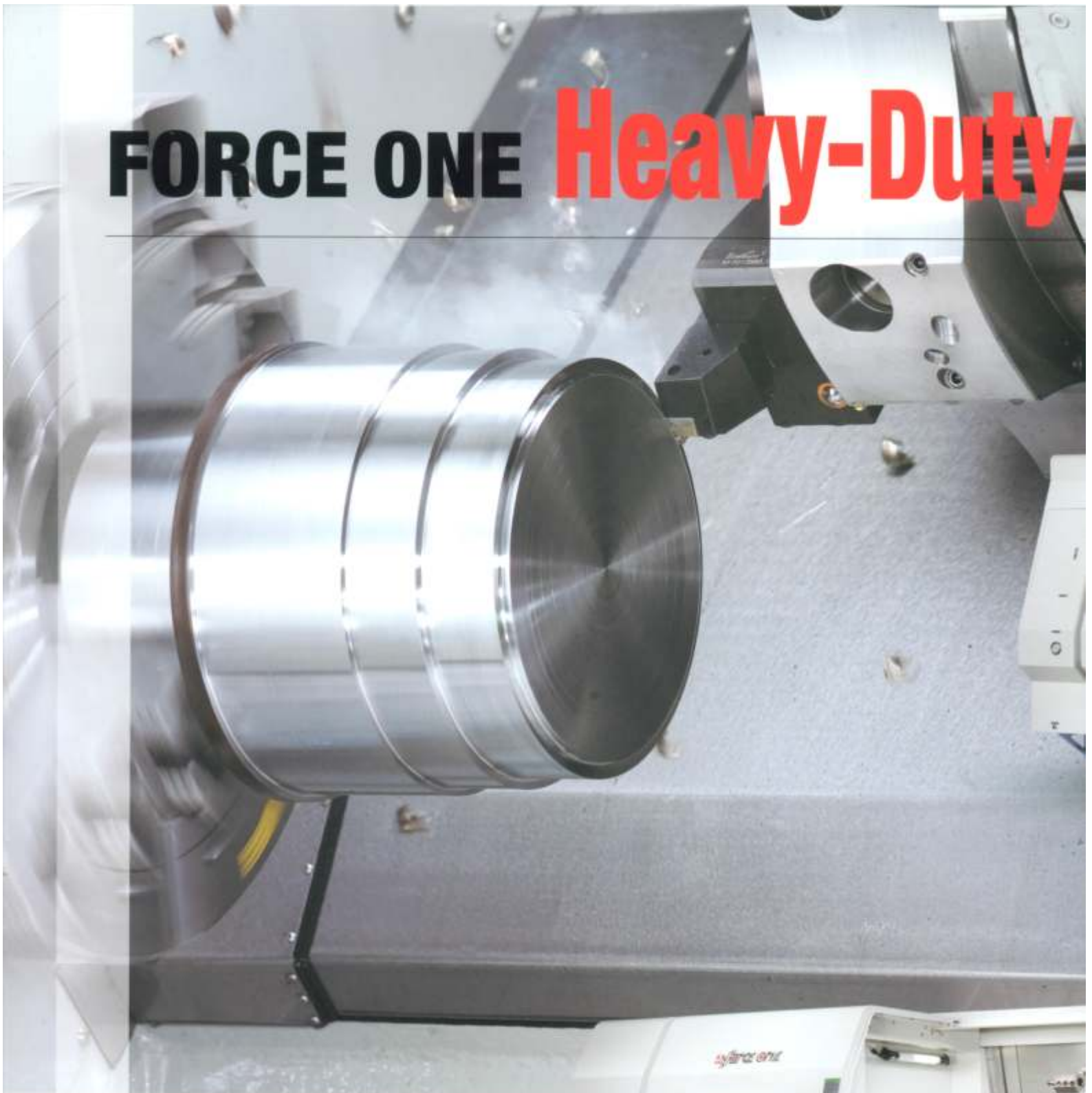




Single Spindle / Single Turret TC-35 / TC-40 / TC-45

TC
SERIES

FORCE ONE Heavy-Duty



The **TC-35/40/45 series** CNC lathes from Force One is designed with heavy cutting and high efficiency in mind. The single spindle, single turret CNC lathe is a 45 degree slant bed construction with box guideways on X, Z-axis. The spindle of TC-35/40 series is transmitted through a Germany ZF gearbox, providing extra high torque output. This makes the machine excellent for heavy duty turning operations.



CNC Lathe

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



TC-35 series Features:

- Swing over bed ϕ 660 mm.
- Swing over saddle ϕ 480 mm.
- Max. turning diameter ϕ 500 mm
- Range of working length 820 - 3,100 mm
- 10-station hydraulic turret
- Germany ZF gearbox
- Manual tailstock



TC-45 series Features:

- Swing over bed ϕ 970 mm.
- Swing over saddle ϕ 720 mm.
- Max. turning diameter ϕ 850 mm
- Range of working length 1,200 - 3,200 mm
- 12-station hydraulic turret
- 3-stage gearbox
- Programmable tailstock

RUGGEDLY AND PRECISELY CONSTRUCTED THROUGHOUT

- Box guideways on X and Z axis, that is high precision and heavy-duty loading.
- High rigidity and stabilization of entire construction.
- Hi-rigid construction stands up bending and torsional force of heavy-duty cutting on large work-piece.



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



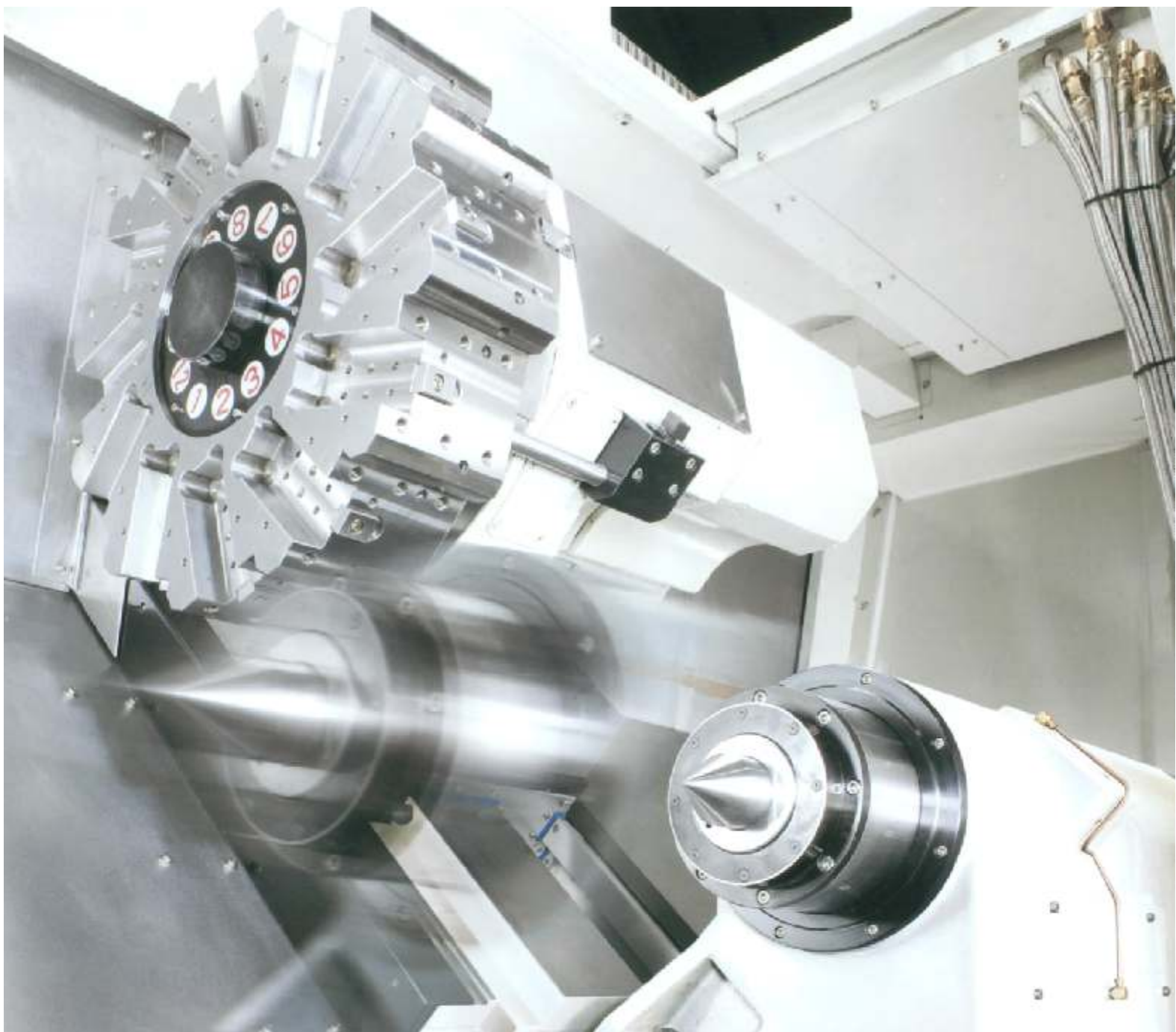
TC-35 series



TC-45 series

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.





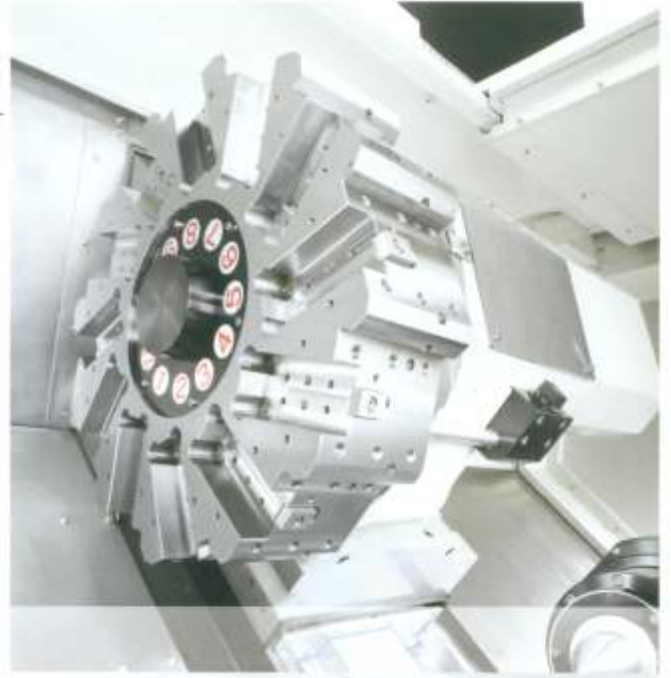
PROGRAMMABLE TAILSTOCK (TC-45 series)

The tailstock movement is driven by a hydraulic motor and transmitted through rack. The tailstock is conveniently controlled by M code.



HYDRAULIC TURRET INDEXING

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



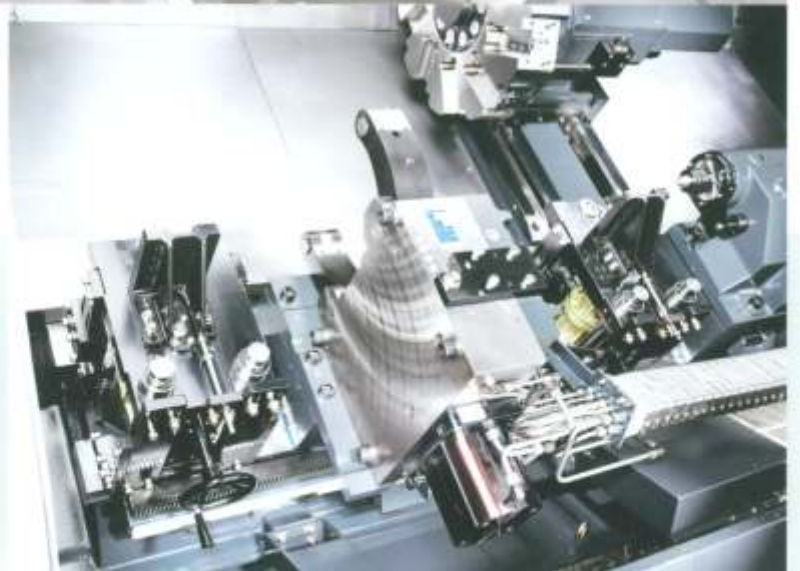
POWER TURRET(OPT) (TC-35 series)

- A. Employs VDI 50 axial turret disk, 12 position power turret.
- B. High indexing resolution for contour/index control.
- C. Hydraulic disk brake locking provides maximum stability during milling and contouring.



PARTS SUPPORTING DEVICE AND HYDRAULIC STEADY REST (OPT)

Offers stable support to the long work piece.



Machine Features:



POWERFUL HI-SPEED AND HI-RIGID SPINDLE (TC-35 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.



Steady Rest (OPT.)

Designed for support long workpiece.



ZF GEAR BOX (TC-35/40 series)

TC-35/TC-40 series equipped with "high precision" German-made ZF two stages gearbox (gear ratio 1:4) provides full horsepower cutting from 208-2,500rpm. The maximum cutting torque is 660 N-m.



FANUC CNC CONTROLLER

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



OIL COOLER OF SPINDLE (TC-45 series)

Control the oil temperature in spindle gearbox.



GEARBOX (TC-45 series)

The spindle is transmitted through a 3-stage gearbox. Gears are precision ground for quiet running.



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.

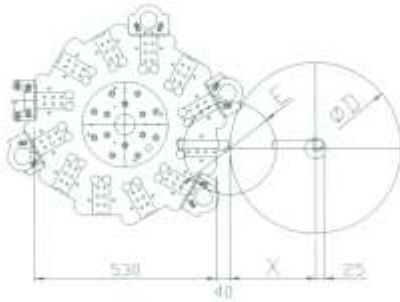


HYDRAULIC POWER UNIT

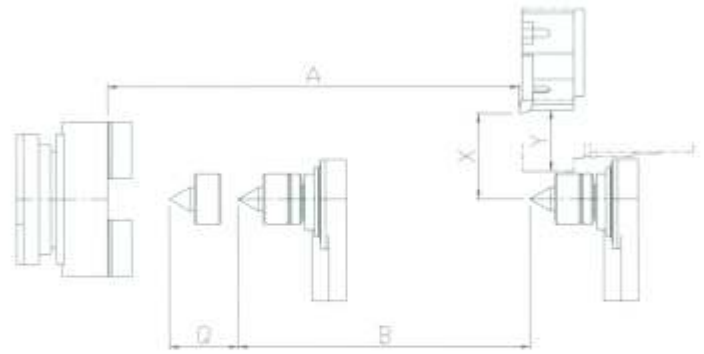
The hydraulic power unit employs high quality components for long service life and stable motions. The unit delivers high pressure to the turret, CS Brake and 3-jaw chuck.

Working capacity:

● TC - 35 Series

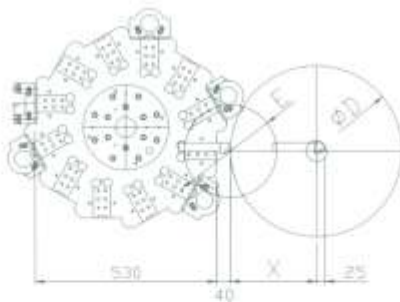


Spec.	D Turning Dia.	X	E (I.D. 40 mm)		E (I.D. 50 mm)	
			10T	12T	10T	12T
TC-35	500	250	345	280	335	270

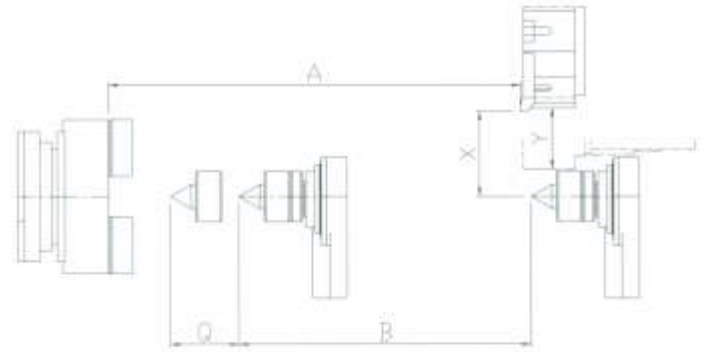


Spec.	A	B	X	Y	Q (Stable Quill + Live Center MT5)
TC-3508	820	780	250	180	100
TC-3515	1580	1540	250	180	100
TC-3523	2340	2300	250	180	100
TC-3530	3100	3060	250	180	100

● TC - 40 Series

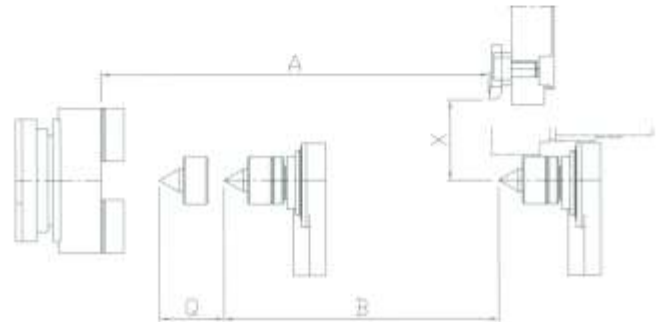
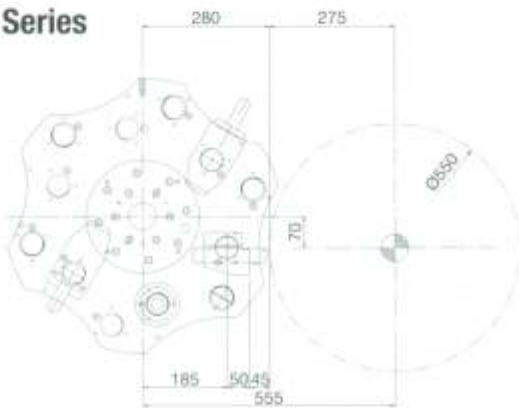


Spec.	D Turning Dia.	X	E (I.D. 40 mm)		E (I.D. 50 mm)	
			100T	12T	10T	12T
TC-40	720	360	345	280	335	270



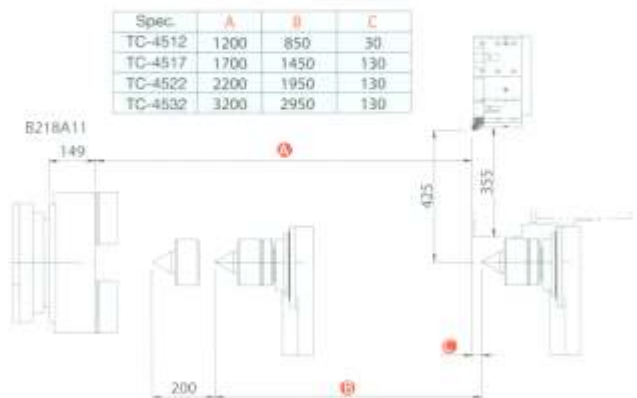
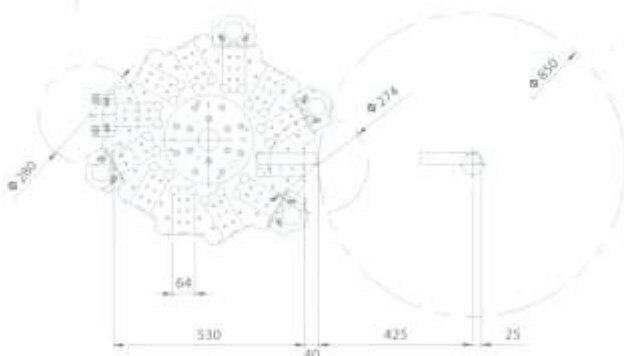
Spec.	A	B	X	Y	Q (Stable Quill + Live Center MT5)
TC-4008	820	780	360	290	100
TC-4015	1580	1540	360	290	100
TC-4023	2340	2300	360	290	100
TC-4030	3100	3060	360	290	100

● TC - 35M Series



Spec.	A	B	X	Q (Stable Quill + Live Center MT5)
TC-3508M	770	780	275	100
TC-3518M	1530	1540	275	100
TC-3523M	2290	2300	275	100
TC-3530M	3050	3060	275	100

● TC - 45 Series



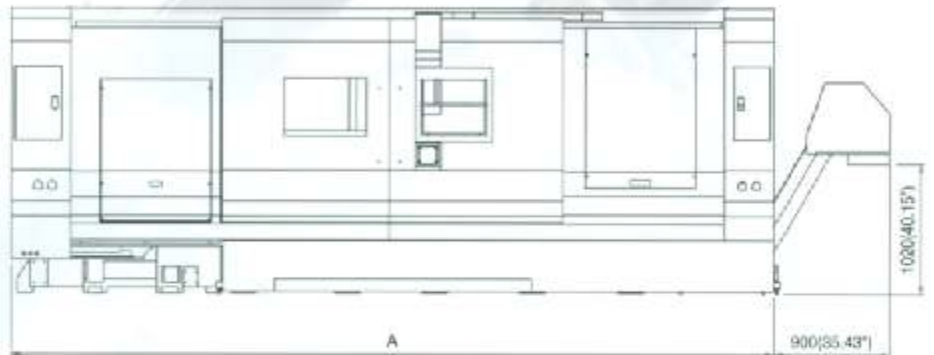
Spec.	A	B	C
TC-4512	1200	850	50
TC-4517	1700	1450	130
TC-4522	2200	1950	130
TC-4532	3200	2950	130

⊗ We reserve the right to change above information without prior notice.

Machine Dimensions:

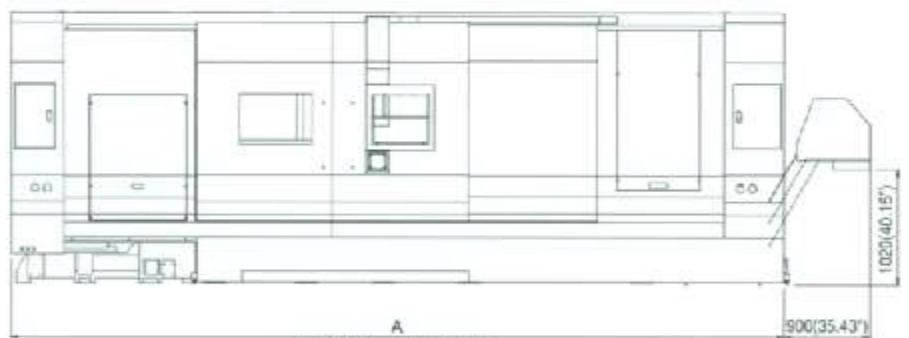
Unit: mm(inch)

● TC - 35 Series



TC-3508 = 4404 (173.38")
 TC-3515 = 5164 (203.30")
 TC-3523 = 5924 (233.22")
 TC-3530 = 6684 (263.15")

● TC - 40 Series



TC-4006 = 4404 (173.38")
 TC-4015 = 5164 (203.30")
 TC-4023 = 5924 (233.22")
 TC-4030 = 6684 (263.15")

● TC - 45 Series

TC-4512=5000
 TC-4517=5500
 TC-4522=6000
 A TC-4532=7000

