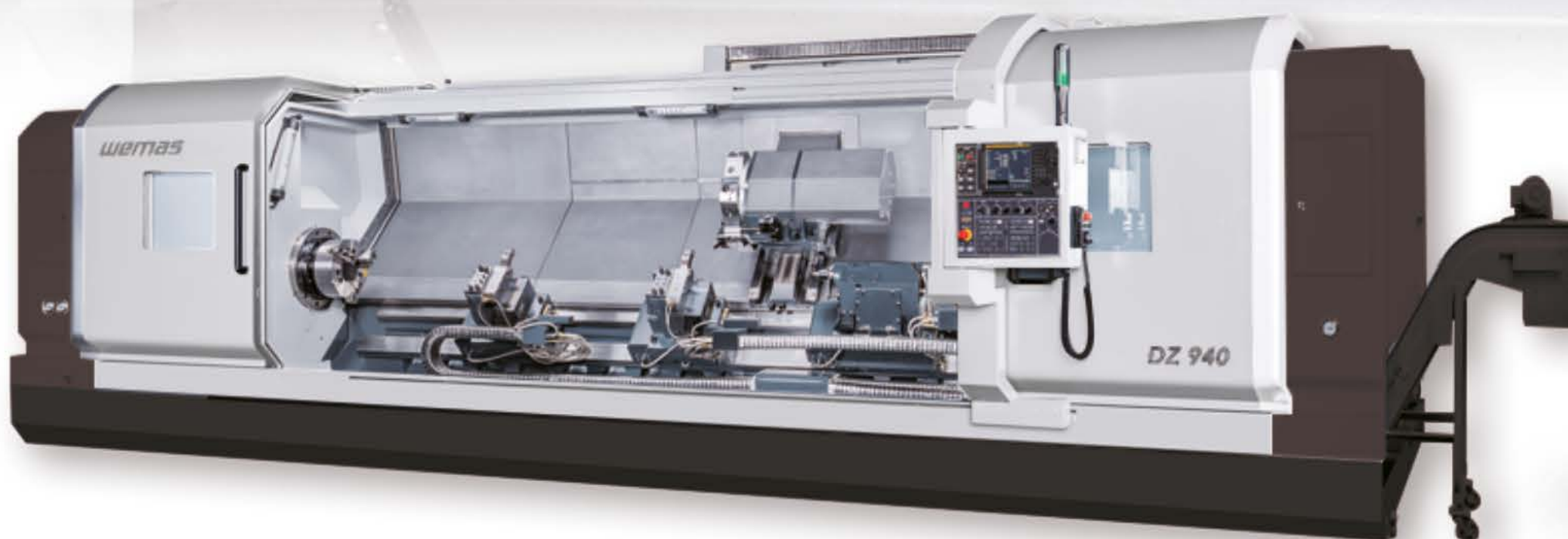


WEMAS Heavy-Duty CNC Lathe

Provide users with significantly greater cutting capabilities, better cut quality and increased accuracy.

The design concept of **DZ 480/640/720/940 series** services of CNC lathes is to enhance their heavy cutting capability high efficiency. With 500 - 1200 diameter of cutting, these machines are applicable for cutting large pipes and shafts in traffic and energy industries, etc.



DZ 480 series Features:

- Swing over bed ϕ 660 mm.
- Swing over saddle ϕ 480 mm.
- Max. turning diameter ϕ 500 mm
- Range of working length 760 - 3,040 mm
- 10-station hydraulic turret
- 2-speed gearbox
- Programmable tailstock

DZ 640 series Features:

- Swing over bed ϕ 850 mm.
- Swing over saddle ϕ 640 mm.
- Max. turning diameter ϕ 710 mm
- Range of working length 760 - 3,040 mm
- 10-station hydraulic turret
- 2-speed gearbox
- Programmable tailstock



DZ 720 series Features:

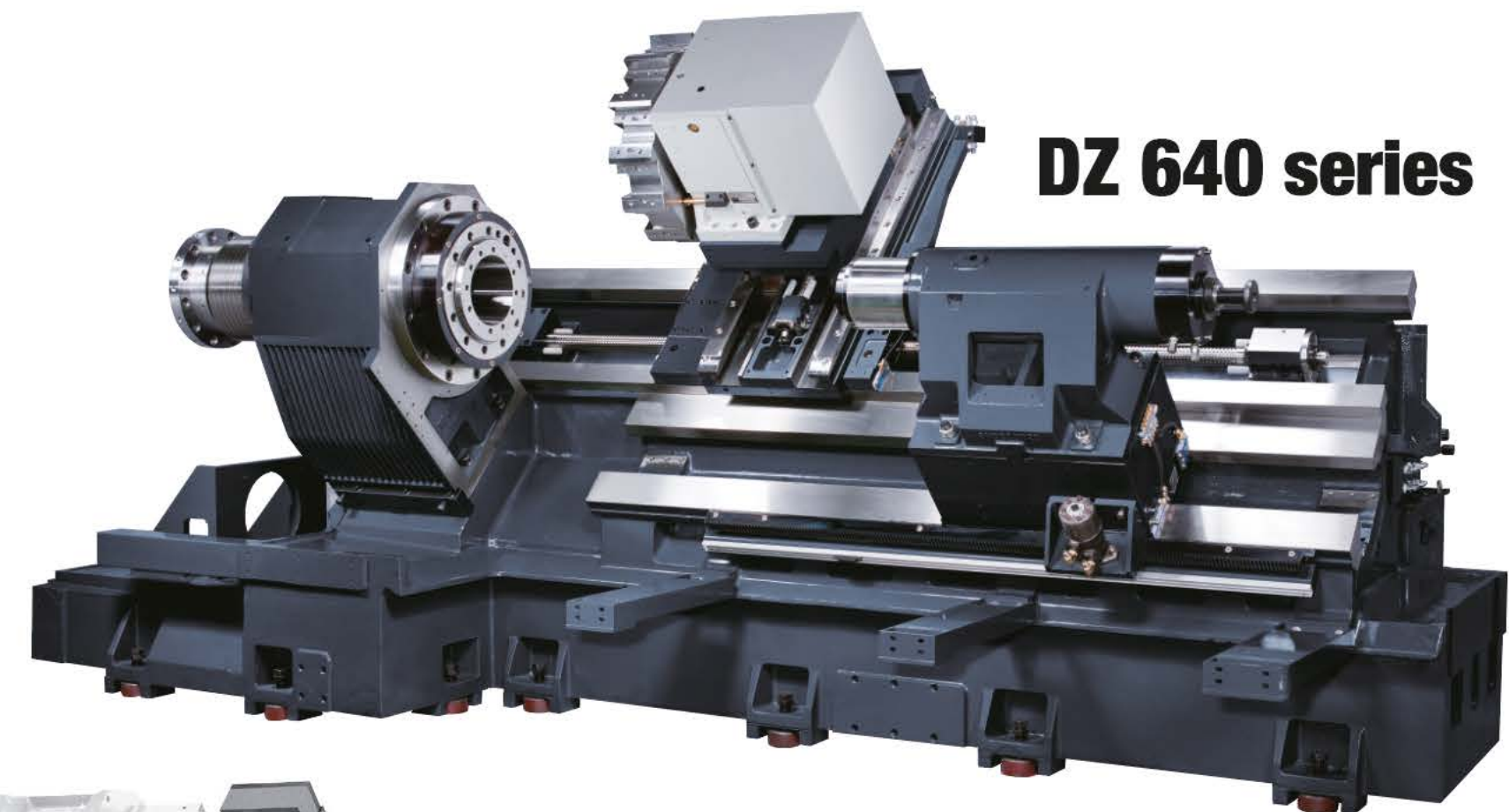
- Swing over bed ϕ 970 mm.
- Swing over saddle ϕ 720 mm.
- Max. turning diameter ϕ 850 mm
- Distance between center 1,130 - 3,090 mm
- 12-station hydraulic turret
- 3-speed heavy duty gear head
- Programmable tailstock

DZ 940 series Features:

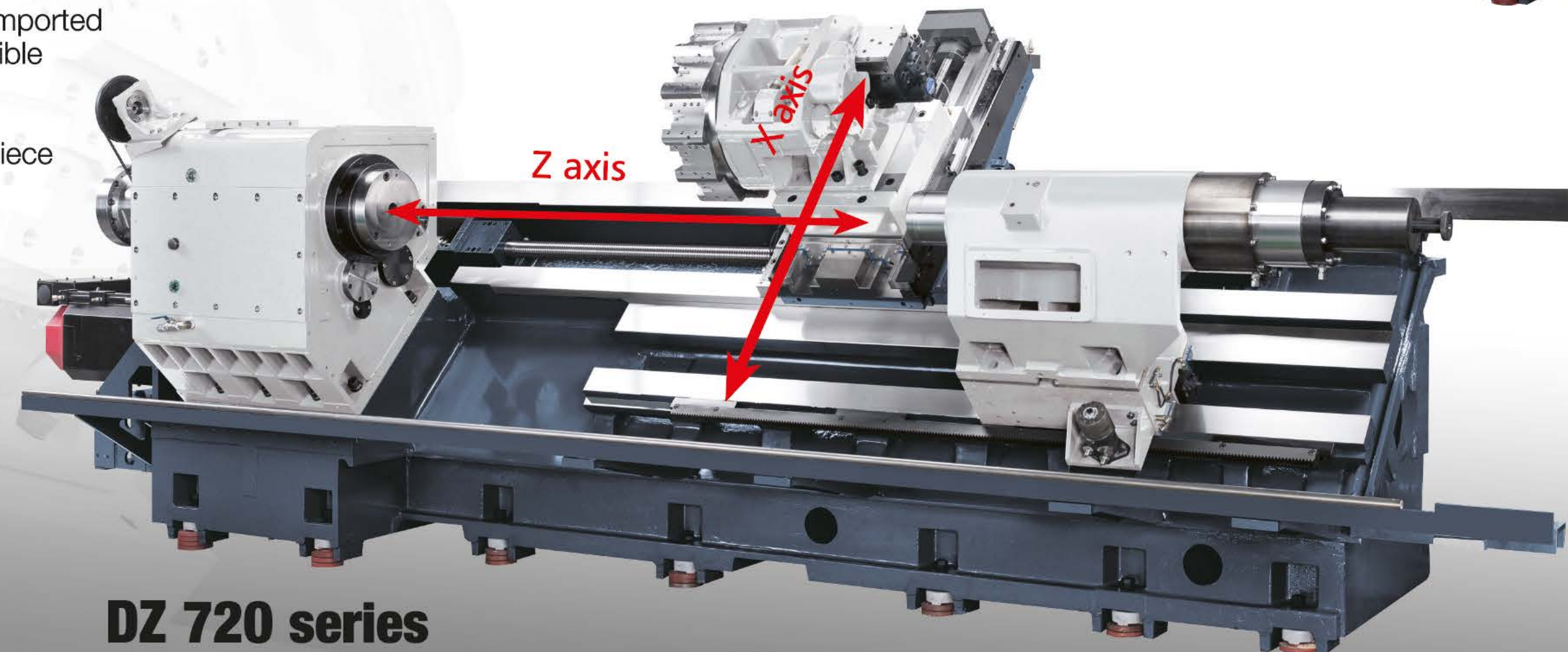
- Swing over bed ϕ 1100 mm.
- Swing over saddle ϕ 940 mm.
- Max. turning diameter ϕ 1020 mm
- Distance between center 2,200 - 5,110 mm
- 12-station hydraulic turret
- 4-speed heavy duty gear head
- Programmable tailstock

RIGID AND PRECISELY CONSTRUCTED THROUGHOUT

- Box ways on X, Z axis exhibit outstanding accuracy and load-resistance capacity
- Rigid and stable construction throughout
- One-piece constructed bed offers the optimal bending-resistance and torsion-resistance capabilities especially when performing heavy cutting on extra large workpiece
- The spindles on DZ 480/640 series are driven by an imported gearbox with 1:4 gear ratio. Full power output is possible when spindle speeds range 208 - 2,500 rpm
- The heavy duty headstock on DZ 720/940 is of one piece casting, and it is with 3 or 4 speed gear head, providing extra large torque output and making the machine ideal for heavy cutting.



DZ 640 series



DZ 720 series

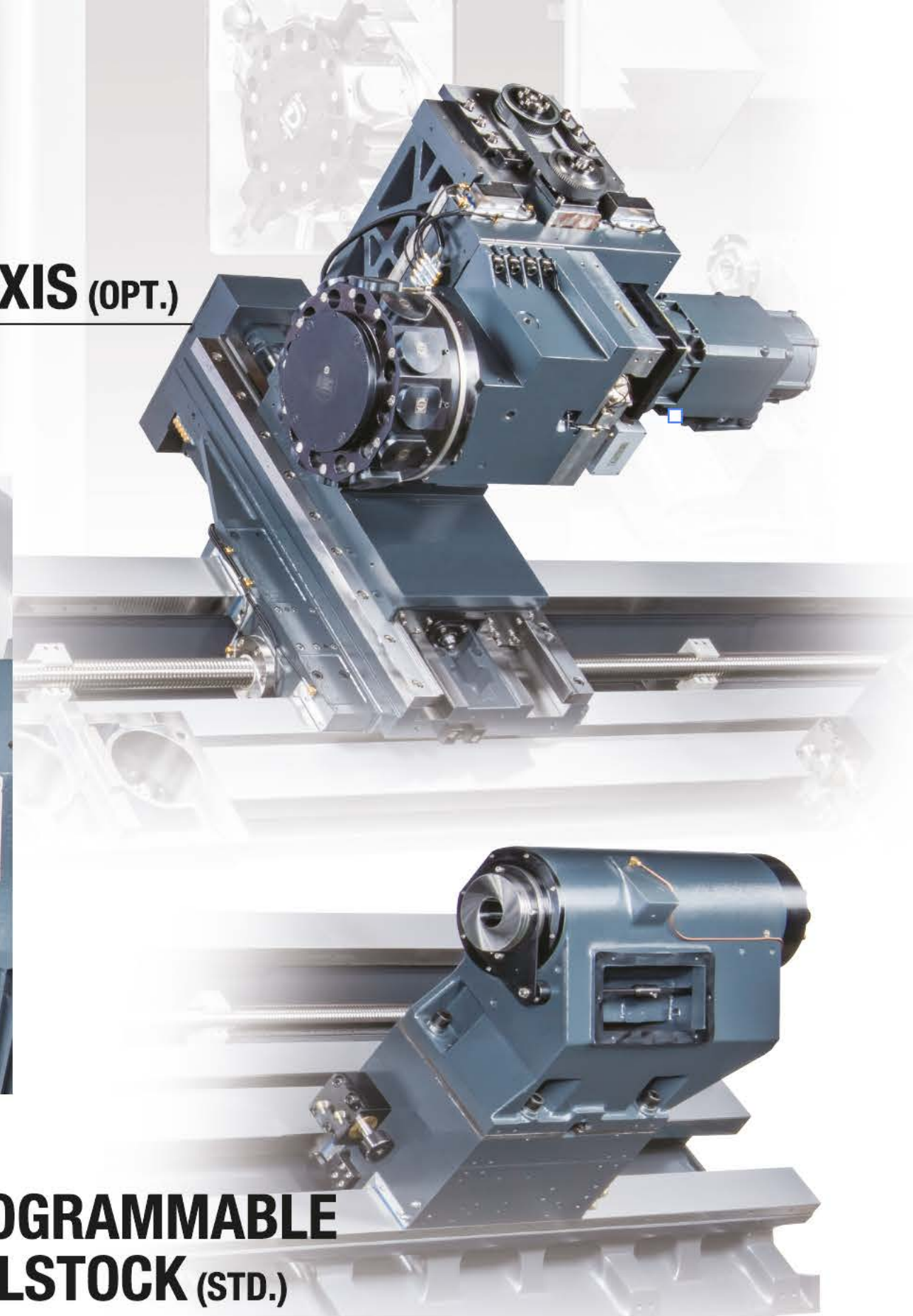
45 degrees slant bed construction features efficient chip removal and firm support.

The major machine parts, such as the base, saddle, headstock, slide and tailstock are made of **Meehanite** cast iron and tempered to relieve stress thereby ensuring lifetime accuracy.

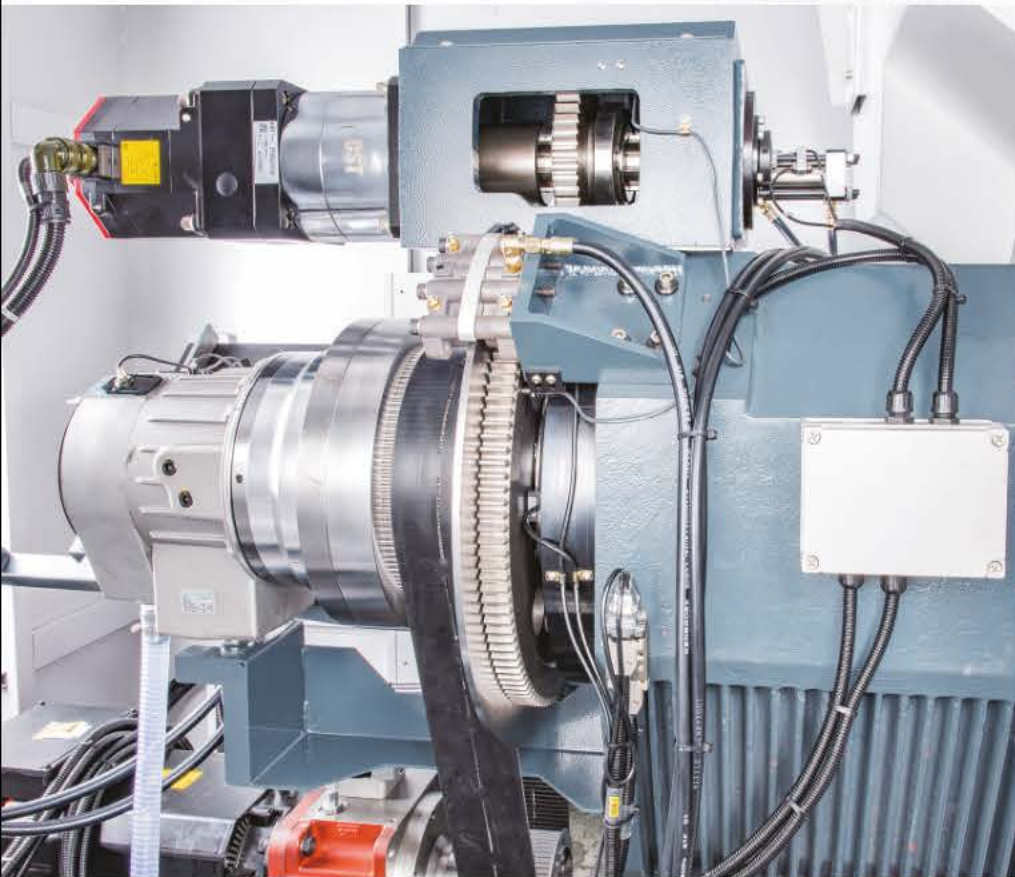


Machine Features:

Y AXIS (OPT.)



CF AXIS (OPT.)



PROGRAMMABLE TAILSTOCK (STD.)



SERVO TURRET INDEXING (STD.)

- A. Heavy-duty station tool turret is driven by low noise, high torque servo indexing motor.
- B. It's high accuracy positioning and features bidirectional random selection to shortest path, achieves high productivity.

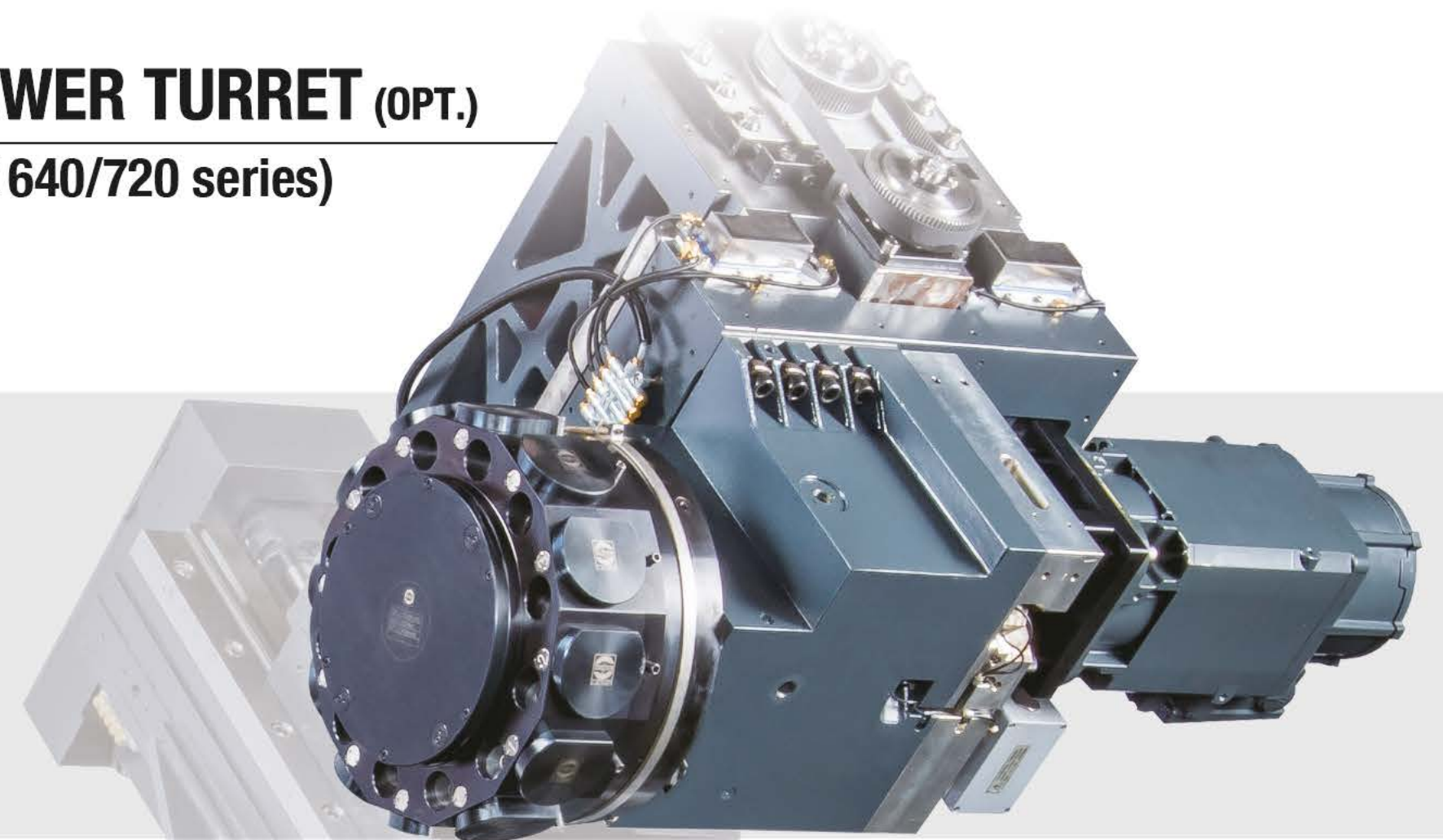


POWER TURRET (OPT.) (DZ 480 series)

- A. Employs VDI 50 axial turret disk, 12 position power turret. (Two PCD - Inner PCD has 6 stations for milling. Outer PCD has 6 stations for turning.)
- B. High indexing resolution for contour/index control.
- C. Hydraulic disk brake locking provides maximum stability during milling and contouring.



POWER TURRET (OPT.) (DZ 640/720 series)



FRONT AND REAR CHUCK (OPT.)



Machine Features:



POWERFUL HI-SPEED AND HI-RIGID SPINDLE (DZ 480/640 series)

Spindle supported by cylindrical roller bearings and hi-speed angular thrust bearings marks the spindle faultless and ideal for heavy-duty and high-speed turning.



2-STAGES SPEED GEARBOX (DZ 480/640 series)

DZ 480 / DZ 640 series equipped with "high precision" stages gearbox (gear ratio 1:4) provides full horsepower cutting from 208-2,50 0rpm. The maximum cutting torque is 660 N-m.



FANUC CNC CONTROLLER

User-friendly operations are designed and more convenient for users.



GEARBOX (DZ 720/940 series)

The headstock is with 3 or 4 speed gear head. Gears are precision ground for quiet running.



HYDRAULIC POWER UNIT

The hydraulic power unit employs high quality components for long service life and stable motions. The unit delivers high pressure to the turret, Cs Brake and 3-jaw chuck.



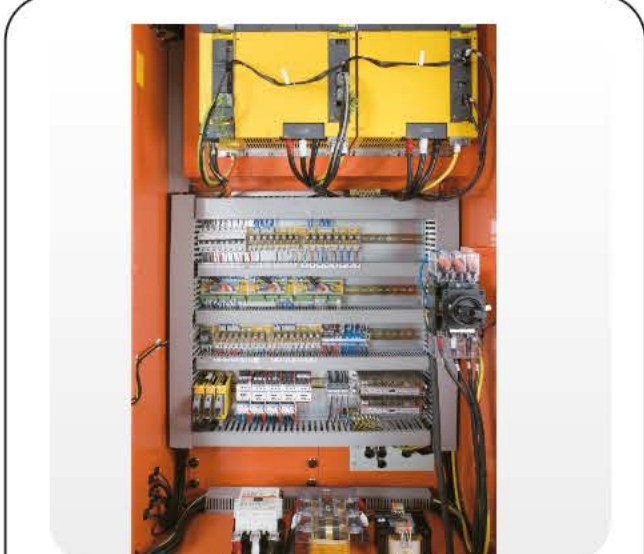
Steady Rest (Opt.)

Designed for support long workpiece.



OIL COOLER OF SPINDLE (DZ 720/940 series) (Std.)

Control the oil temperature in spindle gearbox.

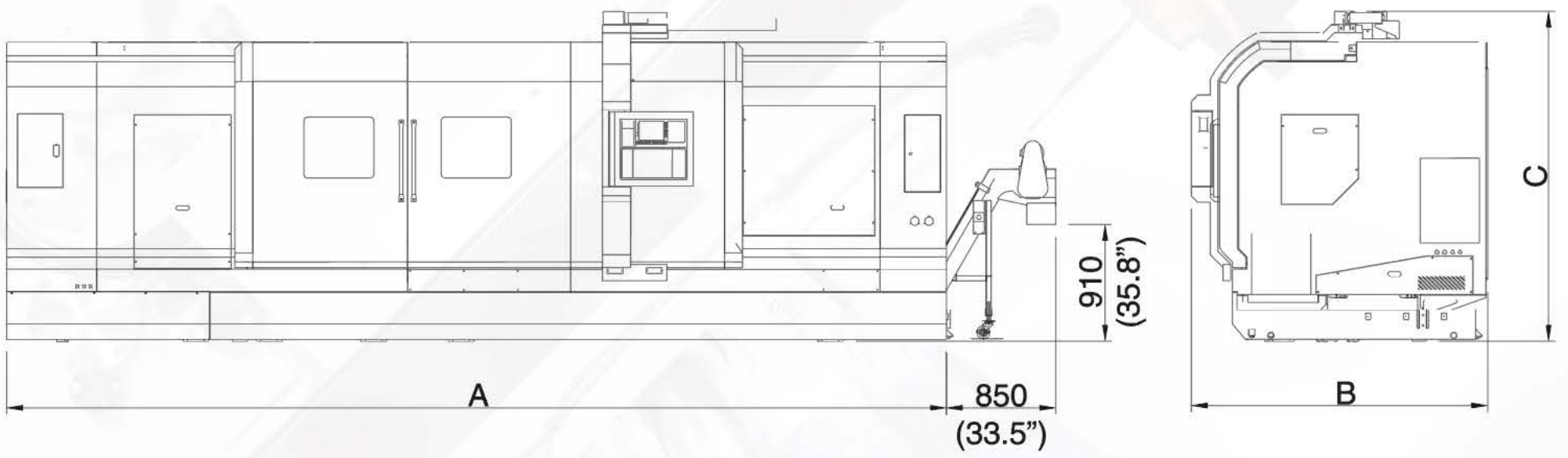


WELL-PLANNED ELECTRICAL CABINET

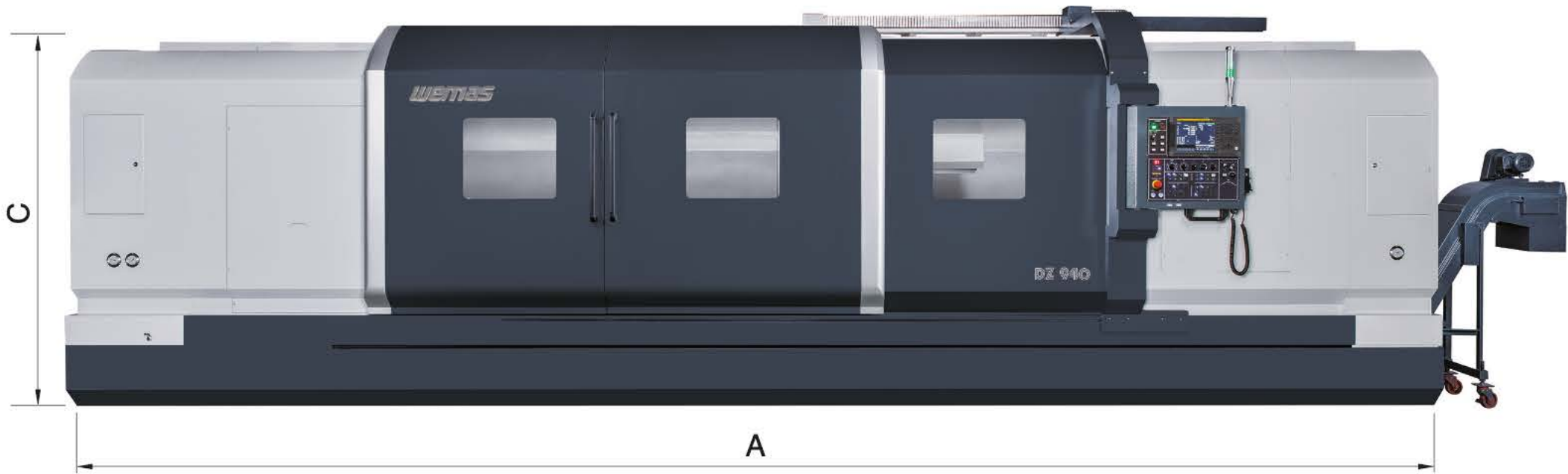
The entire control circuit in the electrical cabinet is well planned for easy maintenance. Top quality electronic components assure extra stable control performance and long service life.

Machine Dimension:

● DZ Series

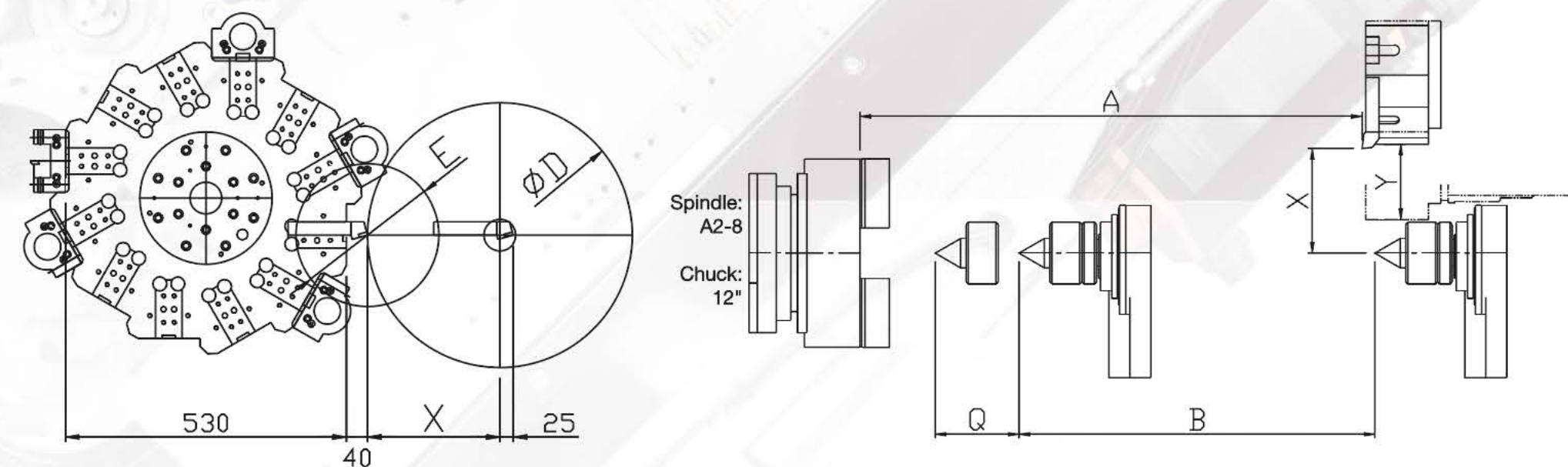


MODEL	LENGTH: A	B	C
DZ 48008	5304 (208.81")	2130 (83.85")	2235 (88")
DZ 48015	6064 (238.74")		
DZ 48023	6824 (268.66")		
DZ 48030	7584 (298.58")	2290 (90.16")	2565 (100.98")
DZ 64008	5304 (208.81")		
DZ 64015	6064 (238.74")		
DZ 64023	6824 (268.66")	2290 (90.16")	2565 (100.98")
DZ 64030	7584 (298.58")		
DZ 72012	6160 (242.5")		
DZ 72017	6660 (262.2")	2230 (87.8")	2445 (96.2")
DZ 72022	7160 (281.8")		
DZ 72032	8160 (321")		
DZ 94022	8700 (342.51")	3158 (124.33")	3050 (124.01")
DZ 94032	9700 (381.88")		
DZ 94042	10700 (421.25")		
DZ 94052	11700 (460.62")	3318 (130.63")	3380 (133.07")



Working capacity:

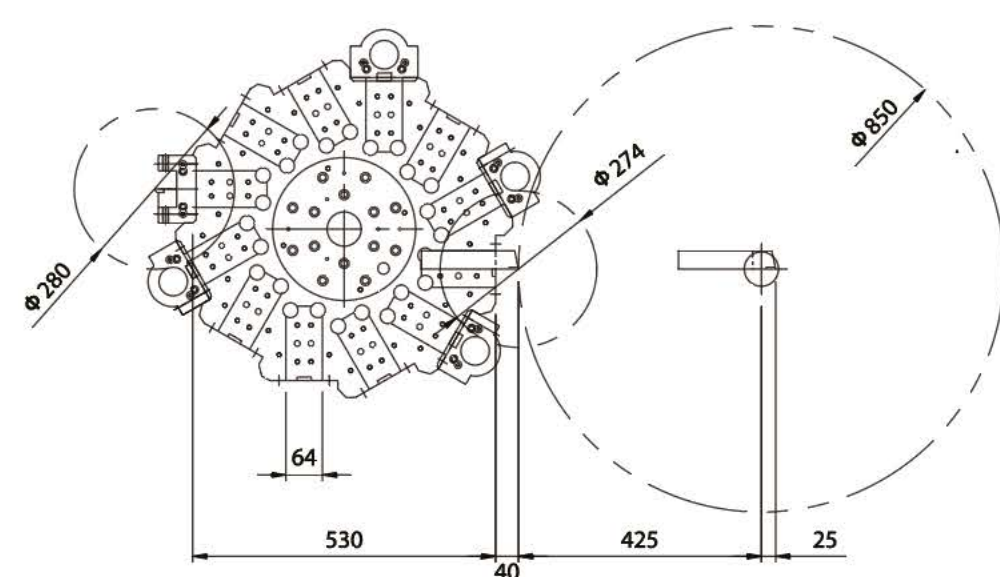
• DZ 480 / 648 Series



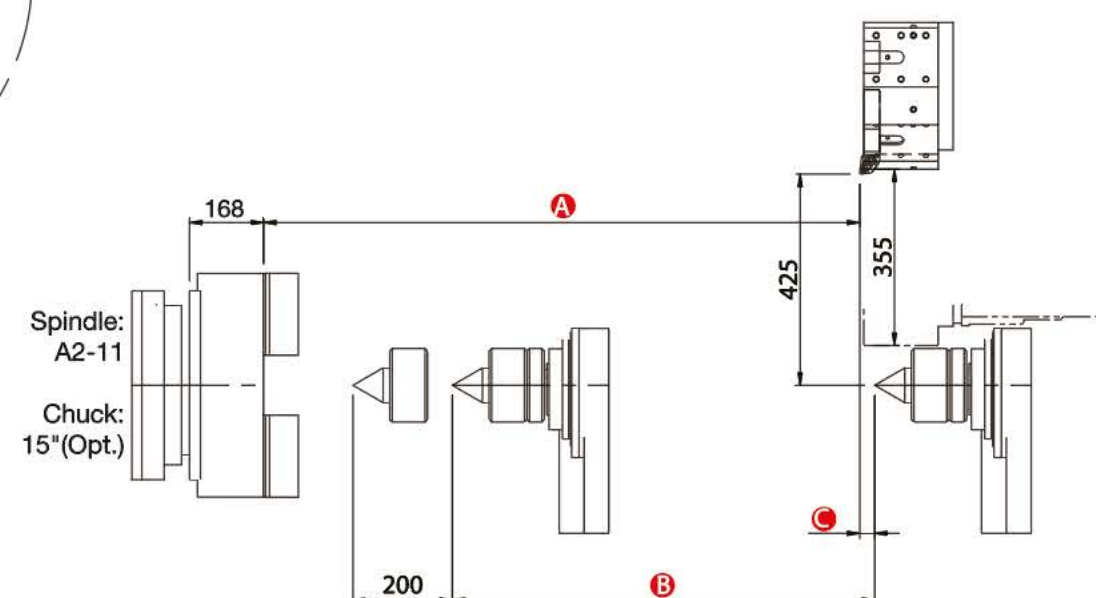
Spec.	D Turning Dia.	X	E (I.D. 40 mm)		E (I.D. 50 mm)	
			10T	12T	10T	12T
DZ 480	500	250	345	280	335	270
DZ 640	710	355	345	280	335	270

Spec.	A	B	X	Y	Q (Stable Quill + Live Center MT5)
DZ 48008	810	650	250	180	100
DZ 48015	1570	1410	250	180	100
DZ 48023	2330	2170	250	180	100
DZ 48030	3090	2930	250	180	100
DZ 64008	810	650	355	290	100
DZ 64015	1570	1410	355	290	100
DZ 64023	2330	2170	355	290	100
DZ 64030	3090	2930	355	290	100

• DZ 720 Series

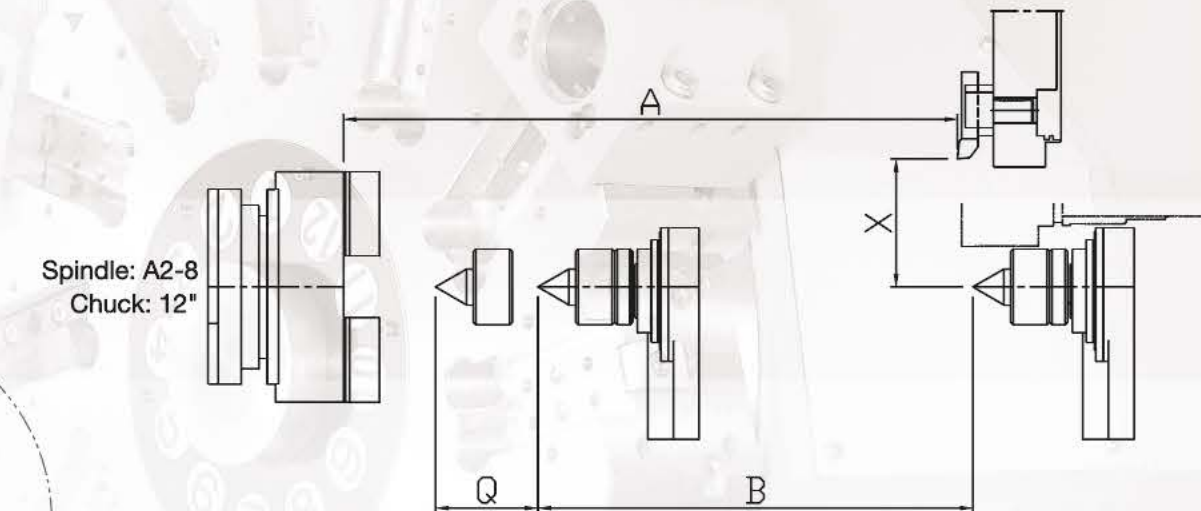
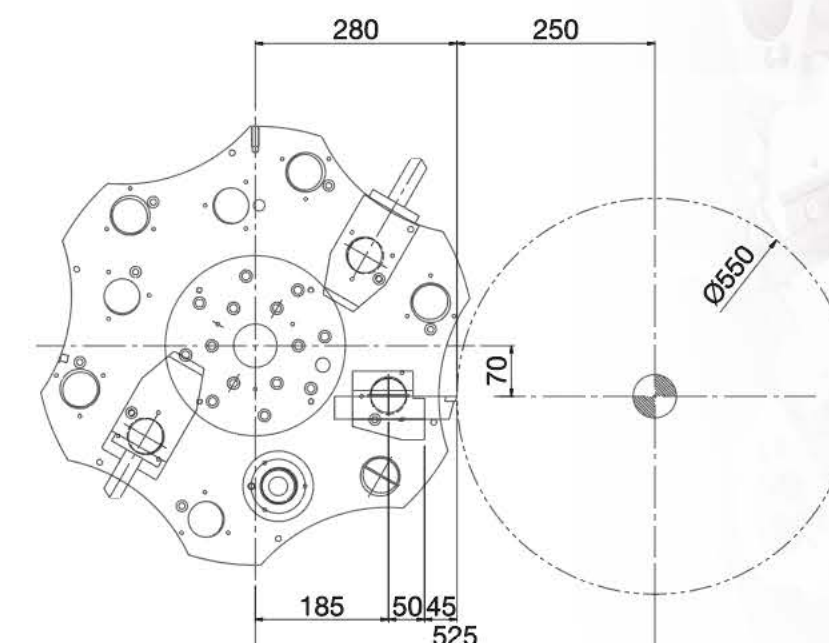


Spec.	A	B	C
DZ 72012	1196	950	206
DZ 72017	1696	1450	206
DZ 72022	2196	1950	206
DZ 72032	3156	2910	206
DZ 94022	2200	2000	30
DZ 94032	3200	3000	30
DZ 94042	4200	4000	30
DZ 94052	5200	5000	30



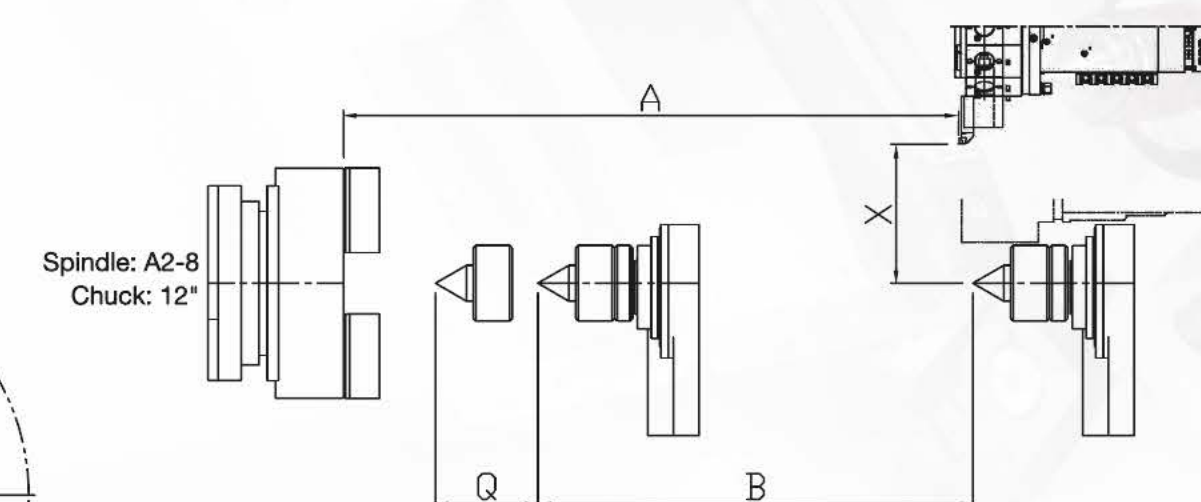
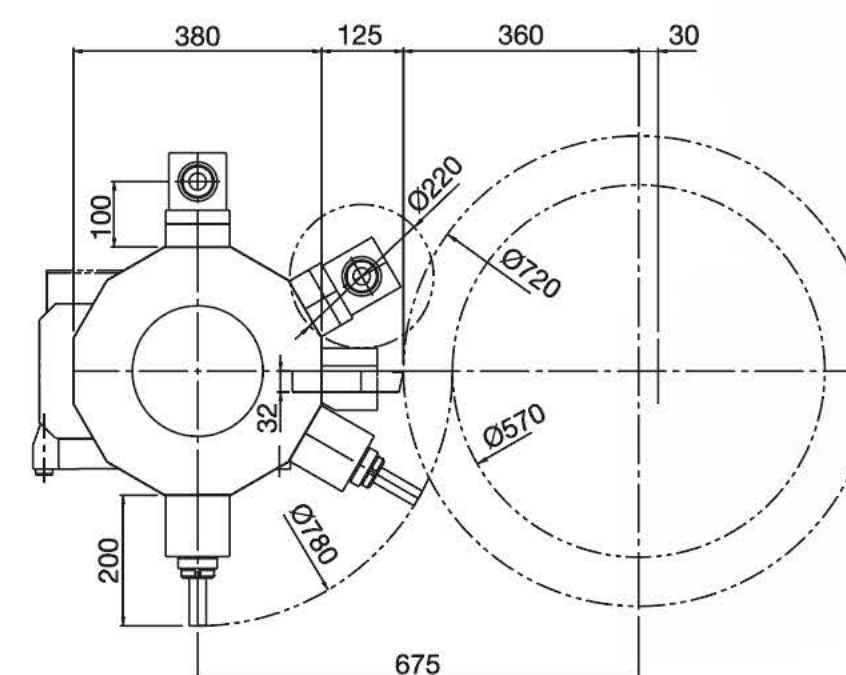
Working capacity:

• DZ 480 with power turret



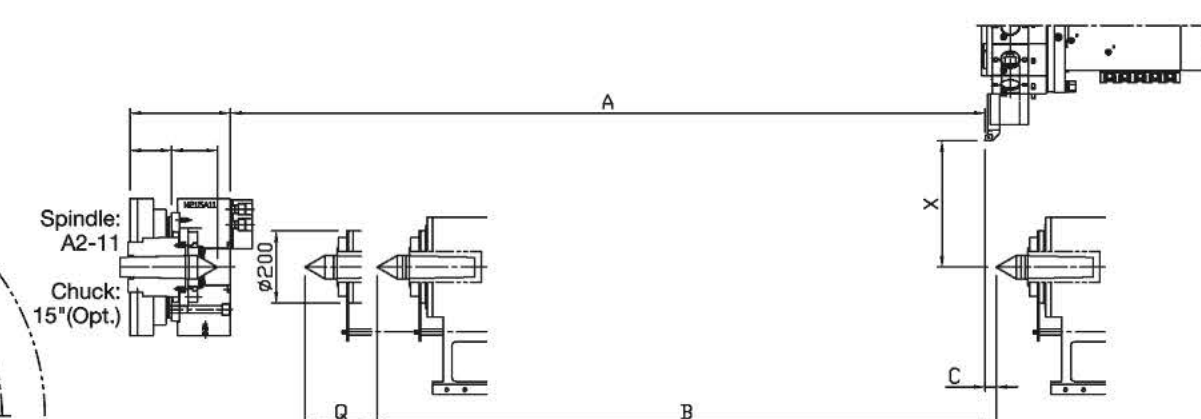
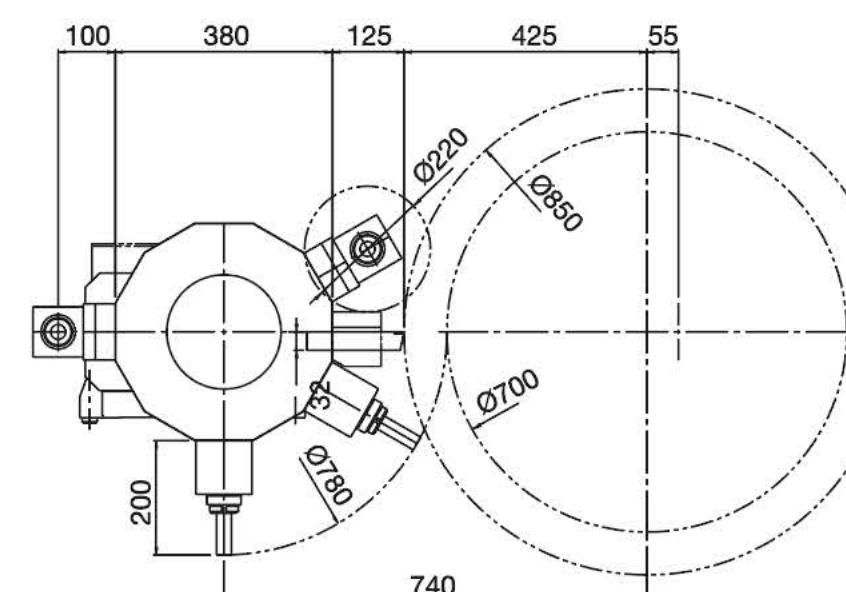
Spec.	A	B	X	Q (Stable Quill + Live Center MT5)	Max. turning dia.	Max. milling dia.
DZ 48008	770	600	250	100	550	440
DZ 48015	1530	1360	250	100	550	440
DZ 48023	2290	2120	250	100	550	440
DZ 48030	3050	2880	250	100	550	440

• DZ 640 with power turret



Spec.	A	B	X	Q (Stable Quill + Live Center MT5)	Max. turning dia.	Max. milling dia.
DZ 64008	780	650	360	100	720	570
DZ 64015	1540	1410	360	100	720	570
DZ 64023	2300	2170	360	100	720	570
DZ 64030	3060	2930	360	100	720	570

• DZ 720 with power turret



Spec.	A	B	X	Q (Stable Quill + Live Center MT5)	C	Max. turning dia.	Max. milling dia.
DZ 72012	1115	765	425	200	100	850	700
DZ 72017	1615	1265	425	200	100	850	700
DZ 72022	2115	1765	425	200	100	850	700
DZ 72032	3075	2725	425	200	100	850	700

Specification:

MODEL	Unit	DZ 480				DZ 640			
CAPACITY									
Swing over bed	mm(in)	Ø660(25.98)				Ø850(33.45)			
Swing over saddle	mm(in)	Ø480(18.9)				Ø640(25.19)			
Max. turning diameter	mm(in)	Ø500(19.68)				Ø710(27.95)			
Working length	mm(in)	760(29.92)	1520(59.8)	2280(89.76)	3040(119.68)	760(29.92)	1520(59.8)	2280(89.76)	3040(119.68)
SPINDLE									
Spindle nose	ISO	std.: A2-8 / opt.: A2-11				std.: A2-8 / opt.: A2-11 / A2-15			
Spindle bore	mm(in)	std.: Ø105(4.13) / opt.: A2-11: Ø131(5.15) , Ø165(6.5)				std.: Ø105(4.13) / opt.: A2-11: Ø131(5.15), Ø165(6.5) / A2-15: Ø180(7.08)			
Bar capacity	mm(in)	std.: Ø89(3.5) / opt.: A2-11: Ø117(4.6) , Ø142(5.6)				std.: Ø89(3.5) / opt.: A2-11: Ø117(4.6), Ø142(5.6) / A2-15: Ø166(6.53)			
Spindle speed range	rpm	std.: 2500 / opt.: 2000, 1650				std.: 2500 / opt.: 2000, 1650 / 1300			
Living tools speed	rpm	opt.: 0 ~ 3000				opt.: 0 ~ 3000			
CHUCK									
Chuck size	mm(in)	std.: 12" / opt.: 15" / 15"				std.: 12" / opt.: 15" , 15" / 16"			
TURRET									
Tool number	Station	std.: 10 / opt.:12				std.: 10 / opt.: 12			
O.D. tool shank	mm(in)	std.: 32(1.25) / opt.: 25(1)				std.: 32(1.25) / opt.: 25(1)			
I.D. tool bore	mm(rev)	Ø50(2)				Ø50(2)			
X / Z AXIS									
X axis travel	mm(in)	250+25 (9.84+1)				355+25 (13.97+1)			
Z axis travel	mm(in)	860(33.85)	1620(63.78)	2380(93.7)	3140(123.62)	860(33.85)	1620(63.78)	2380(93.7)	3140(123.62)
X axis rapid traverse speed	m/min	12				12			
Z axis rapid traverse speed	m/min	15 / 15 / 15 / 12				15 / 15 / 15 / 10			
Cutting feed rate	mm/min	0.001 ~ 500				0.001 ~ 500			
MOTOR									
Output of spindle motor (continuous)	kW(HP)	α 22i		22(29.5)		α 22i		22(29.5)	
Output of spindle motor (30 min. rating)	kW(HP)			26(34.9)				26(34.9)	
Output of X axis motor	kW(HP)	α 22Bi- 4(5.4)				α 22Bi- 4(5.4)			
Output of Z axis motor	kW(HP)	α 22i- 4(5.4)				α 22i- 4(5.4)			
Output of Hydraulic pump	kW(HP)	2.2(3)				2.2(3)			
Output of Coolant pump	kW(HP)	0.75(1)				0.75(1)			
TAILSTOCK									
Tailstock type	-	Programmable				Programmable			
Tailstock travel	mm(in)	650(25.59)	1410(55.51)	2170(85.43)	2930(115.35)	650(25.59)	1410(55.51)	2170(85.43)	2930(115.35)
Quill type	-	std.: stable / opt: revolve				std.: stable / opt: revolve			
Quill stroke	mm(in)	100(3.94)				100(3.94)			
Quill diameter	mm(in)	std.: Ø110(4.33)				std.: Ø110(4.33) / opt: Ø160(6.29)			
Taper of center	MT	MT.5				MT.5			
TANK CAPACITY									
Hydraulic tank	Litres	80				80			
Coolant tank	Litres	480	580	680	780	480	580	680	780
SIZE									
L x W x H	mm	5304x2130x2235	6064x2130x2235	6824x2130x2235	7584x2290x2565	5304x2130x2235	6064x2130x2235	6824x2130x2235	7584x2290x2565
	(in)	208.81x83.85x88	238.74x83.85x88	268.66x83.85x88	298.58x90.16x100.98	208.81x83.85x88	238.74x83.85x88	268.66x83.85x88	298.58x90.16x100.98
MEASUREMENT									
NW/GW	kgs	10030/11140	11300/13160	13700/15700	16300/18700	11500/11950	12100/13700	15600/16800	17900/19200

● All specification, design and characteristics shown on this catalogue are subject to change without prior notice.
● Above specification are based on Force One standard turret (refer to direct type), please contact your local Force One dealer for other turret specification needed.

Standard Accessories:

- 2-stages speed gearbox

Programmable tailstock

Stable quill and live center for tailstock

Working lamp

Heat exchanger of electric box cabinet

10 station hydraulic turret
- 6 bar coolant pump

Chip conveyor and bucket

Three color alarm light

Tool box and tool kits

Lubrication system

Optional Accessories:

- Transformer

Revolve quill and stable center for tailstock

Automatic tool setter

Cs axis and power turret

Larger hydraulic chuck

12 station hydraulic turret
- 60" height chip conveyor and bucket

CE electric control

CSA electric control

Steady rest

Larger spindle

Specification:

MODEL	Unit	DZ 720				DZ 940			
CAPACITY									
Swing over bed	mm(in)	Ø970(38.1)				Ø1100 (43)			
Swing over saddle	mm(in)	Ø720(28.3)				Ø940 (37)			
Max. turning diameter	mm(in)	Ø850(33.4)				Ø1020 (40)			
Distance between center	mm(in)	1130(44.48)	1630(64.17)	2130(83.85)	3090(121.65)	2200 (86.61)	3190 (125.59)	4120 (162.2)	5110 (201.18)
SPINDLE									
Spindle nose	ISO	std.: A2-11 / opt.: A2-15 / A2-20				std.: A2-11 / opt.: A2-15 / A2-20			
Spindle bore	mm(in)	std.: Ø160(6.3) / opt.: A2-15: Ø230(9) / A2-20: Ø320(13), Ø360(14.17)				std.: Ø160(6.3) / opt.: A2-15: Ø230(9) / A2-20: Ø320(13), Ø360(14.17)			
Bar capacity	mm(in)	opt.: A2-11: Ø142(5.6) / A2-15: Ø205(8.07) / A2-20: Depend. on Chuck				opt.: A2-11: Ø142(5.6) / A2-15: Ø205(8.07) / A2-20: Depend. on Chuck			
Spindle speed range	rpm	std.: 1500 / opt.: 700, 550, 450				std.: 1500 / opt.: 700, 550, 450			
Living tools speed	rpm	opt.: 0 ~ 3000				opt.: 0 ~ 3000			
CHUCK									
Chuck size	mm(in)	opt.: 15" / 24"				opt.: 15" / 24"			
TURRET									
Tool number	Station	12				12			
O.D. tool shank	mm(in)	□32(1.25)				□32 (1.25)			
I.D. tool bore	mm(rev)	Ø50(2)				Ø50 (2)			
X / Z AXIS									
X axis travel	mm(in)	425+25 (16.7+1)				510 + 25 (20+1)			
Z axis travel	mm(in)	1250(49.21)	1750(68.89)	2250(88.58)	3210(126.37)	2260 (88.97)	3220 (126.77)	4200 (165.35)	5190 (204.33)
X axis rapid traverse speed	m/min	12				12			
Z axis rapid traverse speed	m/min	15 / 15 / 15 / 10				15 / 10 / 8 / 8			
Cutting feed rate	mm/min	0.001 ~ 500				0.001 ~ 500			
MOTOR									
Output of spindle motor (continuous)	kW(HP)	α 30i		30(40)		α 40i		37(49.6)	
Output of spindle motor (30 min. rating)	kW(HP)			37(49)				45(60.3)	
Output of X axis motor	kW(HP)	α 22Bi- 4(5.4)				α 22Bi- 4(5.4)			
Output of Z axis motor	kW(HP)	α 30i- 7(9.4)				α 30i- 7(9.4)			
Output of Hydraulic pump	kW(HP)	3.75(5)				3.75(5)			
Output of Coolant pump	kW(HP)	0.75(1)				0.75(1)			
TAILSTOCK									
Tailstock type	-	Programmable				Programmable			
Tailstock travel	mm(in)	950(37.4)	1450(57)	1950(76.7)	2910(114.56)	1900 (74.8)	2900 (114.17)	3900 (153.54)	4900 (192.91)
Quill type	-	std.: stable / opt: revolve				std.: stable / opt: revolve			
Quill stroke	mm(in)	160(6.3)				200 (7.8)			
Quill diameter	mm(in)	Ø160(6.3)				Ø200 (7.8)			
Taper of center	MT	MT.6				MT.6			
TANK CAPACITY									
Hydraulic tank	Litres	80				80			
Coolant tank	Litres	520	600	670	810	670	810	950	1050
SIZE									
L x W x H	mm	6160x2230x2445	6660x2230x2445	7160x2230x2445	8160x2390x2775	8700x3158x3050	9700x3318x3380	10700x3318x3380	11700x3318x3380
	(in)	242.5x87.8x96.2	262.2x87.8x96.2	281.8x87.8x96.2	321x94.09x109.25	(342.51x124.33x124.01)	(381.88x130.63x133.07)	(421.25x130.63x133.07)	(460.62x130.63x133.07)
MEASUREMENT									
NW/GW	kgs	14200/15000	14950/15700	15700/16700	18400/19900	18000 / 20000	23000 / 27000	27000 / 31000	32000 / 36000

● All specification, design and characteristics shown on this catalogue are subject to change without prior notice.
● Above specification are based on Force One standard turret (refer to direct type), please contact your local Force One dealer for other turret specification needed.

Standard Accessories:

- Four stages speed gear head (DZ 940)

Three stages speed gear head (DZ 720)

Programmable tailstock

Stable quill and live center for tailstock

Working lamp

Heat exchanger of electric box cabinet

12 station hydraulic turret
- 6 bar coolant pump

Chip conveyor and bucket

Three color alarm light

Tool box and tool kits

Lubrication system

Spindle oil cooler

Optional Accessories:

- Transformer

Automatic tool setter

Cs axis and power turret

Hydraulic and Manual chuck

60" height chip conveyor and bucket
- CE electric control

CSA electric control

Revolve quill and stable center for tailstock

Steady rest

Larger spindle