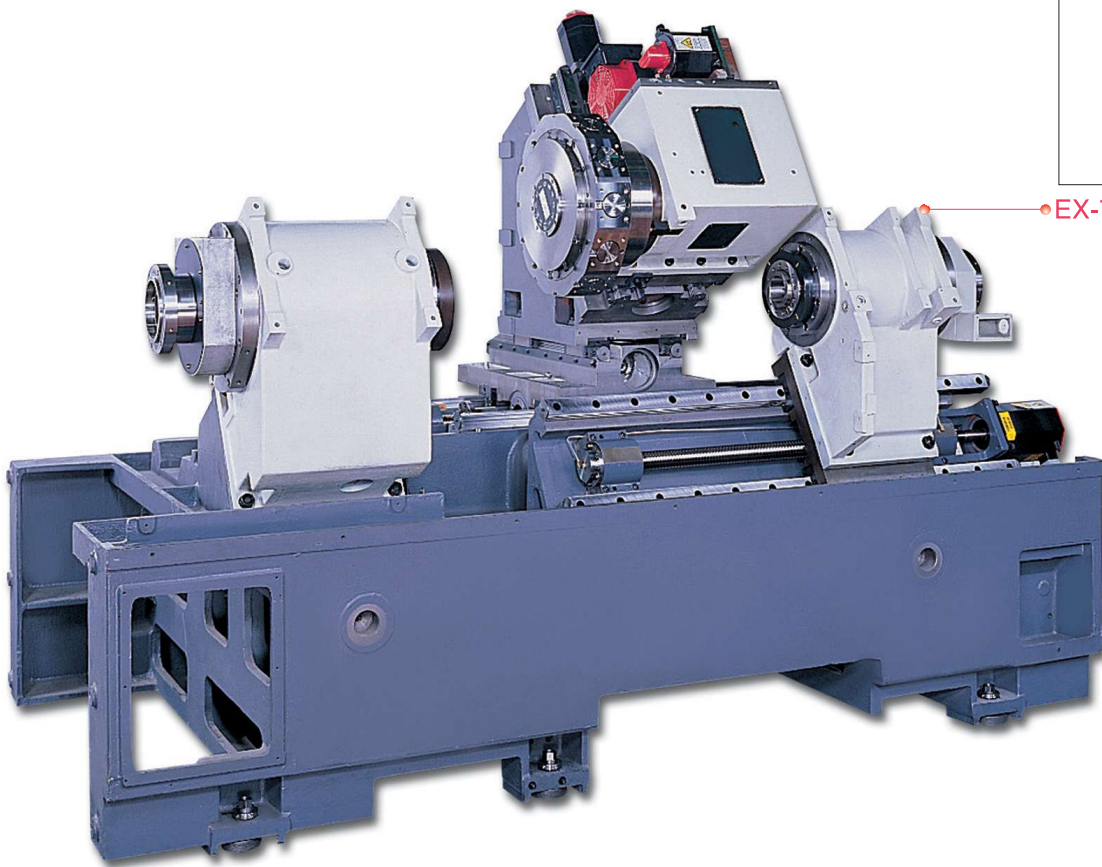
● Standard □ Optional

Items	EX-710	EX-910
Fanuc controller	●	●
Fanuc spindle motor	●	●
Fanuc X & Z axis servo motor	●	●
Hydraulic clamping chuck & cylinder	●	●
3-Jaw thru-hole chuck	●	●
Hydraulic turret	●	●
Boring bar tool holder	●	●
U-drill tool holder	●	●
O.D. tool holder	●	●
Bush(Each size one set)	●	●
Soft jaw	●	●
Hydraulic tailstock	●	●
Programmable tailstock quill	●	●
Coolant pump	●	●
Chuck with M function	●	●
Chip conveyor interface	●	●
Cycle finish light	●	●
Working lamp	●	●
Tool box	●	●
Fanuc warranty	2 years	2 years
Mechanical parts warranty	1 year	1 year
Hard Jaw	□	□
Tool setter	□	□
Chip conveyor	□	□
Rigid tapping	●	●
Variable lead threading	□	□
Multiple repetitive cycle G70~G76	□	□
Graphic function	□	□
Spindle orientation	●	●
CE & EMC regulation	□	□
Manual guide i with color screen	□	□
Part program storage length 160 m.	●	●
Part program storage length 320 m.	□	□
Number of registerable programs 120 pcs.	□	□
Number of registerable programs 200 pcs.	□	□

EX-700/900 SERIES



EX-710 Hydraulic Tailstock



X-axis Driven Holder



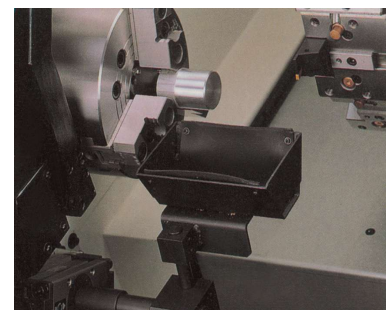
Z-axis Driven Holder



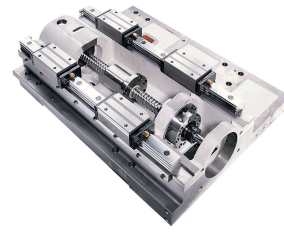
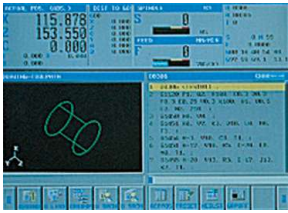
Chip Conveyor



Tool Setter



Parts Catcher



● **FANUC CNC controller, new, friendly, powerful**

- Latest user friendly CNC from FANUC.
- Absolute encoders and precision servo drivers eliminate operator misuse caused by incorrect zero position.
- Option upgrades easily available.
- Simple user friendly operator panel can be adjusted for ease of use.

● **Rigid, durable linear guides**

- Latest generation super rigid guides give longer sustained accuracy and greater metal removal.
- Fast rapid traverse reduces non cutting time, increases productivity.
- Single source machine design ensures better complex shape definition.



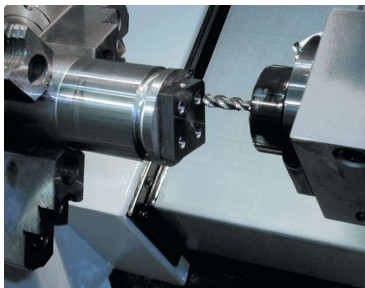
Built-in Spindle



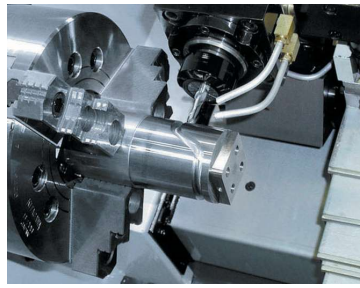
Spindle Oil Cooler

● **Built-in power motor and accurate spindle**

- Built-in and direct-drive spindle motor for powerful cutting.
- Hide-in coolant in spindle for stability.
- Indexing can be 0.001 degree for accurate.



Z Axis Power Tooling



X Axis Power Tooling

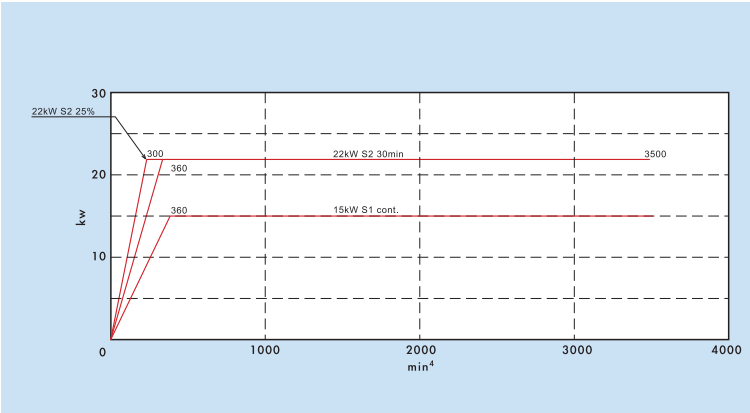
● **Powerful, accurate fast turret**

- Powerful turret.
- Servo controlled high speed indexing reduces idle time and increases productivity.
- Any station can set driving tool on 12 station for flexible using.

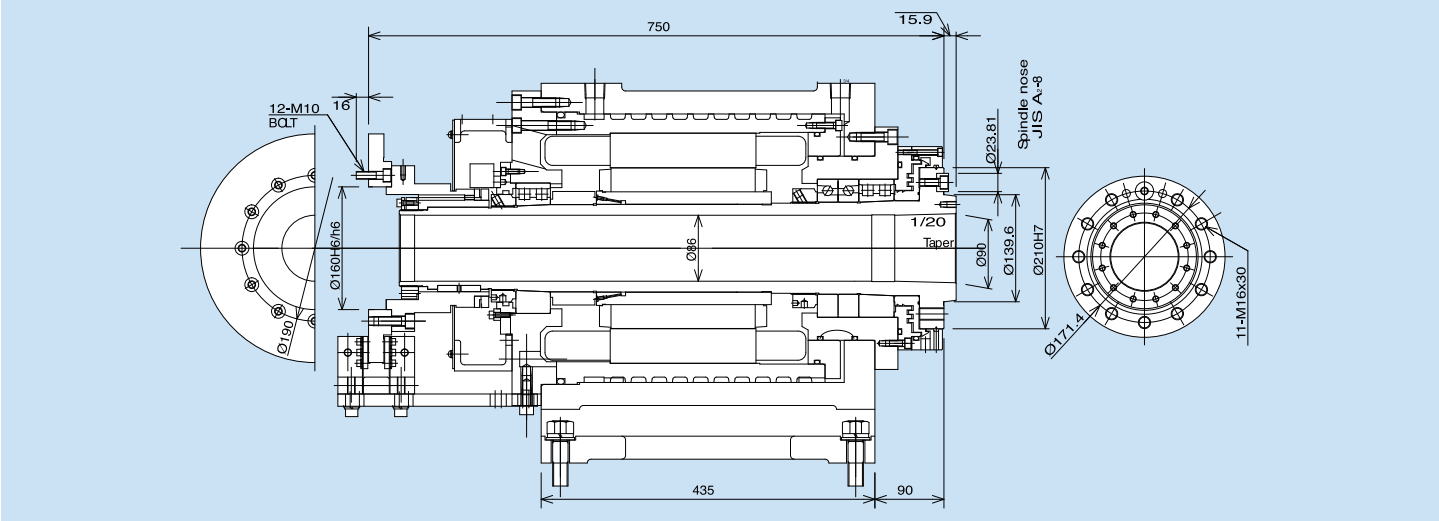




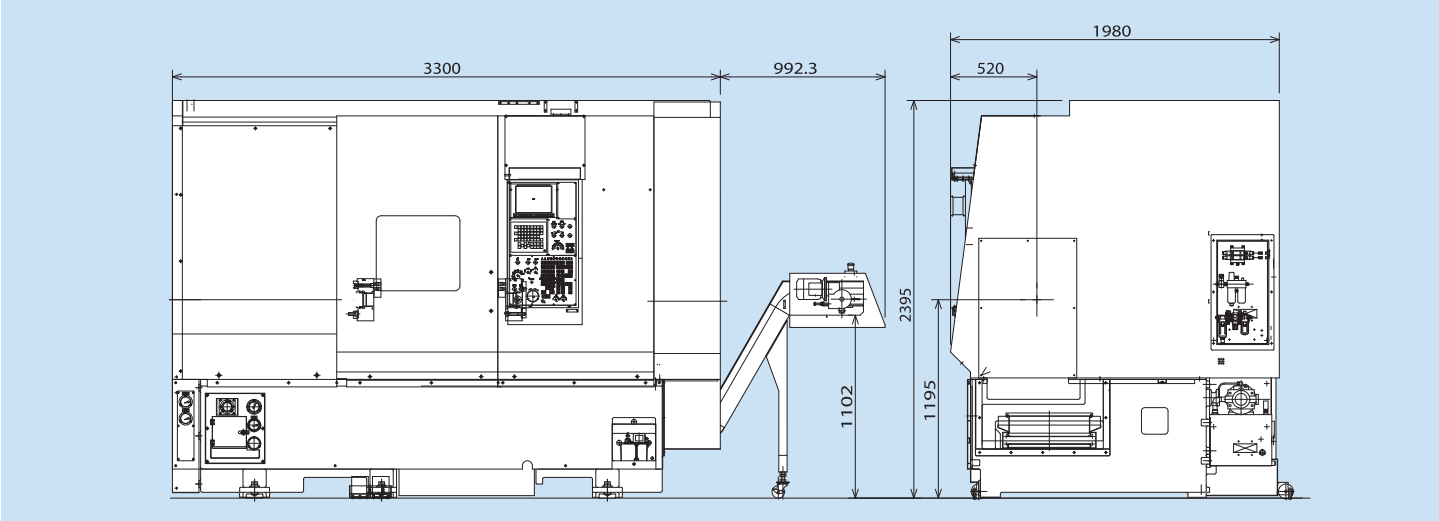
EX-710 Output of built in spindle motor



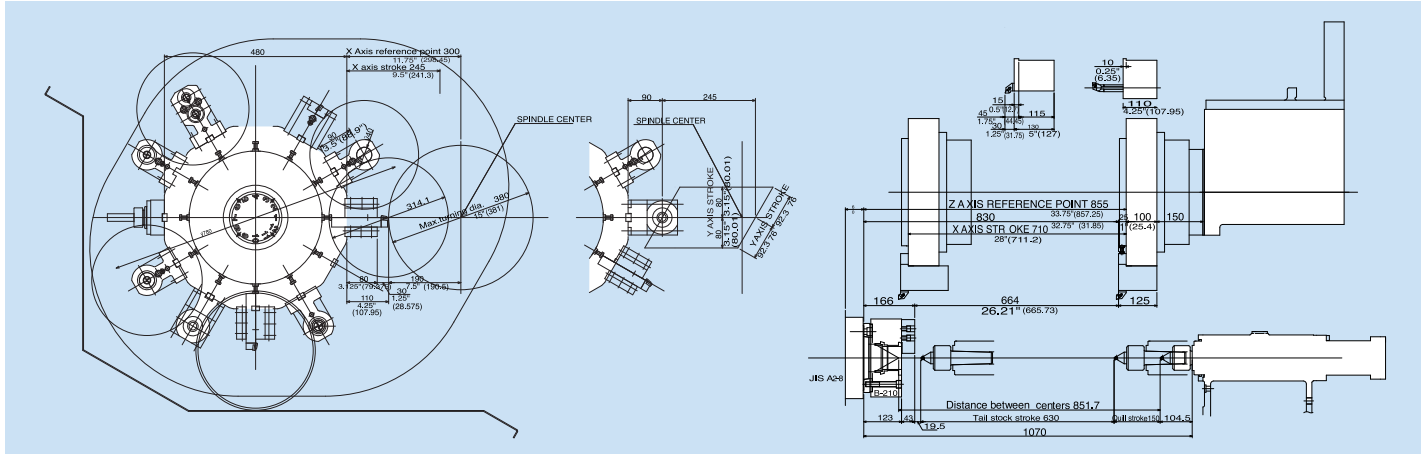
EX-710/910 MAJOR DIMENSION OF HEADSTOCK



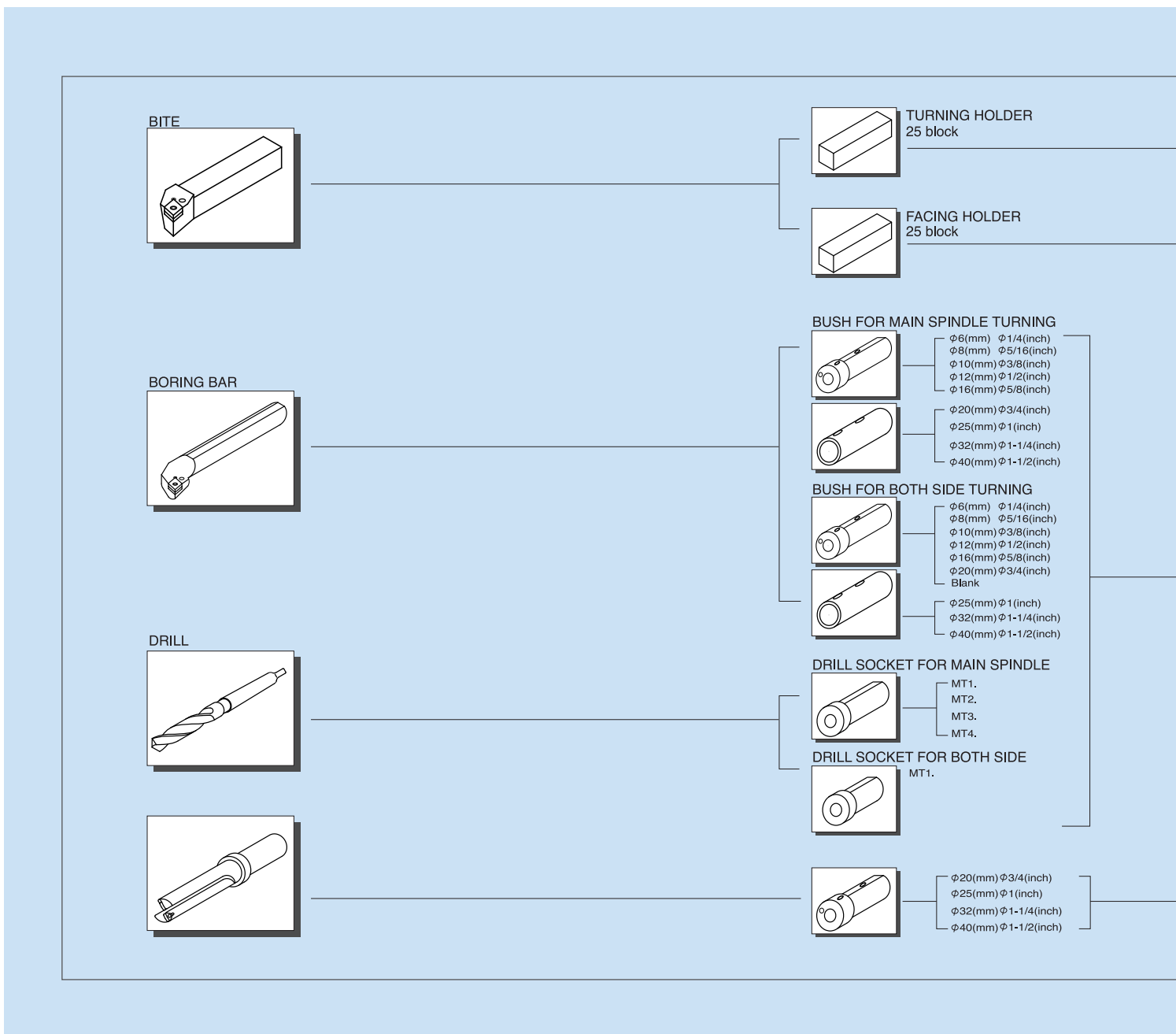
EX-710 MACHINE DIMENSION



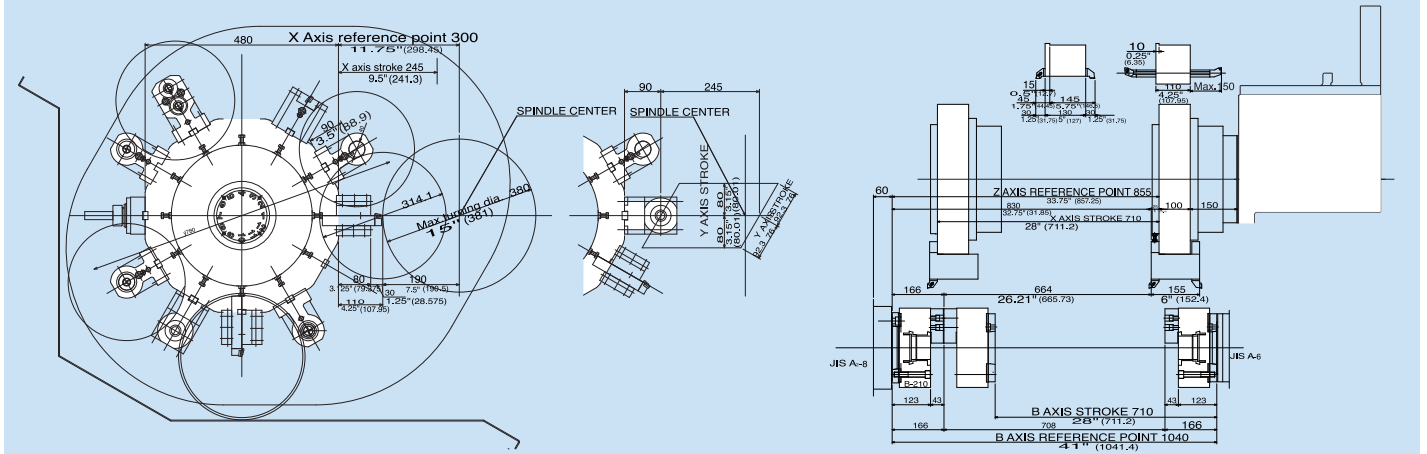
EX-710 Tool Interference and Working Range



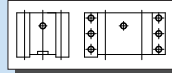
EX-710/910 Tooling System



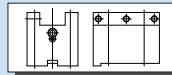
EX-910 Tool Interference and Working Range



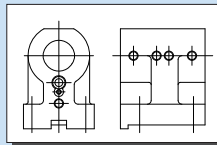
TURNING HOLDER



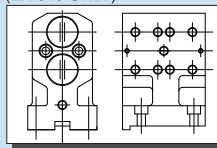
FACING HOLDER



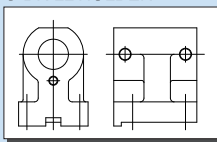
BORING BAR HOLDER



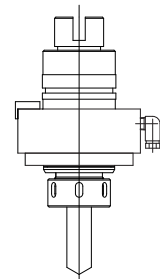
BORING BAR HOLDER FOR BOTH SIDE (EX-910 ONLY)



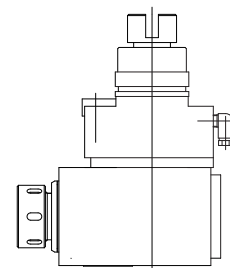
U-DRILL HOLDER



ROTARY TOOL HOLDER



X-axis



Z-axis