



**CHESTER**  
MACHINE TOOLS

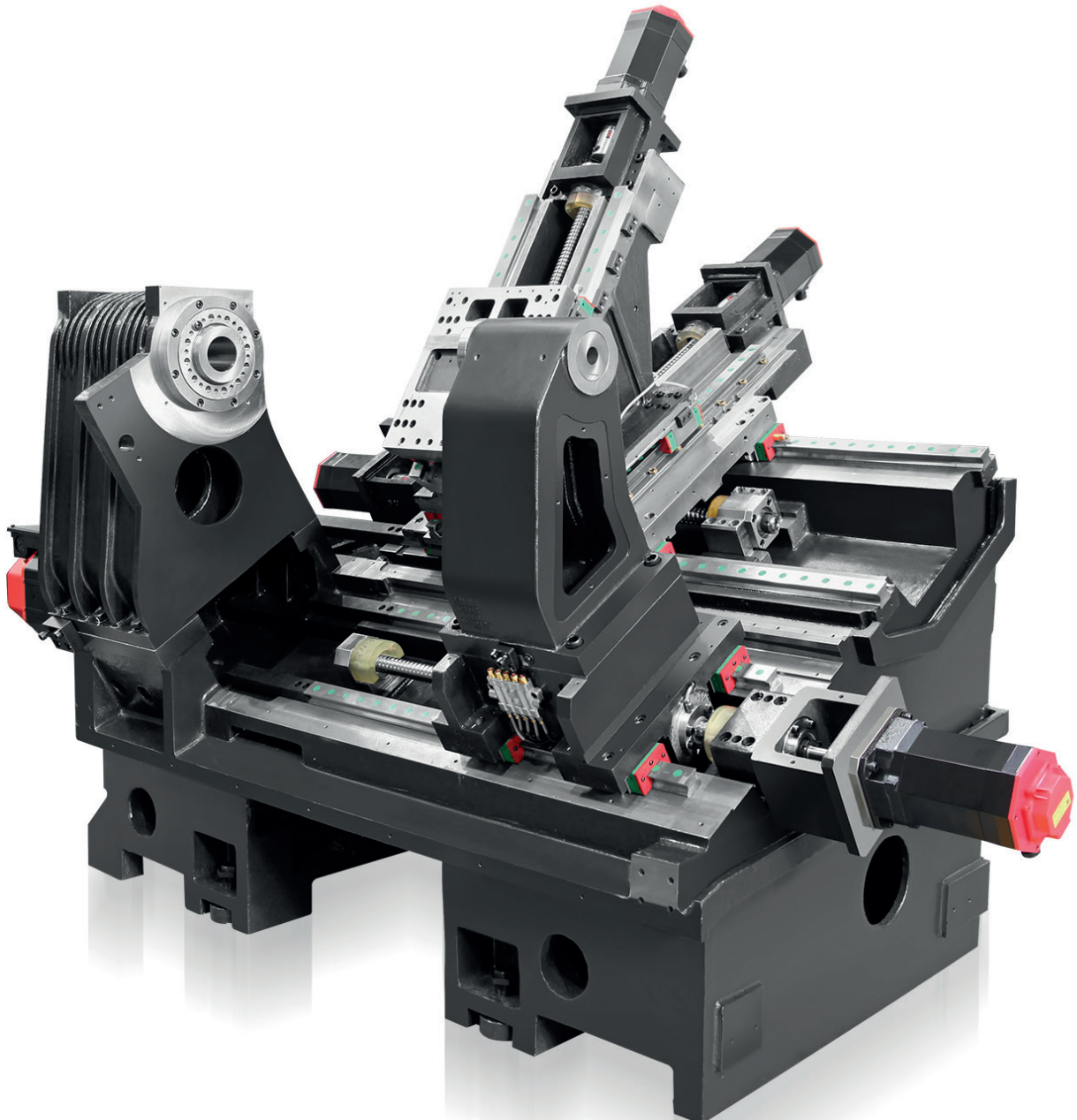
# 2 AXIS TURNING CENTRE

*High precision machines ideal for manufacturing processes.*





## Chester Turning Centres • Construction



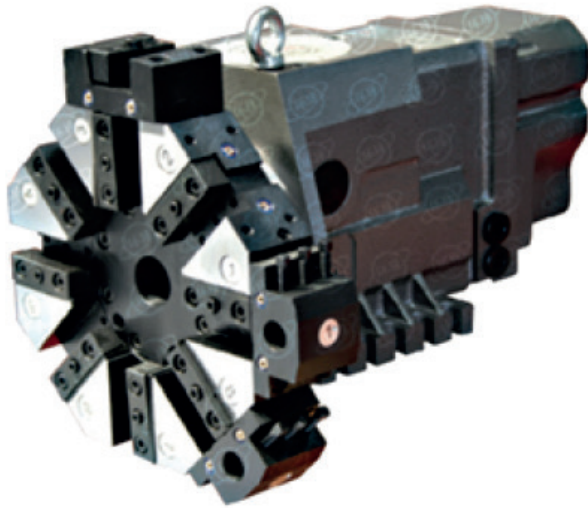
Inside our Turning Centres - Precise construction

### Lathe Construction

The Chester Hawk turning centres features a one piece 45 degree cast iron construction, this compact structure gives you high rigidity and excellent machining performance.

All castings have been designed using finite element analysis to ensure thermal stability, giving the machine excellent accuracy and repeatability.

The Chester Hawk Turning Centres has twenty models ranging from 150mm to 450mm chuck sizes. These machines also come with an Automatic probe, parts catcher and barfeed interface as standard.



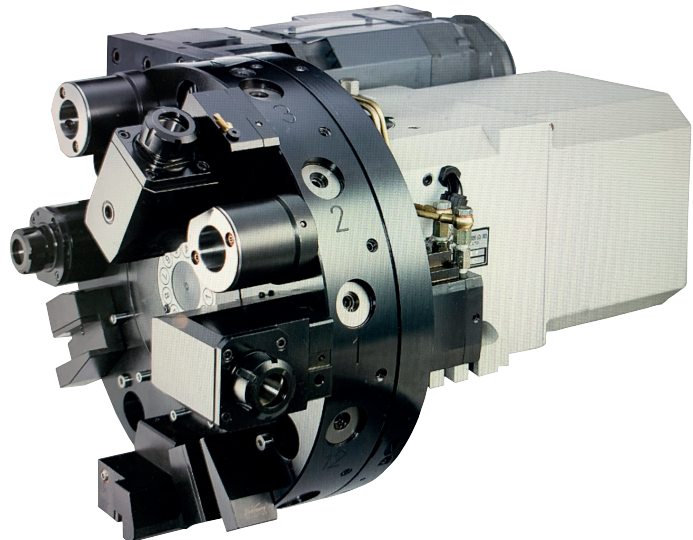
### Block Turret

The Chester Hawk two axis machines all come with a 8 position Block Turret as standard. With an additional option to increase to a 12 position turret.

This Turret is easy to set up and has high rigidity when turning tough materials.

### VDI Turret

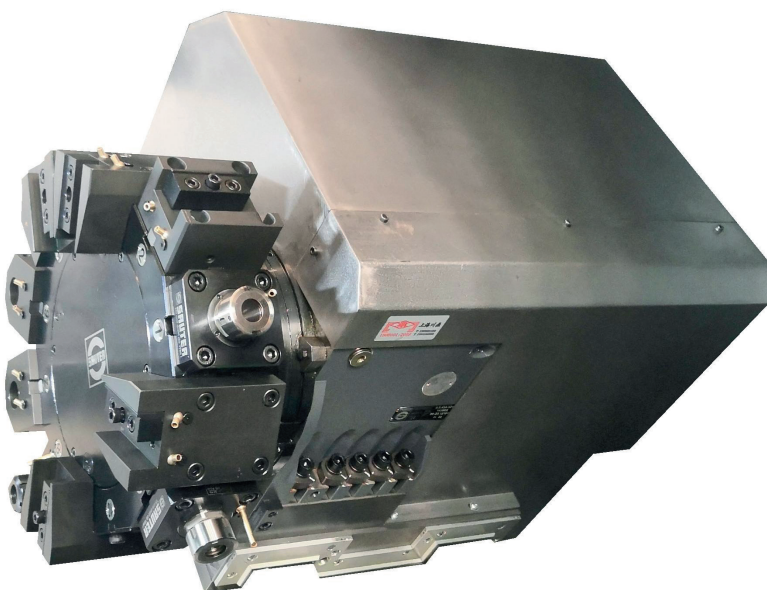
The Chester Hawk three axis machines has optional 12 station VDI Turret, some customers prefer this turret set up when using live axis and radial driven tool holders.



### BMT Turret

The Chester Hawk three axis machines include the BMT Turret as Standard. This set up which features all the toolholders positioned on the outside of the turret, gives this set up the best rigidity possible.

When purchasing these machines our experts will recommend the best set for you and your needs.







## Chester 2 Axis Turning Centre • HAWK TC-150 - TC-200L



### Standard Accessories:

- ✓ FANUC Oi TF(5) CNC System
- ✓ 2Mb System Memory
- ✓ Belt Drive Spindle (Fanuc Servo Motor)
- ✓ 8 Position Hydraulic Turret
- ✓ 6" Hollow Hydraulic Chuck and Cylinder with 1 Set Soft Jaw (TC-150)
- ✓ 8" Hollow Hydraulic Chuck and Cylinder with 1 Set Soft Jaw (TC-200-200L)
- ✓ Solid Hydraulic Cylinder
- ✓ Hydraulic Tailstock
- ✓ Renishaw Auto Swing Tool Setter
- ✓ Automatic Parts Catcher
- ✓ Bar Feed Interface
- ✓ MPG
- ✓ Air Conditioner for Electrical Cabinet
- ✓ Auto Chip Conveyor & Chip Chart
- ✓ Auto Oil Lubrication System
- ✓ Tri-Color Light
- ✓ Air Gun
- ✓ Door Lock Switch
- ✓ Lighting Lamp
- ✓ Full Enclosure Splash Guard
- ✓ Telescopic Covers

### Optional Accessories:

- SIEMENS 828D 240
- Shop Turn
- FANUC Oi TF 1 with  $\beta$  Motor
- Manual Guide
- Data Server 2GB
- 10.4"-15 Touch Screen for Fanuc Controller
- Tool Setter Renishaw Manual
- M30 Auto Power Off
- Scraping Chip Conveyor For Aluminum Cutting
- Magnetic Chip Conveyor
- Oil Mister Collector
- Auto-Door (Pneumatic Control)
- Transformer
- Voltage Stabilizer
- Auto Bar Feeder 26mm Diameter, 3000mm Length
- Auto Bar Feeder 65mm Diameter, 1500mm Length
- Auto Bar Feeder 65mm Diameter, 1250mm Length
- Servo Tail Stock
- 8-12 Position Servo Turret, 25X25, 80-100mm Center Height
- 10-12 Position Servo Turret, 20X20, 100mm Center Height
- U Drilling Tool Holder With Coolant Through 1.5Bar/10 Bar
- Boring Tool Holder & Sleeve (16, 20, 25)
- End Face Turning Tool Holder & Installation Block
- Hydraulic Steady Rest (20—120mm)
- 8-10" Solid Chuck, 4000-5000rpm
- 8"-10 Hollow Chuck, 4000-5000rpm
- Hydraulic Collet Chuck
- Collets
- Soft Jaw Of 6/8 - 8/10" Chuck
- Hard Jaw Of 6/8 - 8/10" Chuck
- H A2-6 Spindle Bore 65mm, Bar Capacity 51mm, 4000rpm
- A2-6 Spindle Bore 76mm, Bar Capacity 65mm, 4000rpm
- 11/15Kw Spindle Motor B
- 15/18.5Kw Spindle Motor B
- Change To Inverter Spindle Motor, 4000rpm
- High Pressure Coolant 1-2Mpa
- High Pressure Coolant 5Mpa Through Turret (8 Position)
- Coolant Tank Coolant Level Sensor
- Water Gun
- Roller Linear Guide Way X/Z Axis
- Two Stage Hydraulic Pressure Valve





## Technical Specifications

Technical Specifications	TC-150	TC-200	TC-200L
Swing over Bed/Saddle	Φ450mm / Φ290mm	Φ550mm / Φ370mm	Φ550mm / Φ370mm
Max Turning Diameter	Φ350mm	Φ360mm	Φ360mm
Max Turning Length	420mm	410mm	810mm
<b>Spindle</b>			
Spindle Bore Diameter	Φ56mm	Φ65mm	Φ65mm
Bar Capacity	Φ44mm	Φ51mm	Φ51mm
Spindle Power	7.5/11kw(10.1/14.7hp)	11/15kw(14.7/20.1hp)	15/18.5kw(20.1/24.8hp)
Spindle Nose	A2-5	A2-6	A2-6
Spindle Speed	6000rpm	4000rpm	4000rpm
<b>Travel</b>			
X Travel	200mm	240mm	240mm
Z Travel	430mm	430mm	830mm
<b>Power of Motor</b>			
Servo Motor X	1.2kw(1.6hp)		
Servo Motor X Torque	7Nm		
Servo Motor Z	1.2kw(1.6hp)		
Servo Motor Z Torque	7Nm		
<b>Tool</b>			
Chuck	6'' hollow hydraulic	8'' hollow hydraulic	8'' hollow hydraulic
Tool Capacity	8 position		
Tool Indexing Time	0.5sec/pos		
Turning Tool Size	25 x 25mm		
Max Boring Tool Diameter	Φ40mm		
<b>Rapid Traverse</b>			
Rapid Traverse X	24m/min		
Rapid Traverse Z	30m/min		
Feeding Speed	1-8000mm/min		
<b>Tailstock</b>			
Tail Stock Quill Diameter / Travel	Φ75mm/80mm	Φ100mm/100mm	Φ100mm/100mm
Tail Stock Quill Taper	MT4 Live	MT5 live	MT5 live
<b>Precision</b>			
Positioning Accuracy X/Z	0.006/0.006mm		
Repeatability X/Z	0.004/0.004mm		
Power Capacity	25KVA		
Cutting Liquid Volume	160L	200L	200L
<b>Dimensions</b>			
Machine Dimension (lxwxh)	3940x1675x1750mm	3605x1790x1820mm	4160x1825x1825mm
Net Weight	3400kg	3500kg	4200kg



## Chester 2 Axis Turning Centre • HAWK TC-250C - TC-250L



### Standard Accessories:

- ✓ FANUC 0i TF(5) CNC System
- ✓ 2Mb System Memory
- ✓ Belt Drive Spindle (Fanuc Servo Motor)
- ✓ 8 Position Hydraulic Turret
- ✓ 10'' Hollow Hydraulic Chuck and Cylinder with 1 Set Soft Jaw
- ✓ Hydraulic Tailstock
- ✓ Renishaw Auto Swing Tool Setter
- ✓ Automatic Parts Catcher
- ✓ Bar Feed Interface
- ✓ MPG
- ✓ Air Conditioner for Electrical Cabinet
- ✓ Auto Chip Conveyor & Chip Chart
- ✓ Auto Oil Lubrication System
- ✓ Tri-Color Light
- ✓ Air Gun
- ✓ Door Lock Switch
- ✓ Lighting Lamp
- ✓ Full Enclosure Splash Guard
- ✓ Telescopic Covers

### Optional Accessories:

- SIEMENS 828D 240
- Shop Turn
- FANUC 0i TF 1 with β Motor
- Manual Guide
- Data Server 2GB
- 10.4"-15 Touch Screen for Fanuc Controller
- Tool Setter Renishaw Manual
- M30 Auto Power Off
- Scraping Chip Conveyor For Aluminum Cutting
- Magnetic Chip Conveyor
- Oil Mister Collector
- Auto-Door (Pneumatic Control)
- Transformer
- Voltage Stabilizer
- Auto Bar Feeder 26mm Diameter, 3000mm Length
- Auto Bar Feeder 65mm Diameter, 1500mm Length
- Auto Bar Feeder 65mm Diameter, 1250mm Length
- Servo Tail Stock
- 8-12 Position Servo Turret, 25X25, 80-100mm Center Height
- 10-12 Position Servo Turret, 20X20, 100mm Center Height
- U Drilling Tool Holder With Coolant Through 1.5Bar/10 Bar
- Boring Tool Holder & Sleeve (16, 20, 25)
- End Face Turning Tool Holder & Installation Block
- Hydraulic Steady Rest (20—120mm)
- 8-10" Solid Chuck, 4000-5000rpm
- 8"-10 Hollow Chuck, 4000-5000rpm
- Hydraulic Collet Chuck
- Collets
- Soft Jaw Of 6/8 - 8/10" Chuck
- Hard Jaw Of 6/8 - 8/10" Chuck
- H A2-6 Spindle Bore 65mm, Bar Capacity 51mm, 4000rpm
- A2-6 Spindle Bore 76mm, Bar Capacity 65mm, 4000rpm
- 11/15Kw Spindle Motor B
- 15/18.5Kw Spindle Motor B
- Change To Inverter Spindle Motor, 4000rpm
- High Pressure Coolant 1-2Mpa
- High Pressure Coolant 5Mpa Through Turret (8 Position)
- Coolant Tank Coolant Level Sensor
- Water Gun
- Roller Linear Guide Way X/Z Axis
- Two Stage Hydraulic Pressure Valve



## Technical Specifications

Technical Specifications	TC-250C	TC-250	TC-250L
Swing over Bed/Saddle	Φ550mm / Φ370mm		Φ570mm / Φ400mm
Max Turning Diameter	Φ360mm		Φ430mm
Max Turning Length	810mm	565mm	1000mm
<b>Spindle</b>			
Spindle Bore Diameter	Φ76mm		
Bar Capacity	Φ65mm		
Spindle Power	15/18.5kw(20.1/24.8hp)		
Spindle Nose	A2-6		
Spindle Speed	4000rpm		
<b>Travel</b>			
X Travel	240mm		
Z Travel	830mm	600mm	1100mm
<b>Power of Motor</b>			
Servo Motor X	1.2kw(1.6hp)		
Servo Motor X Torque	7Nm		
Servo Motor Z	1.2kw(1.6hp)		
Servo Motor Z Torque	7Nm		
<b>Tool</b>			
Chuck	10" hollow hydraulic		
Tool Capacity	8 position		
Tool Indexing Time	0.5sec/pos	0.57sec/pos	
Turning Tool Size	25 x 25mm		
Max Boring Tool Diameter	Φ40mm		
<b>Rapid Traverse</b>			
Rapid Traverse X	24m/min		
Rapid Traverse Z	30m/min		
Feeding Speed	1-8000mm/min		
<b>Tailstock</b>			
Tail Stock Quill Diameter / Travel	Φ100mm/100mm		
Tail Stock Quill Taper	MT5 live		
<b>Precision</b>			
Positioning Accuracy X/Z	0.006/0.006mm	0.008/0.008mm	
Repeatability X/Z	0.004/0.004mm		
Power Capacity	25KVA		
Cutting Liquid Volume	200L	300L	350L
<b>Dimensions</b>			
Machine Dimension (lxwxh)	4160x1825x1825mm	4570x1845x1955mm	5070x1845x1975mm
Net Weight	4200kg		4400kg





## Chester 2 Axis Turning Centre • HAWK TC-300 - TC-350L



### Standard Accessories:

- ✓ FANUC Oi TF(5) CNC System
- ✓ 2Mb System Memory
- ✓ Belt Drive Spindle (Fanuc Servo Motor)
- ✓ 8 Position Hydraulic Turret
- ✓ 10" Hollow Hydraulic Chuck and Cylinder with 1 Set Soft Jaw (TC-300)
- ✓ 10" Hollow Hydraulic Chuck and Cylinder with 1 Set Soft Jaw (TC-300L - 350L)
- ✓ Solid Hydraulic Cylinder
- ✓ Hydraulic Tailstock
- ✓ Renishaw Auto Swing Tool Setter
- ✓ Automatic Parts Catcher
- ✓ Bar Feed Interface
- ✓ MPG
- ✓ Air Conditioner for Electrical Cabinet
- ✓ Auto Chip Conveyor & Chip Chart
- ✓ Auto Oil Lubrication System
- ✓ Tri-Color Light
- ✓ Air Gun
- ✓ Door Lock Switch
- ✓ Lighting Lamp
- ✓ Full Enclosure Splash Guard
- ✓ Telescopic Covers

### Optional Accessories:

- SIEMENS 828D 240
- Shop Turn
- FANUC Oi TF 1 with  $\beta$  Motor
- Manual Guide
- Data Server 2GB
- 10.4"-15" Touch Screen for Fanuc Controller
- Tool Setter Renishaw Manual
- M30 Auto Power Off
- Scraping Chip Conveyor For Aluminum Cutting
- Magnetic Chip Conveyor
- Oil Mister Collector
- Auto-Door (Pneumatic Control)
- Transformer
- Voltage Stabilizer
- Auto Bar Feeder 26mm Diameter, 3000mm Length
- Auto Bar Feeder 65mm Diameter, 1500mm Length
- Auto Bar Feeder 65mm Diameter, 1250mm Length
- Servo Tail Stock
- 8-12 Position Servo Turret, 25X25, 80-100mm Center Height
- 10-12 Position Servo Turret, 20X20, 100mm Center Height
- U Drilling Tool Holder With Coolant Through 1.5Bar/10 Bar
- Boring Tool Holder & Sleeve (16, 20, 25)
- End Face Turning Tool Holder & Installation Block
- Hydraulic Steady Rest (20—120mm)
- 8-10" Solid Chuck, 4000-5000rpm
- 8"-10 Hollow Chuck, 4000-5000rpm
- Hydraulic Collet Chuck
- Collets
- Soft Jaw Of 6/8 - 8/10" Chuck
- Hard Jaw Of 6/8 - 8/10" Chuck
- H A2-6 Spindle Bore 65mm, Bar Capacity 51mm, 4000rpm
- A2-6 Spindle Bore 76mm, Bar Capacity 65mm, 4000rpm
- 11/15Kw Spindle Motor B
- 15/18.5Kw Spindle Motor B
- Change To Inverter Spindle Motor, 4000rpm
- High Pressure Coolant 1-2Mpa
- High Pressure Coolant 5Mpa Through Turret (8 Position)
- Coolant Tank Coolant Level Sensor
- Water Gun
- Roller Linear Guide Way X/Z Axis
- Two Stage Hydraulic Pressure Valve



## Technical Specifications

Technical Specifications	TC-300	TC-300L	TC-350L
Swing over Bed/Saddle	Φ650mm / Φ480mm		
Max Turning Diameter	Φ510mm	Φ510mm	Φ630mm
Max Turning Length	550mm	1000mm	1500mm
<b>Spindle</b>			
Spindle Bore Diameter	Φ76mm	Φ76mm	Φ87mm
Bar Capacity	Φ65mm	Φ65mm	Φ74mm
Spindle Power	15/18.5kw(20.1/24.8hp)		
Spindle Nose	A2-6	A2-6	A2-8
Spindle Speed	4000rpm	4000rpm	2000rpm
<b>Travel</b>			
X Travel	280mm	280mm	350mm
Z Travel	600mm	1100mm	1600mm
<b>Power of Motor</b>			
Servo Motor X	1.2kw(1.6hp)	1.2kw(1.6hp)	β22B/2000is
Servo Motor X Torque	7Nm	7Nm	20Nm
Servo Motor Z	1.2kw(1.6hp)	1.2kw(1.6hp)	β22B/2000is
Servo Motor Z Torque	7Nm	7Nm	20Nm
<b>Tool</b>			
Chuck	10'' hollow hydraulic	12'' hollow hydraulic	12'' hollow hydraulic
Tool Capacity	8 position		
Tool Indexing Time	0.5sec/pos	0.57sec/pos	0.5sec/pos
Turning Tool Size	25 x 25mm	25 x 25mm	32 x 25mm
Max Boring Tool Diameter	Φ40mm	Φ40mm	Φ50mm
<b>Rapid Traverse</b>			
Rapid Traverse X	24m/min	24m/min	16m/min
Rapid Traverse Z	30m/min	30m/min	18m/min
Feeding Speed	1-8000mm/min		
<b>Tailstock</b>			
Tail Stock Quill Diameter / Travel	Φ100mm/100mm		
Tail Stock Quill Taper	MT5 live		
<b>Precision</b>			
Positioning Accuracy X/Z	0.01/0.01mm	0.01/0.01mm	0.01/0.014mm
Repeatability X/Z	0.004/0.004mm	0.004/0.004mm	0.005/0.008mm
Power Capacity	25KVA	25KVA	35KVA
Cutting Liquid Volume	300L	350L	420L
<b>Dimensions</b>			
Machine Dimension (lxwxh)	4570x1885x1955mm	5070x1885x1955mm	5770x2060x2170mm
Net Weight	4400kg	4600kg	8000kg



**CHESTER**  
MACHINE TOOLS

# 3 AXIS TURNING CENTRE WITH DRIVEN TOOLS

*The ideal machining platform for high precision, intensive manufacturing.*







## Chester 3 Axis Turning Centre • HAWK TC-150M - TC-200ML



- Casting designed using Finite element method
- High rigidity for precision components
- High standard specification
- One piece compact structure

### Standard Accessories:

- ✓ FANUC Oi TF(5) CNC system
- ✓ 2Mb System Memory
- ✓ Belt Drive Spindle (Fanuc Servo Motor)
- ✓ 12 Position VID(TC-200M)/BMT55 Live Turret
- ✓ 6" Hollow Hydraulic Chuck with 1 Set Soft Jaw TC-150M)
- ✓ 8" Hollow Hydraulic Chuck with 1 Set Soft Jaw TC-200M-200ML)
- ✓ Hollow Hydraulic Cylinder
- ✓ Hydraulic Tailstock
- ✓ Renishaw Auto Swing Tool Setter
- ✓ Automatic Parts Catcher
- ✓ Bar Feed Interface
- ✓ MPG
- ✓ Air Conditioner for Electrical Cabinet
- ✓ Auto Chip Conveyer & Chip Chart
- ✓ Auto Oil Lubrication System
- ✓ Tri-Color Light
- ✓ Air Gun
- ✓ Door Lock Switch
- ✓ Lighting Lamp
- ✓ Full Enclosure Splash Guard
- ✓ Telescopic Covers

### Optional Accessories:

- SIEMENS 828D 260-280 Controller
- Shop Turn
- FANUC Oi TF 1 with  $\beta$  Motor
- Manual Guide
- Data Server 2GB
- FANUC 10 & 15 inch Touch Screen
- FANUC 15 inch Non-touch Screen
- SIEMENS 15 inch Touch Screen

- M30 power Off
- Magnetic Chip Conveyer
- Scraping Chip Conveyer for Aluminum Cutting
- Magnetic Chip Conveyer
- THK Linear Way and Ball Screw
- Oil Mister Collector
- Auto-door (pneumatic control)
- Transformer
- Voltage Stabilizer
- Grease Lubrication instead of Oil
- Servo Tail Stock
- Live Center of Tail Stock
- Auto Bar feeder 26mm Diameter, 3000mm Length
- Auto Bar Feeder 65mm Diameter, 1500mm Length
- Auto Bar Feeder 65mm Diameter, 1250mm Length
- Sauter VDI30 Living Turret, 12 Position
- 6" Hollow Cylinder
- 8" Solid Chuck, 5000rpm
- 8" Solid Cylinder, 5000rpm
- 8" Hollow Chuck, 5000rpm
- 8" Hollow Cylinder, 5000rpm
- Hydraulic Collet Chuck DIN6343
- Collet
- Soft Jaw of 6-8" Chuck
- Hard Jaw of 6-8" Chuck
- A2-6 Spindle Bore 61mm, Bar Capacity 51mm, 5000rpm
- Bigger Coolant Pump, 10 Bar
- 0-90 Degree Living Tool Holder
- 0-90 Degree Living Tool Holder with High Pressure Coolant through 1.5MPa
- U Drilling Tool Holder with Coolant through 1.5bar/10 bar
- Boring Tool Holder & Sleeve
- End Face Turning Tool Holder & Installation Block
- Proximity Switch (for chuck or tail stock)
- Electric Switch for Door
- Coolant Tank Coolant Level Sensor
- Remove Chip Conveyer
- CNC Controller Book Manuals
- Right Side Chip Conveyer
- Water Gun
- High Pressure Coolant 2MPa through Turret
- 7.5/11kw Spindle Motor  $\beta$
- Roller Linear Guide Way X/Z Axis
- Two Stage Hydraulic Pressure Valve



## Technical Specifications

Technical Specifications	TC-150M	TC-200M	TC-200ML
Swing over Bed/Saddle	Φ500mm / Φ300mm	Φ550mm / Φ370mm	Φ550mm / Φ370mm
Max Turning Diameter	Φ240mm	Φ290mm	Φ290mm
Max Turning Length	320mm	325mm	725mm
<b>Spindle</b>			
Spindle Bore Diameter	Φ56mm	Φ65mm	Φ65mm
Bar Capacity	Φ45mm	Φ51mm	Φ51mm
Spindle Power	5.5/7.5kw(7.37/10.1hp)	15/18.5kw(20.1/24.8hp)	15/18.5kw(20.1/24.8hp)
Spindle Nose	A2-5	A2-6	A2-6
Spindle Speed	6000rpm	4000rpm	4000rpm
<b>Travel</b>			
X Travel	180mm	240mm	240mm
Z Travel	350mm	430mm	830mm
<b>Power of Motor</b>			
Servo Motor X	1.8kw(2.41hp)		
Servo Motor X Torque	7Nm		
Servo Motor Z	1.8kw(2.41hp)		
Servo Motor Z Torque	7Nm		
<b>Tool</b>			
Chuck	6" hollow hydraulic	8" hollow hydraulic	8" hollow hydraulic
Tool Capacity	12 position		
Tool Indexing Time	0.5sec/pos		
Turning Tool Size	16 x 16mm	25 x 25mm	25 x 25mm
Max Boring Tool Diameter	Φ16mm	Φ32mm	Φ32mm
Max.speed of Driven tools	5000rpm	6000rpm	6000rpm
Max.drilling	Φ12x0.14mm	Φ16x0.2mm	Φ16x0.2mm
Max.threading	M8x1.5/M14x1mm	M14x2/M20x1.5mm	M14x2/M20x1.5mm
Max.slotting	Φ12x8x45mm	Φ20x12x40mm	Φ20x12x40mm
<b>Rapid Traverse</b>			
Rapid Traverse X	30m/min	24m/min	24m/min
Rapid Traverse Z	30m/min		
Feeding Speed	1-8000mm/min		
<b>Tailstock</b>			
Tail Stock Quill Diameter / Travel		Φ100mm/100mm(opt.)	Φ100mm/100mm(opt.)
Tail Stock Quill Taper		MT5 live(opt.)	MT5 live(opt.)
<b>Precision</b>			
Positioning Accuracy X/Z/C	0.006/0.006/130mm		
Repeatability X/Z	0.004/0.004/51mm		
Power Capacity	20KVA	25KVA	25KVA
Cutting Liquid Volume	160L	200L	360L
<b>Dimensions</b>			
Machine Dimension (lwxhxh)	1850x2250x1550mm	3605x1790x1820mm	4160x1825x1825mm
Net Weight	2600kg	3500kg	4200kg



## Chester 3 Axis Turning Centre • HAWK TC-250MC - TC-250ML



### Standard Accessories:

- ✓ FANUC Oi TF(5) CNC system
- ✓ 2Mb System Memory
- ✓ Belt Drive Spindle (Fanuc Servo Motor)
- ✓ 12 Position VID(TC-200M)/BMT55 Live Turret
- ✓ 10" Hollow Hydraulic Chuck 1 Set Soft Jaw
- ✓ Hollow Hydraulic Cylinder
- ✓ Hydraulic Tailstock
- ✓ Renishaw Auto Swing Tool Setter
- ✓ Automatic Parts Catcher
- ✓ Bar Feed Interface
- ✓ MPG
- ✓ Air Conditioner for Electrical Cabinet
- ✓ Auto Chip Conveyor & Chip Chart
- ✓ Auto Oil Lubrication System
- ✓ Tri-Color Light
- ✓ Air Gun
- ✓ Door Lock Switch
- ✓ Lighting Lamp
- ✓ Full Enclosure Splash Guard
- ✓ Telescopic Covers

### Optional Accessories:

- SIEMENS 828D 260-280 Controller
- Shop Turn
- FANUC Oi TF 1 with  $\beta$  Motor
- Manual Guide
- Data Server 2GB
- FANUC 10 & 15 inch Touch Screen
- FANUC 15 inch Non-touch Screen
- SIEMENS 15 inch Touch Screen
- M30 power Off
- Magnetic Chip Conveyor
- Scraping Chip Conveyor for Aluminum Cutting
- Magnetic Chip Conveyor
- THK Linear Way and Ball Screw
- Oil Mister Collector

- Auto-door (pneumatic control)
- Transformer
- Voltage Stabilizer
- Grease Lubrication instead of Oil
- Servo Tail Stock
- Live Center of Tail Stock
- Auto Bar feeder 26mm Diameter, 3000mm Length
- Auto Bar Feeder 65mm Diameter, 1500mm Length
- Auto Bar Feeder 65mm Diameter, 1250mm Length
- Sauter VDI30 Living Turret, 12 Position
- 6" Hollow Cylinder
- 8" Solid Chuck, 5000rpm
- 8" Solid Cylinder, 5000rpm
- 8" Hollow Chuck, 5000rpm
- 8" Hollow Cylinder, 5000rpm
- Hydraulic Collet Chuck DIN6343
- Collet
- Soft Jaw of 6-8" Chuck
- Hard Jaw of 6-8" Chuck
- A2-6 Spindle Bore 61mm, Bar Capacity 51mm, 5000rpm
- Bigger Coolant Pump, 10 Bar
- 0-90 Degree Living Tool Holder
- 0-90 Degree Living Tool Holder with High Pressure Coolant through 1.5MPa
- U Drilling Tool Holder with Coolant through 1.5bar/10 bar
- Boring Tool Holder & Sleeve
- End Face Turning Tool Holder & Installation Block
- Proximity Switch (for chuck or tail stock)
- Electric Switch for Door
- Coolant Tank Coolant Level Sensor
- Remove Chip Conveyor
- CNC Controller Book Manuals
- Right Side Chip Conveyor
- Water Gun
- High Pressure Coolant 2MPa through Turret
- 7.5/11kw Spindle Motor  $\beta$
- Roller Linear Guide Way X/Z Axis
- Two Stage Hydraulic Pressure Valve





## Technical Specifications

Technical Specifications	TC-250MC	TC-250M	TC-250ML
Swing over Bed/Saddle	Φ550mm / Φ370mm	Φ570mm / Φ400mm	Φ570mm / Φ400mm
Max Turning Diameter	Φ320mm	Φ430mm	Φ320mm
Max Turning Length	475mm	565mm	955mm
<b>Spindle</b>			
Spindle Bore Diameter	Φ76mm		
Bar Capacity	Φ65mm		
Spindle Power	15/18.5kw(20.1/24.8hp)		
Spindle Nose	A2-6		
Spindle Speed	4000rpm		
<b>Travel</b>			
X Travel	235mm	240mm	235mm
Z Travel	475mm	600mm	1050mm
<b>Power of Motor</b>			
Servo Motor X	1.8kw(2.41hp)		
Servo Motor X Torque	7Nm	11Nm	11Nm
Servo Motor Z	1.8kw(2.41hp)		
Servo Motor Z Torque	7Nm	11Nm	11Nm
<b>Tool</b>			
Chuck	10" hollow hydraulic		
Tool Capacity	12 position		
Tool Indexing Time	0.5sec/pos	0.57sec/pos	0.57sec/pos
Turning Tool Size	25 x 25mm		
Max Boring Tool Diameter	Φ32mm		
Max.speed of Driven tools	6000rpm		
Max.drilling	Φ16x0.2mm		
Max.threading	M14x2/M20x1.5mm		
Max.slotting	Φ20x12x40mm		
<b>Rapid Traverse</b>			
Rapid Traverse X	24m/min		
Rapid Traverse Z	30m/min		
Feeding Speed	1-8000mm/min		
<b>Tailstock</b>			
Tail Stock Quill Diameter / Travel	Φ100mm/100mm(opt.)		
Tail Stock Quill Taper	MT5 live(opt.)		
<b>Precision</b>			
Positioning Accuracy X/Z/C	0.006/0.006/130mm	0.008/0.008/130mm	0.008/0.008/130mm
Repeatability X/Z	0.004/0.004/51mm		
Power Capacity	20KVA	40KVA	40KVA
Cutting Liquid Volume	360L	300L	350L
<b>Dimensions</b>			
Machine Dimension (lxwxh)	4160x1825x1825mm	4570x1845x1955mm	5070x1845x1975mm
Net Weight	4200kg	4200kg	4400kg



## Chester 3 Axis Turning Centre • HAWK TC-300M - TC-350ML



### Standard Accessories:

- ✓ FANUC 0i TF(5) CNC system
- ✓ 2Mb System Memory
- ✓ Belt Drive Spindle (Fanuc Servo Motor)
- ✓ 12 Position VID(TC-200M)/BMT55 Live Turret
- ✓ 12" Hollow Hydraulic Chuck 1 Set Soft Jaw (TC-300M, TC300ML)
- ✓ 14" Solid Hydraulic Chuck 1 Set Soft Jaw (TC-350M, TC350ML)
- ✓ Hollow Hydraulic Cylinder (TC-300M, TC300ML)
- ✓ Solid Hydraulic Cylinder (TC-350M, TC350ML)
- ✓ Hydraulic Tailstock
- ✓ Renishaw Auto Swing Tool Setter
- ✓ Automatic Parts Catcher
- ✓ Bar Feed Interface
- ✓ MPG
- ✓ Air Conditioner for Electrical Cabinet
- ✓ Auto Chip Conveyor & Chip Chart
- ✓ Auto Oil Lubrication System
- ✓ Tri-Color Light
- ✓ Air Gun
- ✓ Door Lock Switch
- ✓ Lighting Lamp
- ✓ Full Enclosure Splash Guard
- ✓ Telescopic Covers

### Optional Accessories:

- SIEMENS 828D 260-280 Controller
- Shop Turn
- FANUC 0i TF 1 with  $\beta$  Motor
- Manual Guide
- Data Server 2GB
- FANUC 10 & 15 inch Touch Screen
- FANUC 15 inch Non-touch Screen
- SIEMENS 15 inch Touch Screen
- M30 power Off
- Magnetic Chip Conveyor
- Scraping Chip Conveyor for Aluminum Cutting
- Magnetic Chip Conveyor

- THK Linear Way and Ball Screw
- Oil Mister Collector
- Auto-door (pneumatic control)
- Transformer
- Voltage Stabilizer
- Grease Lubrication instead of Oil
- Servo Tail Stock
- Live Center of Tail Stock
- Auto Bar feeder 26mm Diameter, 3000mm Length
- Auto Bar Feeder 65mm Diameter, 1500mm Length
- Auto Bar Feeder 65mm Diameter, 1250mm Length
- Sauter VDI30 Living Turret, 12 Position
- 6" Hollow Cylinder
- 8" Solid Chuck, 5000rpm
- 8" Solid Cylinder, 5000rpm
- 8" Hollow Chuck, 5000rpm
- 8" Hollow Cylinder, 5000rpm
- Hydraulic Collet Chuck DIN6343
- Collet
- Soft Jaw of 6-8" Chuck
- Hard Jaw of 6-8" Chuck
- A2-6 Spindle Bore 61mm, Bar Capacity 51mm, 5000rpm
- Bigger Coolant Pump, 10 Bar
- 0-90 Degree Living Tool Holder
- 0-90 Degree Living Tool Holder with High Pressure Coolant through 1.5MPa
- U Drilling Tool Holder with Coolant through 1.5bar/10 bar
- Boring Tool Holder & Sleeve
- End Face Turning Tool Holder & Installation Block
- Proximity Switch (for chuck or tail stock)
- Electric Switch for Door
- Coolant Tank Coolant Level Sensor
- Remove Chip Conveyor
- CNC Controller Book Manuals
- Right Side Chip Conveyor
- Water Gun
- High Pressure Coolant 2MPa through Turret
- 7.5/11kw Spindle Motor  $\beta$
- Roller Linear Guide Way X/Z Axis
- Two Stage Hydraulic Pressure Valve



## Technical Specifications

Technical Specifications	TC-300M	TC-300ML	TC-350M	TC-350ML
Swing over Bed/Saddle	Φ650mm / Φ480mm	Φ650mm / Φ480mm	Φ600mm / Φ450mm	Φ600mm / Φ450mm
Max Turning Diameter	Φ400mm	Φ400mm	Φ430mm	Φ430mm
Max Turning Length	460mm	940mm	500mm	1000mm
<b>Spindle</b>				
Spindle Bore Diameter	Φ87mm			
Bar Capacity	Φ74mm			
Spindle Power	15/18.5kw(20.1/24.8hp)			
Spindle Nose	A2-6			
Spindle Speed	3000rpm	3000rpm	30-3000rpm	30-3000rpm
<b>Travel</b>				
X Travel	275mm	275mm	295mm	1050mm
Z Travel	460mm	1050mm	550mm	550mm
<b>Power of Motor</b>				
Servo Motor X	1.8kw(2.41hp)	1.8kw(2.41hp)	βiSc 22/2000B	βiSc 22/2000B
Servo Motor X Torque	11Nm	11Nm	20Nm	20Nm
Servo Motor Z	1.8kw(2.41hp)	1.8kw(2.41hp)	βiSc 22/2000	βiSc 22/2000
Servo Motor Z Torque	11Nm	11Nm	20Nm	20Nm
<b>Tool</b>				
Chuck	12" hollow hydraulic	12" hollow hydraulic	14" hollow hydraulic	14" hollow hydraulic
Tool Capacity	12 position			
Tool Indexing Time	0.5sec/pos			
Turning Tool Size	25 x 25mm			
Max Boring Tool Diameter	Φ32mm			
Max.speed of Driven tools	6000rpm			
Max.drilling	Φ16x0.2mm			
Max.threading	M14x2/M20x1.5mm			
Max.slotting	Φ20x12x40mm			
<b>Rapid Traverse</b>				
Rapid Traverse X	24m/min	24m/min	12m/min	12m/min
Rapid Traverse Z	30m/min	30m/min	16m/min	16m/min
Feeding Speed	1-8000mm/min	1-8000mm/min	1-8000mm/min(315IPM)	1-8000mm/min(315IPM)
<b>Tailstock</b>				
Tail Stock Quill Diameter / Travel	Φ100mm/100mm		Φ100mm/100mm	sΦ100mm/100mm
Tail Stock Quill Taper	MT5 live		MT5 live	MT5 live
<b>Precision</b>				
Positioning Accuracy X/Z/C	0.01/0.01/130mm	0.01/0.01/130mm	0.01/0.012/51"mm	0.01/0.012/51"mm
Repeatability X/Z	0.004/0.004/51mm	0.004/0.004/51mm	0.005/0.007/20"mm	0.005/0.007/20"mm
Power Capacity	40KVA			
Cutting Liquid Volume	300L	350L	240L	240L
<b>Dimensions</b>				
Machine Dimension (lxwxh)	4570x1885x1955mm	5070x1885x1955mm	4250x1880x1950mm	4750x1880x1950mm
Net Weight	4400kg	4600kg	4300kg	4800kg





## Chester 3 Axis Turning Centre • HAWK TC-400M - TC-450ML



### Standard Accessories:

- ✓ FANUC 0i TF(5) CNC system
- ✓ 2Mb System Memory
- ✓ Belt Drive Spindle (Fanuc Servo Motor)
- ✓ 12 Position VID(TC-200M)/BMT55 Live Turret
- ✓ 16" Solid Hydraulic Chuck 1 Set Soft Jaw
- ✓ Solid Hydraulic Cylinder
- ✓ Hydraulic Tailstock
- ✓ Renishaw Auto Swing Tool Setter
- ✓ Automatic Parts Catcher
- ✓ MPG
- ✓ Air Conditioner for Electrical Cabinet
- ✓ Auto Chip Conveyor & Chip Chart
- ✓ Auto Oil Lubrication System
- ✓ Tri-Color Light
- ✓ Air Gun
- ✓ Door Lock Switch
- ✓ Lighting Lamp
- ✓ Full Enclosure Splash Guard
- ✓ Telescopic Covers

### Optional Accessories:

- SIEMENS 828D 260-280 Controller
- Shop Turn
- FANUC 0i TF 1 with  $\beta$  Motor
- Manual Guide
- Data Server 2GB
- FANUC 10 & 15 inch Touch Screen
- FANUC 15 inch Non-touch Screen
- SIEMENS 15 inch Touch Screen
- M30 power Off
- Magnetic Chip Conveyor
- Scraping Chip Conveyor for Aluminum Cutting
- Magnetic Chip Conveyor
- THK Linear Way and Ball Screw
- Bar Feed Interface
- Oil Mister Collector
- Auto-door (pneumatic control)
- Transformer
- Voltage Stabilizer
- Grease Lubrication instead of Oil
- Servo Tail Stock
- Live Center of Tail Stock
- Auto Bar feeder 26mm Diameter, 3000mm Length
- Auto Bar Feeder 65mm Diameter, 1500mm Length
- Auto Bar Feeder 65mm Diameter, 1250mm Length
- Sauter VDI30 Living Turret, 12 Position
- 6" Hollow Cylinder
- 8" Solid Chuck, 5000rpm
- 8" Solid Cylinder, 5000rpm
- 8" Hollow Chuck, 5000rpm
- 8" Hollow Cylinder, 5000rpm
- Hydraulic Collet Chuck DIN6343
- Collet
- Soft Jaw of 6-8" Chuck
- Hard Jaw of 6-8" Chuck
- A2-6 Spindle Bore 61mm, Bar Capacity 51mm, 5000rpm
- Bigger Coolant Pump, 10 Bar
- 0-90 Degree Living Tool Holder
- 0-90 Degree Living Tool Holder with High Pressure Coolant through 1.5MPa
- U Drilling Tool Holder with Coolant through 1.5bar/10 bar
- Boring Tool Holder & Sleeve
- End Face Turning Tool Holder & Installation Block
- Proximity Switch (for chuck or tail stock)
- Electric Switch for Door
- Coolant Tank Coolant Level Sensor
- Remove Chip Conveyor
- CNC Controller Book Manuals
- Right Side Chip Conveyor
- Water Gun
- High Pressure Coolant 2MPa through Turret
- 7.5/11kw Spindle Motor
- Roller Linear Guide Way X/Z Axis
- Two Stage Hydraulic Pressure Valve



## Technical Specifications

Technical Specifications	TC-400M	TC-400ML	TC-450ML
Swing over Bed/Saddle	Φ650mm / Φ410mm	Φ650mm / Φ410mm	Φ650mm / Φ410mm
Max Turning Diameter	Φ630mm		
Max Turning Length	1000mm	1500mm	2000mm
<b>Spindle</b>			
Spindle Bore Diameter	Φ102mm		
Bar Capacity	Φ89mm		
Spindle Power	15/18.5kw(20.1/24.8hp)		
Spindle Nose	A2-8		
Spindle Speed	2000rpm		
<b>Travel</b>			
X Travel	330mm		
Z Travel	1100mm	1600mm	2100mm
<b>Power of Motor</b>			
Servo Motor X		βiSc22/2000B	βiSc22/2000B
Servo Motor X Torque	10.5Nm	20Nm	20Nm
Servo Motor Z		βiSc22/2000	βiSc22/2000
Servo Motor Z Torque	20Nm	20Nm	20Nm
<b>Tool</b>			
Chuck	16" solid hydraulic	16" solid hydraulic	18" solid hydraulic
Tool Capacity	12 position		
Tool Indexing Time	0.5sec/pos		
Turning Tool Size	25 x 25mm		
Max Boring Tool Diameter	Φ32mm		
Max.speed of Driven tools	6000rpm		
Max.drilling	Φ16x0.2mm		
Max.threading	M14x2/M20x1.5mm		
Max.slotting	Φ20x12x40mm		
<b>Rapid Traverse</b>			
Rapid Traverse X	8m/min		
Rapid Traverse Z	12m/min		
Feeding Speed	1-8000mm/min(315IPM)		
<b>Tailstock</b>			
Tail Stock Quill Diameter / Travel	Φ130mm/100mm		
Tail Stock Quill Taper	MT5 dead		
<b>Precision</b>			
Positioning Accuracy X/Z/C	0.012/0.014/51"mm	0.012/0.014/51"mm	0.016/0.04/51"mm
Repeatability X/Z/C	0.006/0.008/20"mm	0.006/0.008/20"mm	0.007/0.02/20"mm
Power Capacity	30KVA		
Cutting Liquid Volume	300L	360L	420L
<b>Dimensions</b>			
Machine Dimension (lwxhxh)	5090x1945x2075mm	6007x1997x2145mm	6890x2165x2135mm
Net Weight	7500kg	8000kg	8800kg



**CHESTER**  
MACHINE TOOLS

**CNC TURNING CENTRE**  
WITH SUB SPINDLE, DRIVEN TOOLS AND Y AXIS

*CNC machining with precise integrated production turning centres.*







## Chester Turning Centre • HAWK TC-150MY - TC-150MYL



### Standard Accessories:

- ✓ FANUC Oi TF(5)
- ✓ 6000rpm Belt Drive Spindle
- ✓ Flood Coolant with Large Separate Coolant Tank
- ✓ Portable Manual Pulse Generator
- ✓ Chain Type Chip Conveyor with Bucket
- ✓ Hydraulic System
- ✓ Automatic Lubricating System
- ✓ Air Gun Cleaner
- ✓ Work Light and 3 Color Tower Signal Light
- ✓ Full Enclosure Splash Guard
- ✓ Telescopic Covers
- ✓ 3 Live Tools
- ✓ Renishaw Auto Swing Tool Setter
- ✓ Automatic Parts Catcher
- ✓ Bar Feed Interface
- ✓ Electronic handwheel (MPG)

### Optional Accessories:

- Siemens 828D Controller
- Shop Turn (for Siemens)
- Manual Guide 0I (for Fanuc)
- Manual Guide I (for Fanuc Oi TF1)
- Data Serve 2Gb (for Fanuc Oi TF1)

- Fanuc 10 Inch Touch Screen
- Fanuc 15 Inch Non-Touch Screen (for Fanuc Oi TF1)
- Fanuc 15 Inch Touch Screen (for Fanuc Oi TF1)
- Fanuc Oi TF1)
- Auto Parts Catcher
- Tool Setter Renishaw
- M30 Auto Power Off
- 15/18.5KW spindle motor
- Oil Mister Collector
- Auto-Door (Pneumatic Control)
- Bar Feeder Interface
- 90 Degree Living Tool Holder
- 0 Degree Living Tool Holder
- 90 Degree Living Tool Holder with High Pressure Coolant Through 1.5Mpa
- 0 Degree Living Tool Holder with High Pressure Coolant Through 1.5Mpa
- U Drilling Tool Holder with Coolant Through 1.5Bar/10 Bar
- Boring Tool Holder
- Boring Tool Holder Sleeve
- End Face Turning Tool Holder
- Air Conditioner of Electrical Cabinet
- Electric Switch for Door
- Coolant Tank Coolant Level Sensor
- CNC Controller Book Manuals
- Water Gun



## Technical Specifications

Model	TC-150MY	TC-150MYL
Max Swing over Bed/Saddle	Φ410mm	
Max Cutting Diameter	Φ300mm	
Max Cutting Length	300mm	550mm
<b>Spindle</b>		
Spindle Bore Diameter	Φ56mm	
Bar Capacity	Φ44mm	
Spindle Power	11/15kw(14.7/20.1hp)	
Spindle Nose	A2-6	
Spindle Speed	30-6000rpm	
<b>Travel</b>		
X/Z Travel	210/400mm	210/600mm
Z2 Travel	/	550mm
Y Travel	+/-52.5mm	
<b>Power of Motor</b>		
Servo Motor X/Y/Z Torque	11Nm	
<b>Tool</b>		
Chuck	6" hollow hydraulic	
Number of Tools	12	
Max.speed of Driven tools	6000rpm	
Tools Specification	BMT55	
Turning Tool Shank	25x25mm	
Max. Dia.of Boring Tool	Φ32mm	
Max.drilling	Φ14x0.16mm	
Max.threading	M10x1.5/M24x1mm	M24x1/M10x1.5mm
Max.slotting	Φ16x12x40mm	
<b>Speed</b>		
Rapid Traverse X/Z	30m/min	30/30m/min
Rapid Traverse Z2	/	10m/minβ
Rapid Traverse Y	10mm/min	
Feeding Speed	1-8000mm/min	
<b>Precision</b>		
Positioning Accuracy X/Y/Z/C	0.0008/0.0008/0.0008mm/51s	
Repeatability X/Y/Z/C	0.004/0.0004/0.0004mm/20s	
Power Capacity	45KVA	
Cutting Liquid Volume	300L	350L
<b>Dimensions</b>		
Net Weight	3800kg	4200kg



## Chester Turning Centre • HAWK TT-200MSY



### Standard Accessories:

- √ FANUC Oi TF Control
- √ Double spindle with C axis, 4500rpm
- √ Flood Coolant with Large Separate Coolant Tank
- √ Portable Manual Pulse Generator
- √ Chain Type Chip Conveyor with Bucket
- √ Hydraulic System
- √ Automatic Lubricating System
- √ Air Gun Cleaner
- √ Work Light and 3 Color Tower Signal Light
- √ Full Enclosure Splash Guard
- √ Telescopic Covers
- √ Twin Turrets with 12 Position Driven Tools
- √ Air Conditioned Electrical Cabinet
- √ Splash Guard
- √ Telescopic Covers

### Optional Accessories:

- Siemens 828D Controller
- Shop Turn (for Siemens)
- Manual Guide 0I (for Fanuc)
- Manual Guide I (for Fanuc Oi TF1)
- Data Serve 2Gb (for Fanuc Oi TF1)
- Fanuc 10 Inch Touch Screen

- Fanuc 15 Inch Non-Touch Screen (for Fanuc Oi TF1)
- Fanuc 15 Inch Touch Screen (for Fanuc Oi TF1)
- Tool Setter Renishaw
- M30 Auto Power Off
- Thk Linear Way And THK Ball Screw
- Oil Mister Collector
- Auto-Door (Pneumatic Control)
- Bar Feeder Interface
- 90 Degree Living Tool Holder
- 0 Degree Living Tool Holder
- 90 Degree Living Tool Holder with High Pressure Coolant Through 1.5Mpa
- 0 Degree Living Tool Holder with High Pressure Coolant Through 1.5Mpa
- U Drilling Tool Holder with Coolant Through 1.5Bar/10 Bar
- Boring Tool Holder
- Boring Tool Holder Sleeve
- End Face Turning Tool Holder
- Air Conditioner of Electrical Cabinet
- Electric Switch for Door
- Coolant Tank Coolant Level Sensor
- CNC Controller Book Manuals
- Water Gun



## Technical Specifications

Model	TT-200MSY
Max Swing over Bed/Saddle	Φ314mm
Max Cutting Diameter	Φ314mm
Max Cutting Length	550mm
Spindle Bore Diameter	Φ65mm
Bar Capacity	51mm
<b>Travel</b>	
X/Z Travel	200/650mm
Z2 Travel	650mm
Y Travel	'+/-50mm
<b>Main Spindle</b>	
Spindle Power	22/25 KW (Double)
Spindle Nose	A2-6
Spindle Speed	4500 rpm
<b>Sub Spindle</b>	
Spindle power	22/25Kw (Double)
Spindle Nose	A2-6
Spindle Speed	4500 rpm
<b>Power of Motor</b>	
Servo Motor X/Y/Z	12Nm
<b>Tool</b>	
Chuck	8'' hollow hydraulic
Number of Tools	12 (Double)
Max.speed of Driven tools	6000rpm
Tool Specification	BMT65
Turning Tool Shank	25x25mm
Max. Dia.of Boring Tool	Φ40mm
Max.drilling	Φ16x0.2mm
Max.threading	M14x2/M20x1.5
Max.slotting	Φ20x12x40mm
<b>Speed</b>	
Rapid Traverse X/Z	30/36mm/min
Rapid Traverse Z2	36mm/min
Rapid Traverse Y	15mm/min
Feeding Speed	1-8000mm/min
<b>Precision</b>	
Positioning Accuracy X/Y/Z/C	0.01/0.01/0.01mm/51s
Repeatability X/Y/Z/C	0.005/0.005/0.005mm/20s
Power capacity	66KVA
Cutting liquid volume	350L
<b>Dimensions</b>	
Net Weight	8500kg





**CHESTER**  
MACHINE TOOLS

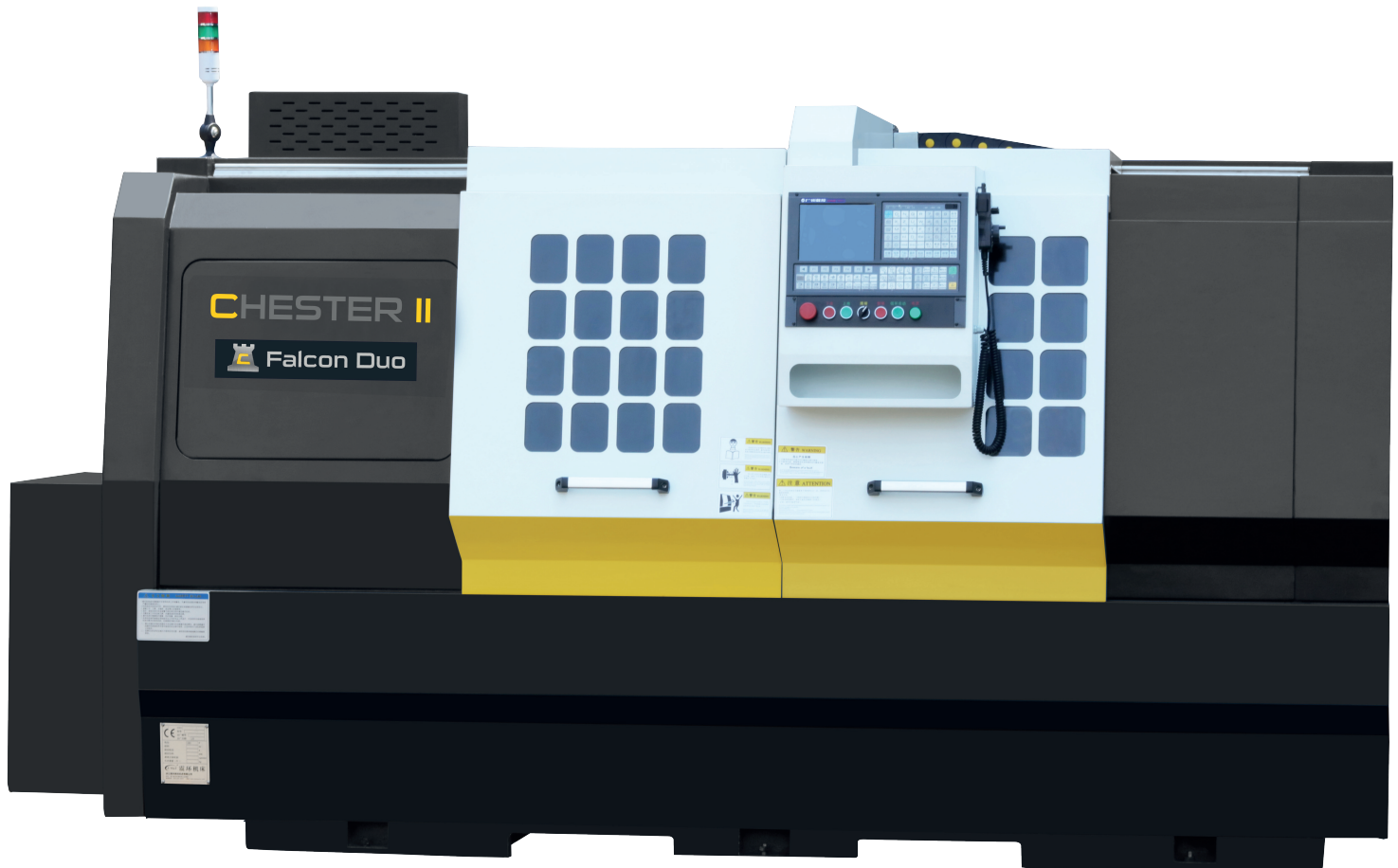
# FLATBED LATHES

*CNC machining with precise integrated production turning centres.*





## Chester Flatbed Lathe • FALCON Duo



### Standard Accessories:

- ✓ Fanuc Oi TF
- ✓ Manual 3-Jaw Chuck
- ✓ 4-Station Tool Post plus 2 Gang Tools
- ✓ Manual Tailstock
- ✓ Ergonomic Operator Panel Design & MPG
- ✓ Automatic Lubrication System
- ✓ Manual Tailstock
- ✓ Automatic Coolant System
- ✓ Automatic Lubricating System
- ✓ Work Lamp & Built-In Safety Features

### Optional Accessories:

- Siemens 828D
- Shopturn for Siemens
- 2 Handwheels for Manual Operation "Teach In"
- Bigger Chuck Size
- Hydraulic Chuck
- 8 Station Turret (except 300 series)
- Hydraulic Tailstock
- Bar Feeder
- C Axis and Live Tooling
- C Axis & 12 station Power Turret (500, 550, 660 series only)

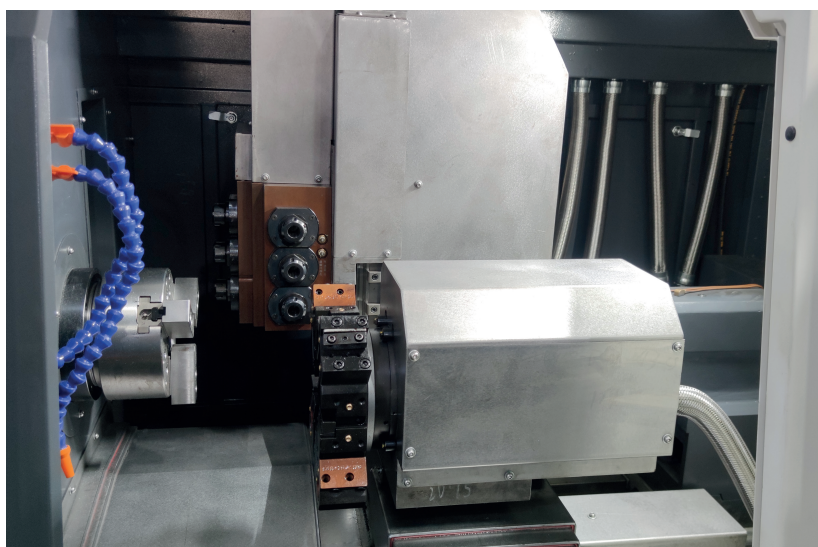


Optional Teach In Control Panel

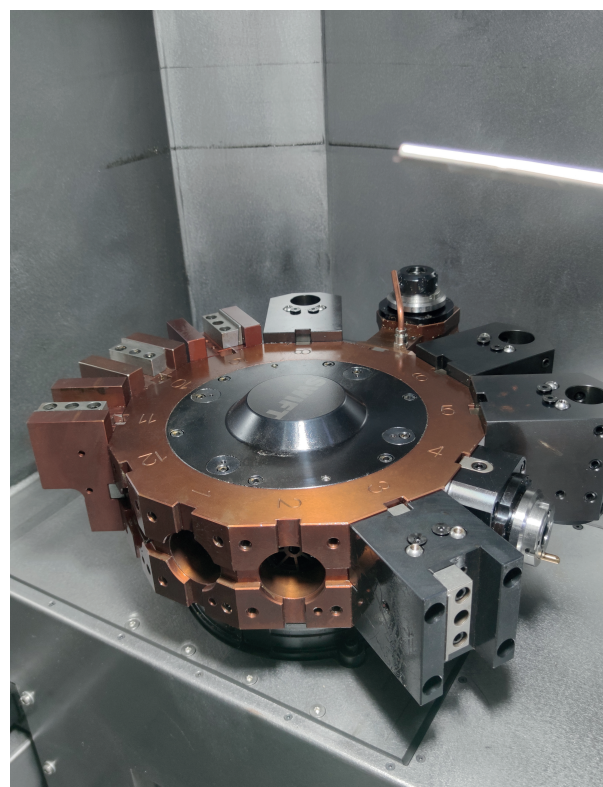


# Technical Specifications

Technical Specifications	FALCON DUO 300		FALCON DUO 320		FALCON DUO 400	FALCON DUO 500		FALCON DUO 550			FALCON DUO 700
Chuck Size	6"		6"		8"	10"		12"			15"
Max.Swing Dia. over Bed	Φ300mm		Φ400mm		Φ400mm	Φ500mm		Φ550mm			Φ700mm
Max.Length of Workpiece	180mm		Collet:380mm Chuck:320mm 300mm (Station turret) (opt)		650mm(C2C) 500mm(Chuck) 450mm(turret) (opt)	700/1000/1500/2000mm(C2C) 550/850/1350/1850mm(Chuck) 450/750/1250/1750mm(turret) (opt)		700/1000/1500/2000mm(C2C) 550/850/1350/1850mm(Chuck) 450/750/1250/1750mm(turret) (opt)			1000/1500/2000mm(C2C) 800/1300/1800mm(Chuck) 700/1200/1700mm(turret) (opt)
Max.Swing Dia. over Slide	Φ135mm		Φ140mm		Φ250mm	Φ350mm		Φ350mm			Φ480mm
<b>Spindle</b>											
Spindle Bore	Φ48mm	Φ55mm	Φ55mm	Φ62mm(opt)	Φ62mm	Φ81mm	Φ62mm(opt)	Φ62mm	Φ105mm (opt)	Φ120mm (opt)	Φ120mm
Max Dia. of Through Hole	Φ40mm	Φ46mm	Φ46mm	Φ52mm(opt)	Φ52mm	Φ70mm	Φ52mm(opt)	Φ91mm	Φ91mm (opt)	Φ110mm (opt)	Φ110mm
Spindle Nose	A2-5	A2-5	A2-5	A2-6(opt)	A2-6	A2-8	A2-6(opt)	A2-11	A2-8 (opt)	A2-11 (opt)	A2-11
Spindle Speed	3000rpm (std) 4500rpm (opt)	2500rpm (std) 4500rpm (opt) 5000rpm (opt)	2500rpm (std) 4500rpm (opt) 5000rpm (opt)	2000rpm (opt) 4000rpm (opt)	2000rpm (std) 4000rpm (opt)	1600rpm (std) 2500rpm (opt)	2000rpm (opt) 4000rpm (opt)	1000rpm (std)	2000rpm (opt)	1000rpm (opt)	1000rpm (std)
Main Motor Power	3.7/5.5kw (std) 5.5/7.5kw (opt)		3.7/5.5kw (std) 5.5/7.5kw (opt)		5.5/7.5kw (std) 7.5/11kw (opt)	7.5/11kw (std) 11/15kw (opt) 15/18.5kw (opt)		11/15kw (std) 15/18.5kw (opt)			11/15kw (std) 15/18.5kw (opt)
<b>Axis</b>											
X/Z Travel	300/200mm		280/380mm		280/650mm	280/700mm,1000mm,1500mm,2000mm		280/700mm,1000mm,1500mm,2000mm			370/1000mm,1500mm,2000mm
X/Z Rapid Traverse	15/15mm/min (std), 25/25mm/min (opt)		25/15mm/min (std), 25/25mm/min (opt)		15/15mm/min (std), 20/20mm/min (opt)	15/15mm/min (std), 20/20mm/min (opt)		15/15mm/min (std), 20/20mm/min (opt)			15/15mm/min (std), 20/20mm/min (opt)
<b>Toolpost</b>											
Type	4-station toolpost					4-station toolpost					
<b>Tailstock</b>											
Type	12" hollow hydraulic					Manual					
Taper of Quill	MT4					MT5					
Travel of Tailstock Quill	80mm					100mm					
<b>Structure</b>											
Guideway	Linear Guide Way					Linear Guide Way					
Bed Width	300mm		400mm		405mm	500mm			680mm		
<b>Weight and Dimensions</b>											
Power Capacity	9Kva		13Kva			15Kva			18kva		
Dimensions (bwxh)	1800x1580x1600mm		2200x1500x1600mm		2500x1400x1500mm	3200x1600x2010/2310/2810/3310mm		3200x1600x2010/2310/2810/3310mm			3400x1900x2010/2310/2810/3310mm
Weight	1800kgs		2400kgs		2800kgs	4000kgs/4300kgs/4800kgs/5300kgs		4200kgs/4500kgs/5000kgs/5300kgs			4800kgs/5600kgs/6400kgs



BPT Turret  
300-400 Models only



BMT Turret  
500-660 Models only





## Chester Flatbed Lathe • FALCON TC-1250L



The Chester Falcon TC-1250L is a horizontal flatbed CNC lathe, with the main machine body as a one piece casting.

The casting design has been developed using finite element analyse software, this gives the machine excellent rigidity and accuracy.

Chester Machine Tools have designed this machine for medium to small batch work and one off machined components.

The Falcon range has twelve machines to chose from which will satisfy most applications.

With most accessories coming with this model as standard, this machine gives you excellent value for money and fantastic machine performance.

### Standard Accessories:

- √ Siemens 828D Control With USB Port, CF Card Port And 10.4" Color LCD Display
- √ Full Enclosure
- √ 3-Guideway Boxway Structure
- √ 4 Station Electrical Turret
- √ Chip Discharge Plate
- √ Manual 4 Jaw Chuck
- √ Manual Tailstock
- √ A/C In Electric Cabinet
- √ Automatic Lubricating System
- √ Air Cooling And Air Gun Cleaner
- √ Work Light And 3 Color Tower Signal Light
- √ Instruction Manual, Parts List, And Electrical Drawings

### Optional Accessories:

- Siemen 15" Screen
- Fanuc Oi TF
- Chip Conveyor
- Hydraulic Turret
- Toolholders
- Hydraulic 3 Jaw Chuck





## Technical Specifications

Model	TC-1250L
Max Swing over Bed	Φ1250mm
Max Swing over Saddle	Φ950mm
Max Cutting Diameter	Φ1250mm
Max Cutting Length	3000mm
Max Component Weight	6000kg
<b>Spindle</b>	
Spindle Type	A2-15
Spindle Bore	130mm
Speed Change Type	Auto hydraulic
Spindle Speed	3-500r/min
Max.Output Torque	6370Nm
Spindle Motor Power	22/25kw(29.5/33.5hp)
<b>Power of Motor</b>	
X Axis Drive Type	Ball screw with direct motor drive
Servo Motor X Torque	20Nm
Z Axis Drive Type	Ball screw with direct motor drive
Servo Motor Z Torque	25Nm
<b>Tool</b>	
Manual 4 Jaws Chuck	1000mm
Axis Centering Journal Taper	metric 140
Spindle Front Bearing ID Diameter	200mm
Taper Hole	MT6
Taper of Spindle Center Sleeve	01:20
Turret Type	Electrical
Turrent Position	4
Tool Size	50*50mm
Tail Stock Quill Diameter	Φ160mm
Tail Stock Quill Travel	Φ300mm
Tail Stock Quill Taper	MT6
<b>Rapid Traverse</b>	
X Travel	730mm
Z Travel	3150mm
X Axis Rapid Traverse Rate	8m/min
Z Axis Rapid Traverse Rate	10m/min
<b>Precision</b>	
Cutting Feed Rate	1-8000mm/min
Positioning Accuracy X/Z	0.012/0.035mm
Repeatability X/Z	0.007/0.020mm
Power Required	45kva
Cooling Tank	800L
<b>Dimensions</b>	
Machine Gross Weight	16500kg
Machine Floor Space (lwxh)	6915x2555x2370mm



## Chester Flatbed Lathe • FALCON TC-1600L



The Chester Falcon TC-1600L is a horizontal flatbed CNC lathe, with the main machine body as a one piece casting.

The casting design has been developed using finite element analyse software, this gives the machine excellent rigidity and accuracy.

Chester Machine Tools have designed this machine for medium to small batch work and one off machined components.

The Falcon range has twelve machines to chose from which will satisfy most applications.

With most accessories coming with this model as standard, this machine gives you excellent value for money and fantastic machine performance.

### Standard Accessories:

- ✓ Siemens 828D Control With USB Port, CF Card Port And 10.4" Color LCD Display
- ✓ Full Enclosure
- ✓ 4-Guideway Boxway Structure
- ✓ 4 Station Electrical Turret
- ✓ Fagor X/Z Axis Linear Scales
- ✓ Chip Discharge Plate
- ✓ Manual 4 Jaw Chuck
- ✓ Electric Tailstock
- ✓ A/C In Electric Cabinet
- ✓ Automatic Lubricating System
- ✓ Air Cooling And Air Gun Cleaner
- ✓ Work Light And 3 Color Tower Signal Light
- ✓ Instruction Manual, Parts List, And Electrical Drawings

### Optional Accessories:

- Siemen 15" Screen
- Fanuc Oi TF
- Chip Conveyor
- Hydraulic Turret
- Toolholders
- Hydraulic 3 Jaw Chuck



## Technical Specifications

Model	TC-1600L
Max Swing over Bed	Φ1600mm
Max Swing over Saddle	Φ1300mm
Max Cutting Diameter	Φ1600mm
Max Cutting Length	3000mm
Max Component Weight	20000kg
<b>Spindle</b>	
Spindle Type	160 metric
Spindle Bore	130mm
Speed Change Type	Auto hydraulic
Spindle Speed	3-450r/min
Max.Output Torque	22000Nm
Spindle Motor Power	55kw(73.7hp)
<b>Power of Motor</b>	
X Axis Drive Type	Ball screw with direct motor drive
Servo Motor X Torque	25Nm
Z Axis Drive Type	Ball screw with direct motor drive
Servo Motor Z Torque	37Nm
<b>Tool</b>	
Manual 4 Jaws Chuck	1400mm
Axis Centering Journal Taper	metric 160
Spindle Front Bearing ID Diameter	280mm
Taper Hole	Metric 100
Taper of Spindle Center Sleeve	01:20
Turret Type	Electrical
Turrent Position	4
Tool Size	40*40mm
Tail Stock Quill Diameter	Φ320mm
Tail Stock Quill Travel	Φ250mm
Tail Stock Quill Taper	100 metric
<b>Rapid Traverse</b>	
X Travel	850mm
Z Travel	3000mm
X Axis Rapid Traverse Rate	6m/min
Z Axis Rapid Traverse Rate	6m/min
<b>Precision</b>	
Cutting Feed Rate	1-8000mm/min
Positioning Accuracy X/Z	0.05/0.08mm
Repeatability X/Z	0.02/0.035mm
Power Required	45kva
Voltage Required-Fanuc	380v/50hz/3ph
Cooling Tank	800L
<b>Dimensions</b>	
Machine Gross Weight	35000kg
Machine Floor Space (lwxh)	12200x5170x3300mm