

JOHNFORD[®]



**Great
Turning Centers**

GT

S E R I E S

**JOHNFORD offers you the best performance
in large turning centers with our
advanced manufacturing ability**

GT SERIES

GT-□□□(+C)

Option
C: C Axis

Spindle Type

F-Bore $\phi 6'$ ($\phi 153\text{mm}$) /A2-11/1000rpm
G-Bore $\phi 9'$ ($\phi 230\text{mm}$) /A2-15/700rpm
H-Bore $\phi 12.5'$ ($\phi 318\text{mm}$)/A2-20/500rpm
I - Bore $\phi 14'$ ($\phi 360\text{mm}$) /A2-20/400rpm
J- Bore $\phi 16'$ ($\phi 410\text{mm}$) /A2-28/350rpm
K- Bore $\phi 21'$ ($\phi 510\text{mm}$) /A2-28/250rpm

Model (Z Axis Travel)

40=1000mm	130=3000mm
60=1500mm	160=4000mm
80=2000mm	200=5000mm
100=2500mm	250=6000mm



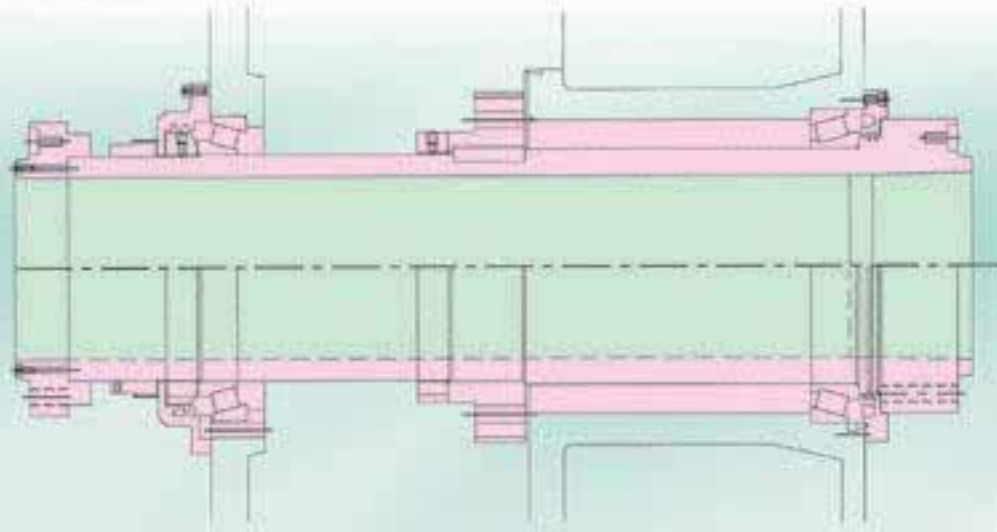
GT-80

Powerful spindle for heavy duty cutting

Headstock is a thick wall casting with special ribs arranged for maximum rigidity.

The main spindle adopts JOHNFORD's own 2-point supporting system. We can provide large size spindle bores: ϕ 153, ϕ 230, ϕ 318, ϕ 360, ϕ 410, ϕ 510mm.

The 4-step geared headstock with automatic hydraulic shift and constant surface speed control ensures the proper cutting speed for a better surface finish and longer tool life while delivering awesome cutting power at any speed.



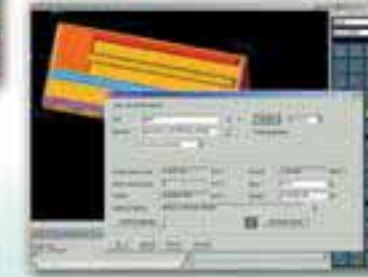
12-position vertical turret

The heavy duty cutting turret with a clamping force of 20,000kg (35kg/cm²) and large cutting tool capacity provides for the use of ϕ 100mm diameter boring bar. The turret indexing is a non-stop random selection system and allows high-speed indexes.



Programmable hydraulic tailstock

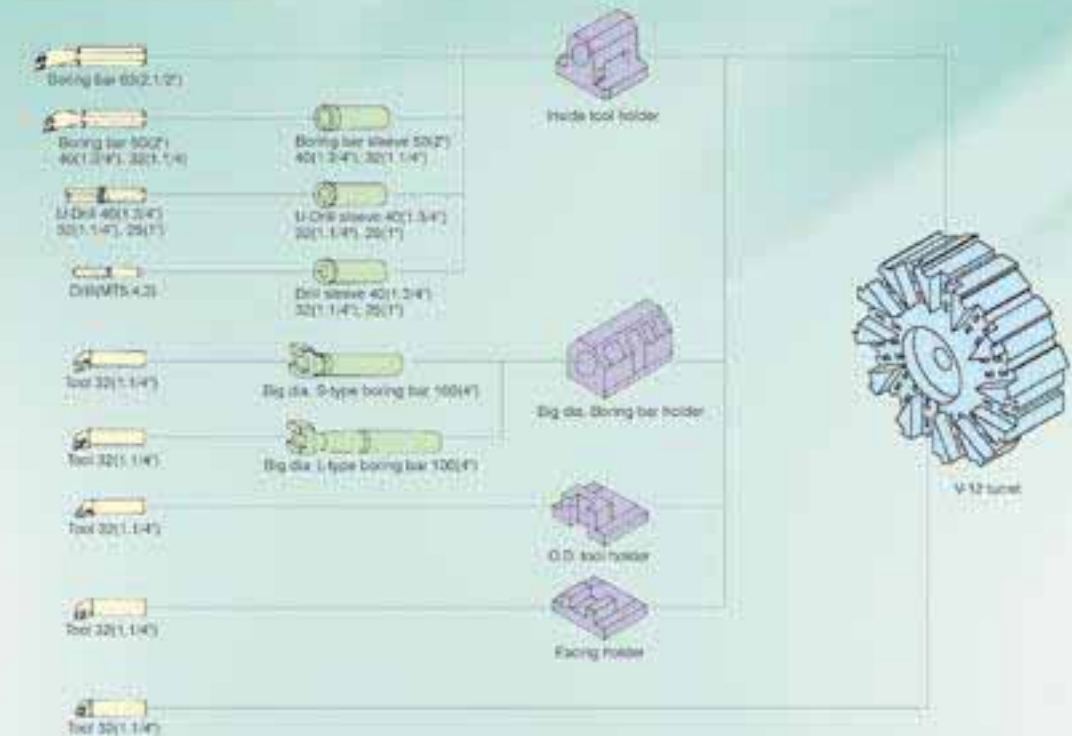
Tailstock is designed for heavy duty operation and is fully automatic. Tailstock body and spindle is programmable and can also be operated by manual switches.



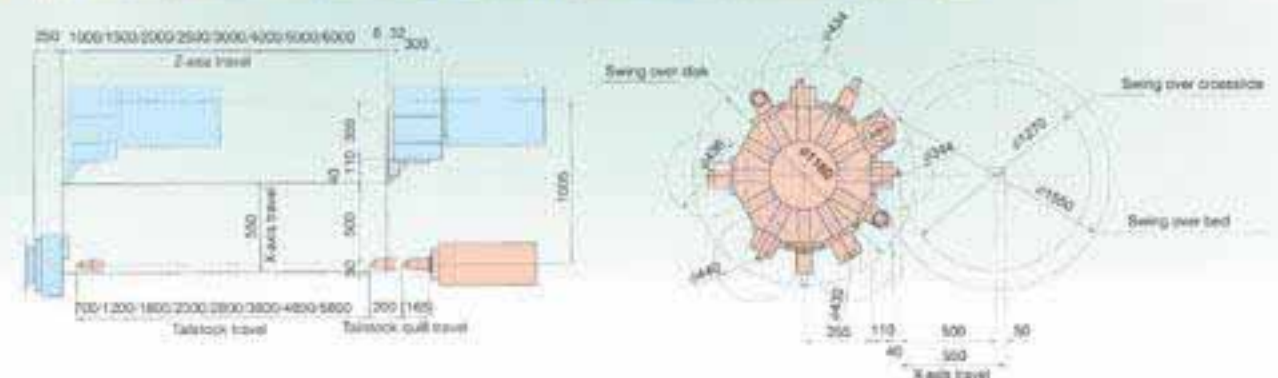
Quality

IDEAS advanced engineering software is utilized for optimizing the design of the GT Series. It is used to calculate the physical and material properties of the components. ANSYS Finite element analysis (FEA) software is employed to analyze all components of the GT series to determine the optimal machine structure. Both of the softwares help us to refine our design and ensure our machines without weakness.

Tooling system



12-Angle turret working capacity / range



SPECIFICATIONS

MODEL		GT-40	GT-60	GT-80	GT-100	GT-130	GT-160	GT-200	GT-250
ITEM									
Swing over bed (mm)		φ 1550							
Swing over cross slide (mm)		φ 1270							
Distance between centers (mm)		1000	1500	2000	2500	3000	4000	5000	6000
Chuck size (in)		F: 18", G: 21", H,I: 24", J,K: 40"							
Spindle nose		F: A2-11, G: A2-15, H,I: A2-20, J,K: A2-28							
Spindle bore (mm)		F: φ 153, G: φ 230, H: φ 318, I: φ 360, J: φ 410, K: φ 510							
Spindle speed step(s)		Auto 4-speeds							
Spindle speed range (rpm)		F: 1000, G: 700, H: 500, I: 400, J: 350, K: 250							
Spindle motor (HP)		50/40				60/50			
Spindle bearing diameter (mm)		F: φ 200, G: φ 310, H: φ 390, I: φ 450, J: φ 480, K: φ 580							
NO. of tools		12							
Cross travel (X-axis) (mm)		550							
Longitudinal travel(Z-axis) (mm)		1000	1500	2000	2500	3000	4000	5000	6000
Rapid traverse (m/min)		X: 12 ; Z: 15							
Tailstock travel (mm)		700	1200	1700	2200	2700	4700	4700	5700
Tailstock quill travel (mm)		200							
Tailstock quill diameter (mm)		φ 200							
Tailstock spindle taper (Rotary)		MT#7							
Servo motor (X-axis) (HP)		5							
Servo motor (Z-axis) (HP)		6							
Bed inclination		45°							
Coolant pump motor (HP)		1.7 (P=4.4kg/cm ² , Q=50L/min)							
Hydraulic pump motor (HP)		5							
Weight (kg)		15000	16000	17000	18000	19000	20000	21000	22000
Packing	W x H (mm)	3500 x 3000							
	L (mm)	5200	5600	6000	6400	7400	8400	9400	10400

*Specification subject to change without prior notice.

STANDARD ACCESSORIES:

1. Coolant system
2. Splash guard
3. Through hole 3-jaw chuck
4. Programmable hydraulic tailstock
5. Chain type chip conveyor
6. Tool box and various manuals
7. Tool holders (direct mounting type)
8. Auto lube. with alarm
9. Halogen work lamp

OPTIONAL ACCESSORIES:

1. C-axis (Live Tooling)
2. Touch sensor (manual tool presetter)
3. Tool holders (VDI type)
4. Twin spindle
5. Super cap II (for 18T)

CNC CONTROL SPECIFICATIONS

ITEM	FUNCTION	SPECIFICATION	SIEMENS	FANUC				
			840D	OT-C	OT-F	16T	18T	OIT
Control axes	Standard number of control axes	axes	4	2	2	2	2	2
	No. of simultaneously controlled axes	axes	4	2	2	2	2	2
Input commands	Least detection increment	1 μ	1 μ	1 μ	1 μ	1 μ	1 μ	1 μ
	Least programmable increment	1 μ	1 μ	1 μ	1 μ	1 μ	1 μ	1 μ
	Inch/metric conversion	G20/G21	0	0	0	0	0	0
	Absolute/incremental command		0	0	0	0	0	0
	Diameter/radius designation		0	0	0	0	0	0
	Input buffer	word/characters	unlimited	1	1	1	1	12
	Pre-read buffer (No-of block)	block	unlimited	1	1	6	6	12
	ISO/EIA automatic identification		0	0	0	0	0	0
RS232-C interface			0	0	0	0	0	0
			0	0	0	0	0	0
Interpolation	Positioning (Interpolation)	G00	0	0	0	0	0	0
	Linear interpolation	G01	0	0	0	0	0	0
	Circular interpolation	G02/G03	0	0	0	0	0	0
	Variable lead thread cutting		0	Δ	Δ	Δ	Δ	0
	Continuous thread cutting		0	0	0	0	0	0
Program	Memory capacity	Meter	640	80	80	160	160	640
	No. of programs stored		unlimited	64	64	200	200	200
	Background editing		0	0	0	0	0	0
Spindle functions	S code output 4-digit BCD-binary	S4BCD	0	0	0	0	0	0
	Constant peripheral speed control	G96/G97	0	0	0	0	0	0
	Spindle rate	%	0-200	50-120	50-120	50-150	50-150	50-120
Feed	Per-revolution		0	0	0	0	0	0
	Per-minute		0	0	0	0	0	0
	Rapid traverse rate	low25%,50%,100%	0	0	0	0	0	0
	Cutting speed rate	%	0-200	0-150	0-150	0-200	0-200	0-200
	Handle feed rate	x1,x10,x100	0	0	0	0	0	0
Miscellaneous function	M-code	M2(BCD)	0	0	0	0	0	0
Coordinate system	Automatic coordinate system setting		0	0	0	0	0	0
	Machine coordinate system		0	0	0	0	0	0
	Work coordinate system	G54-G59	0	Δ	Δ	Δ	Δ	0
	Coordinate system setting	G50	0	0	0	0	0	0
	Manual reference point return		0	0	0	0	0	0
	Automatic reference point return	G28/G29	0	0	0	0	0	0
	2nd reference point return	G30	0	0	0	0	0	0
Reference point return verify	G27	0	0	0	0	0	0	
Tool function	Tool command	T4 digit	0	0	0	0	0	0
	Shape/wear differentiated compensation		0	0	0	0	0	0
	Nose radius compensation	G40/G41/G42	0	0	0	0	0	0
	Number of offset sets		unlimited	16	16	16	16	16
Operation	Single block		0	0	0	0	0	0
	Block skip		0	0	0	0	0	0
	Dry run		0	0	0	0	0	0
	Machine lock		0	0	0	0	0	0
	Option stop	M01	0	0	0	0	0	0
	Miscellaneous function lock	M.S.T.lock	0	0	0	0	0	0
	Manual/Absolute ON/OFF		0	0	0	0	0	0
	PLC switch		0	0	0	0	0	0
Programming support function	Sub-program control	M98, M99	0	0	0	0	0	0
	Corner chamfering/corner rounding		0	0	0	0	0	0
	Canned cycle for drilling	G80-G89	0	Δ	Δ	Δ	Δ	0
	Multiple repetitive canned cycle for lathe	G70-G79	0	0	0	0	0	0
	User macro		0	A	A	0	0	0
	No. of variable command sets		unlimited	100	100	100	100	100
	Backlash compensation		0	0	0	0	0	0
	Memory-type pitch error compensation		0	0	0	0	0	0
Direct drawing dimension program		Δ	0	0	0	0	0	
Measurement function	Skip function		0	0	0	0	0	0
	Direct input of offset value measured A		0	0	0	0	0	0
	Automatic tool offset		Δ	Δ	Δ	Δ	Δ	Δ
Safety protection	Emergency stop		0	0	0	0	0	0
	Travel protection		0	0	0	0	0	0
	Program protection		0	0	0	0	0	0
Other	CRT		9.5" LCD	9" mono	9" mono	8.4" LCD	8.4" LCD	8.4" LCD
	MDI	Full key	0	small	small	0	0	0
	Languages	English/Japanese	7	7	7	7	7	7
	Run hour and parts count			0	0	0	0	0
	Graphic display			0	0	0	0	0
	Menu programming		0	0	0	0	0	0
	Conversational programming with graphic		Δ	Δ	0	Δ	Δ	-
	Touch sensor (tool setter)		Δ	Δ	Δ	Δ	Δ	Δ
	Chinese, French, German, Italian, Spanish		0	0	0	0	0	0
Data server (HD)		Δ	-	-	Δ	Δ	-	

* Specifications subject to change without prior notice.

JOHNFORD[®]

*Whatever you need
for milling and turning
we offer the best.*



JOHNFORD

ROUNDTOP MACHINERY INDUSTRIES CO., LTD.

1056, Chungshan Rd., Shengkang Hsiang, Taichung Hsien, Taiwan

Tel: 886-4-2562-4721

Fax: 886-4-2561-3886

<http://www.johnford.com.tw>

E-mail: johnford@johnford.com.tw