Double Spindle
Turret + Gang Tools
Multi-Tasking Turning Center

GT42
GT52

- Aerospace
- Automotive
- Electronics
- Hydraulics
- Medical
- Pneumatics

MYLAS

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Turning Precision
Into Perfection

GT

GT42/52 Machine Highlights

Front Machining

- BMT 45, 12 Stations
- Up to 24 Tools
- 7.5/11 kW Spindle Power
- 55 mm Through Hole

Back Machining

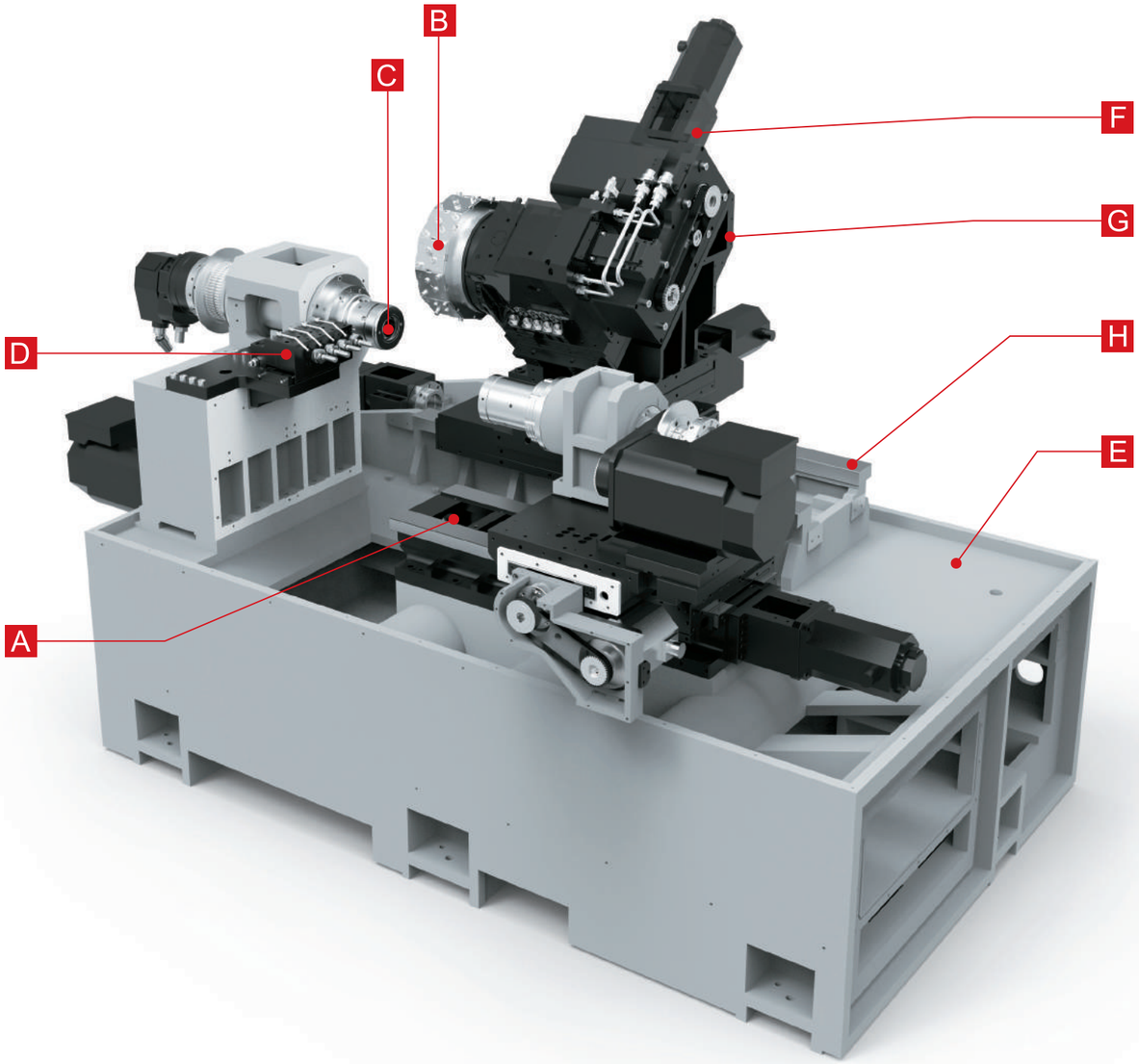
- GT42: 4 x 20 mm ID Tools
- GT52: 4 x 16 mm ID Tools
- Or 3x 20 mm ID Tools
- Or 3x 25 mm ID Tools

Capabilities

This multi-tasking turning center is an advanced and economical solution designed to process precision complex parts with fast cycle times.

Power & Speed

It has Double Spindles, a BMT 12 station turret and 4 gang tools for economical machining. Coupled with superimposed cutting it's a powerful solution for precision complex workpieces with extremely fast cycle times.



Key Features

A Boxways on all axes are oversized and precision ground to a near mirror finish for smooth, fast precision movements providing dynamic rigidity & heavy-duty cutting ability

B The main turret has 12 stations. With multi-tool holders up to 24 tools can be equipped. Driven tools at all 12 stations are possible.

C Heavy-duty precision spindle design for enhanced thermal stability & power

D GT42-4x 20mm ID Tools, GT52- 4x 16mm ID Tools, or 3x 20mm or 3x 25mm for complex, fast back machining & superimposed cutting that reduces cycle times.

E Meehanite cast material is used and stress relieved to provide the best possible rigidity and vibration dampening base for machining parts with excellent surface finishes

F Y1-Axis travel +/- 35mm is supported by two slides, distributing the machining force evenly to ensure accuracy and rigidity

G 45 degree wedge design for fast chip flow and removal from the machining area for a thermally stable work platform

H Z-axis is equipped with precision high-rigidity 32mm ball screws & all other axes use 28mm ball screws to ensure fast feed rates and extended long-term durability for trouble free machining

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Turrets/Backmachining

SAUTER BMT45 / VDI 30-12 Stations Main Turret

The main turret has 12 stations, but with multi-tool holders up to 24 tools are possible. Fanuc Alpha 2 motors provide driven tools up to 6000 rpm with high power and speed. Bidirectional turret indexing allows the shortest path to the next tool for faster cycle times. A 20 bar high pressure coolant system provides fast chip removal and longer tool life.

BMT45

- Fanuc Alpha 2 Motor-High torque, resolution & precision
- Driven tools: 2.2/3.75 kW & 23.5 N.m
- Optional 50/100 bar High Pressure Coolant Systems

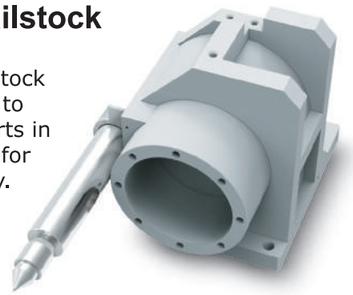
Gang Tool Slide/ Backmachining

For back machining, the 4 gang tools can shorten machining times and provides an economic solution for processing of mass production parts.

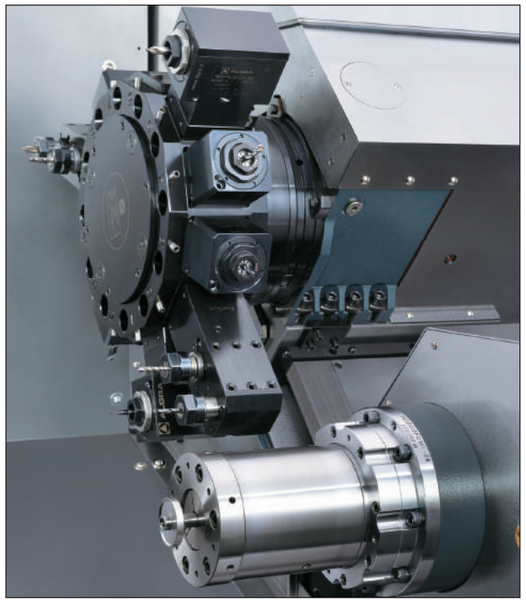
- GT42: 4x 20 mm ID Tools
- GT52: 4x 16 mm ID Tools
- Or 3x 20 mm ID Tools
- Or 3x 25 mm ID Tools

Optional Tailstock

An optional tailstock unit is available to process long parts in the same setup for added versatility.

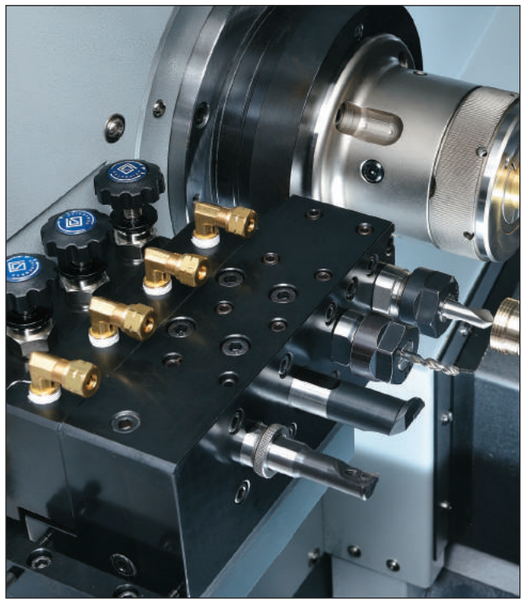


Y-Axis Enhanced Machining Capability in One Setup Speed, Precision & Complex Parts



Sauter BMT 45/VDI 30 Turret (Y1-Axis)

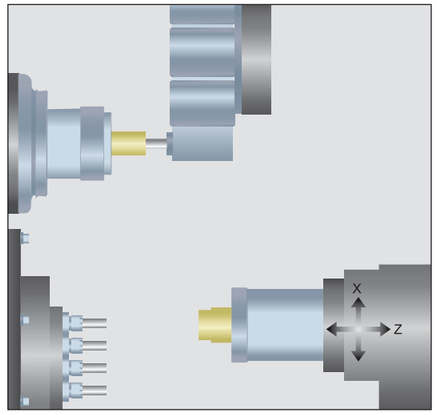
- **24 Tools Possible**-12 station German branded turret for reliable heavy-duty cutting for non-stop production is equipped with half-indexing and fast tool changes of only 0.2 sec.
- **Fanuc Alpha 2** servos for driven tools up to 6000rpm for powerful high-performance cutting of the most difficult materials with ease and speed
- **20 Bar High Pressure Coolant** systems also provides fast chip removal and longer tool life necessary in for prolonged serial production. (Optional 50/100 bar)
- **Y1-axis Travel +/- 35mm**



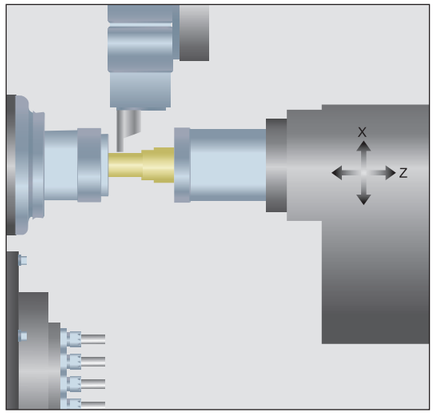
Back Machining Gang Tools

- **4 tools**-For back machining of complex workpieces, the added capability will shorten cycle times significantly.
- **Superimposed Cutting for High Productivity**-Cycle times can be significantly reduced with superimposed cutting

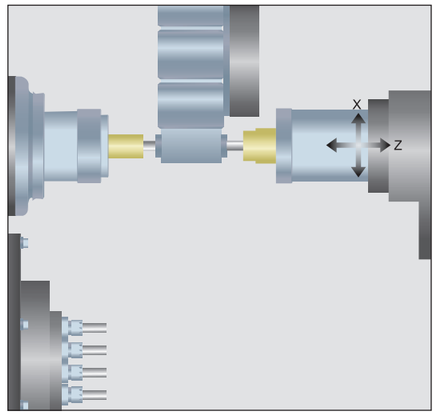
Spindle 1,Turret 1 ID Turning



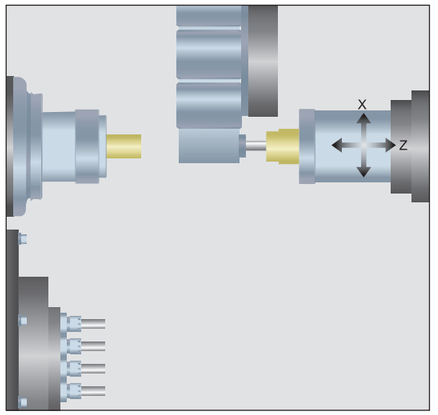
Transfer & Cutoff to Spindle 2



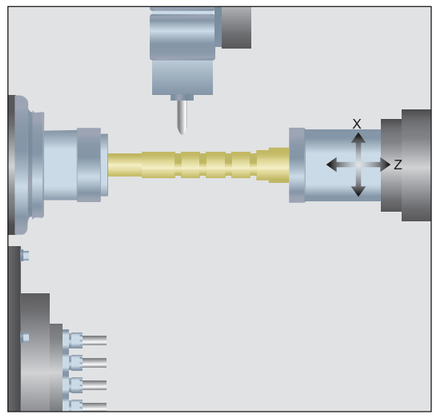
Superimposed Machining



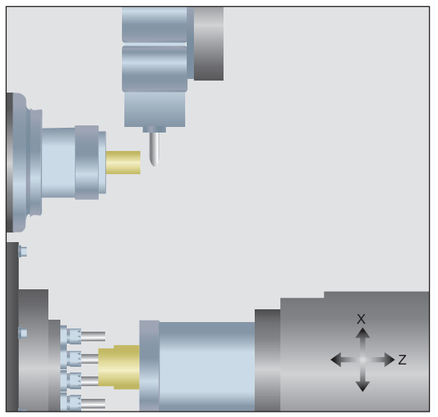
Turret 1 Back Machining



Spindle 1 & 2 Milling



Turret 1 Milling ID Turning



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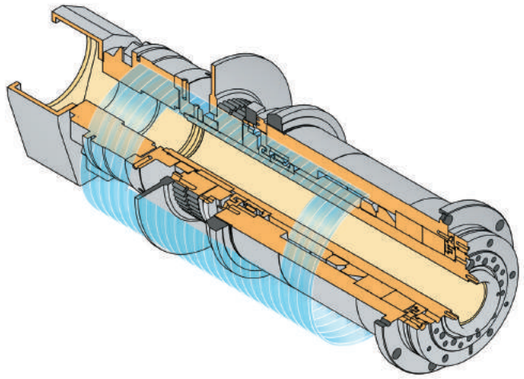
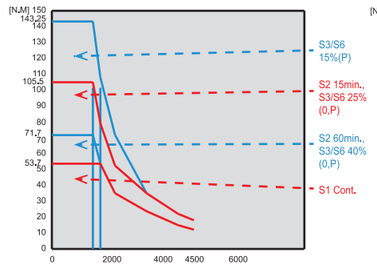
Precision Spindles

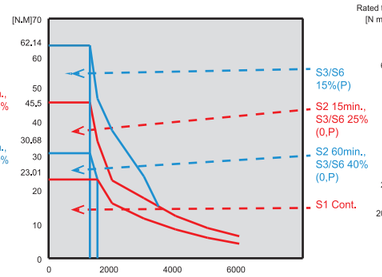
- Extremely rigid main and sub-spindles with purpose built roller bearings on the front and rear to concentrate power directly to the cutting surface and resist axial and radial forces
- Higher speeds and heavy-cuts are possible with this bearing arrangement
- Simultaneous independent machining of the front and back of the workpiece and C-axis with resolution of 0.001 degrees allows for complex contouring of parts



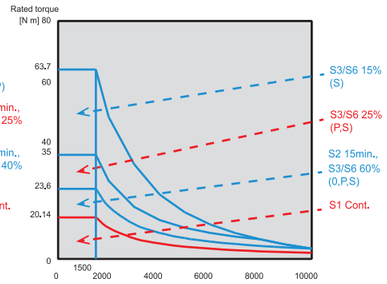
FANUC Spindle Motor Torque



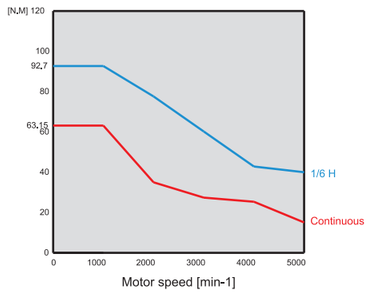
FANUC Sub-spindle Motor Torque



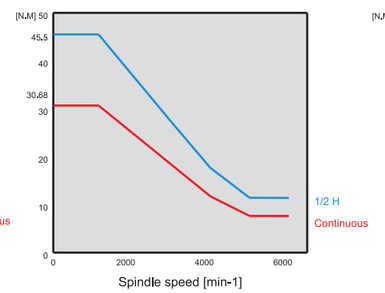
FANUC Main Turret Live Tool Torque



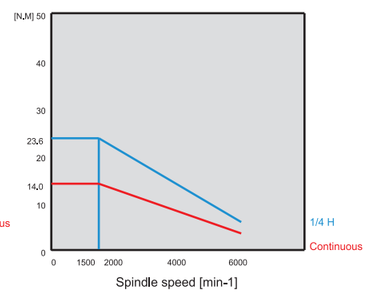
MITSUBISHI Spindle Motor Torque



MITSUBISHI Sub-spindle Motor Torque



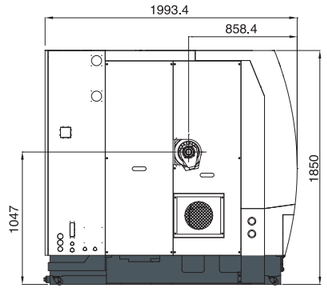
MITSUBISHI Main Turret Live Tool Torque

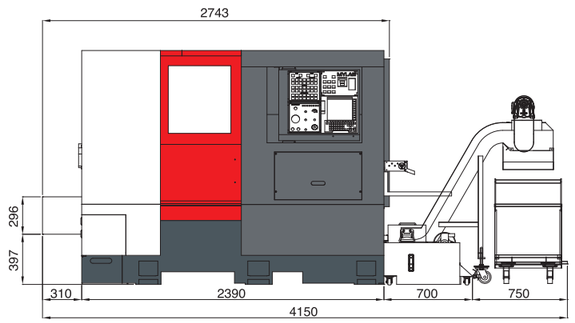


Machine Details

Machine Dimensions

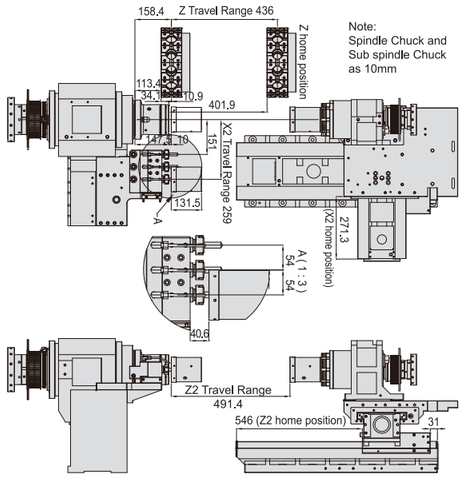
Unit:mm





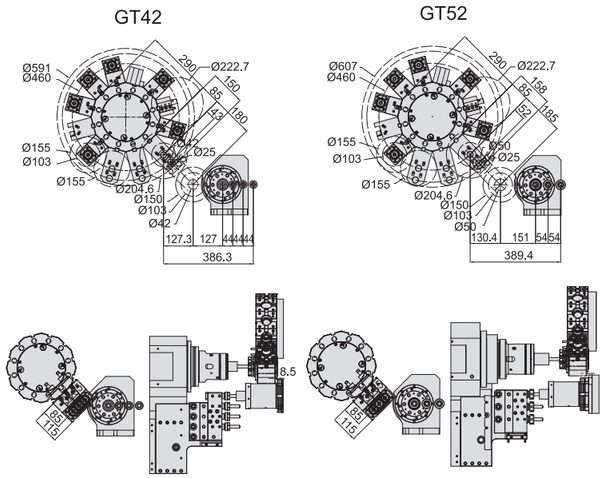
Tool Interference Diagrams

Machining Zone

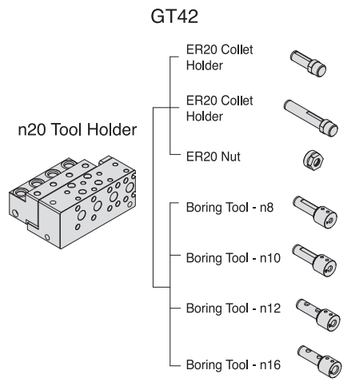


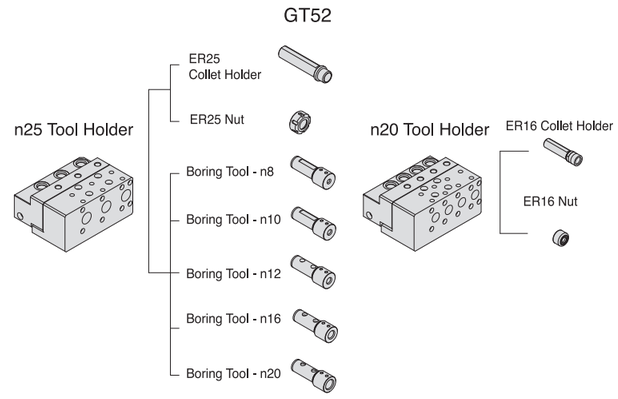
Note:
Spindle Chuck and Sub spindle Chuck as 10mm

Tool Interference



Tooling System





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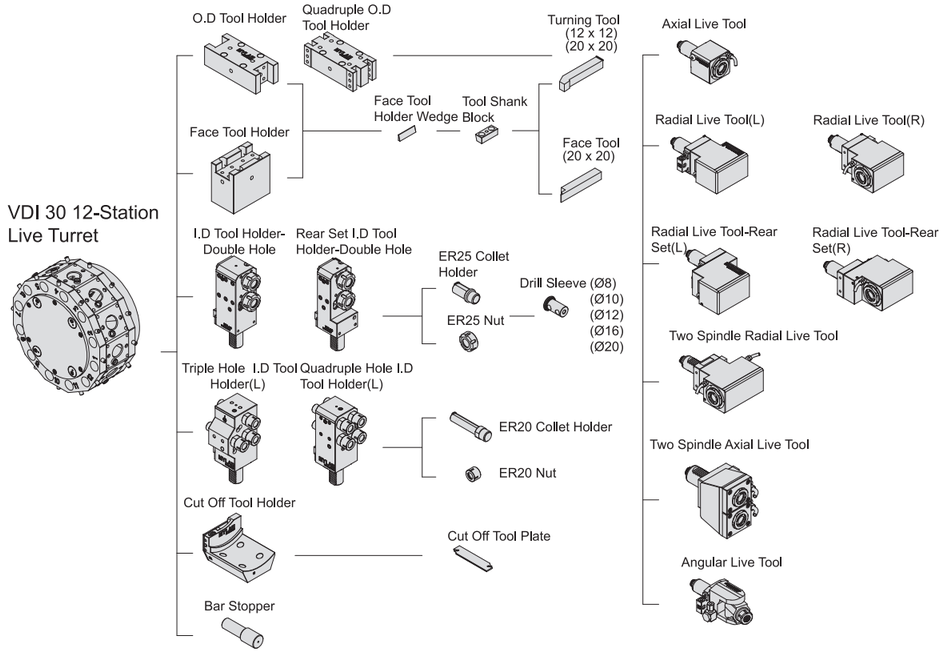
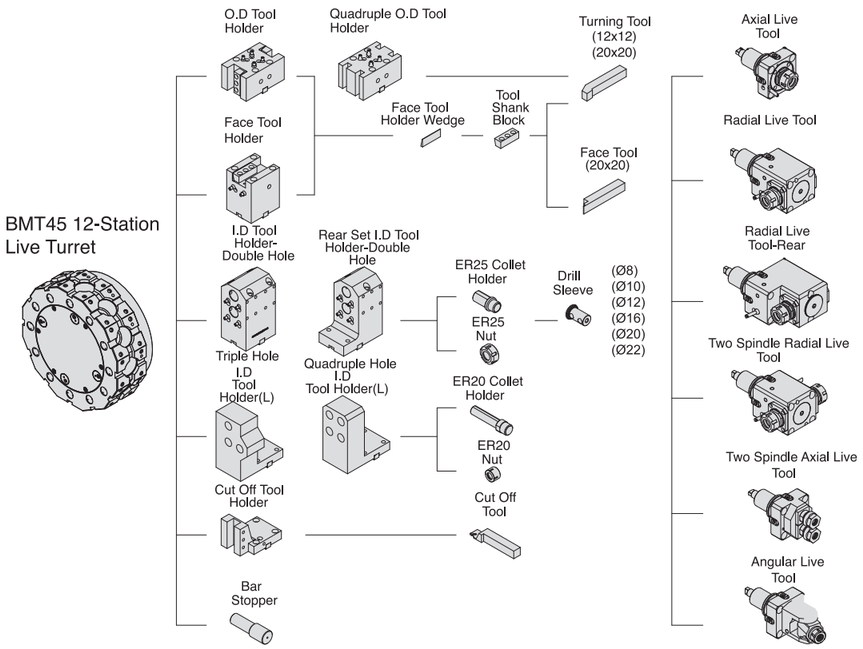
Tooling System

VDI 30.12 Tooling System

Unit:mm



BMT45. 12 Tooling System



Specifications

	Item	Unit	GT42 Main Spindle	GT52 Main Spindle	GT42 / GT52 Sub spindle
Capacity	Swing Over Saddle	mm	Ø260	Ø260	-
	Chuck Type	mm	DIN173E	DIN177E	DIN171E
	Max. Bar Turning Length	mm	135	150	60
	Max. Turning Length	mm	350	350	-
	Max. Turning	mm	Ø150	Ø150	Ø135
	Max. Turning Bar Diameter	mm	Ø42	Ø51	Ø32
Travel	X1 / X2 Axis Travel	mm	180 (X1)	180 (X1)	259 (X2)
	Z1 / Z2 Axis Travel	mm	435 (Z1)	435 (Z1)	490 (Z2)
	Y1 Axis Travel	mm	±35	±35	-
	X1 / X2 Axis Rapid Traverse	mm/min	18 (X1)	18 (X1)	18 (X2)
	Z1 / Z2 Axis Rapid Traverse	mm/min	24 (Z1)	24 (Z1)	24 (Z2)
	Y1 Axis Rapid Traverse	mm/min	18	18	-
Spindle	Spindle Nose	type	A2-5	A2-6	A2-4
	Hole Through	mm	56	79	48
	Spindle Speed	rpm	50 - 5000	50 - 4500	50 - 6000
	Spindle Motor Type	type	β8 / 12000i	β8 / 12000i	β3 / 12000i
	Spindle Motor (Cont./15min)	kW	7.5 / 11 / 15	7.5 / 11 / 15	3.7 / 5.5 / 7.5
Turret	No.of Tool Stations	set	12	12	-
	O.D. Tool Size	mm	20	20	-
	I.D. of Boring Bar Holder	mm	25	25	-
	Turret Indexing	sec	0.1 - 0.3	0.1 - 0.3	-
	Tool Spindle Speed	rpm	6000	6000	-
	Tool Spindle Motor Type	type	α2 / 10000i	α2 / 10000i	-
	Tool Spindle Motor (Cont./15min)	kW	2.2 / 3.7	2.2 / 3.7	-
	Tool Spindle Torque (Cont./15min)	mm	14 / 23.6	14 / 23.6	-
	Drill Capacity	mm	Ø13	Ø13	-
	Endmill Capacity	mm	Ø13	Ø13	-
	Tap Capacity	mm	M8	M8	-
Gang Tool	No. of Gang Tool	set	4	3 / 4	-
	Tool Holder of Gang Tool	mm	Ø20	Ø25 / Ø20	-
	Collet Holder of Gang Tool	type	ER20	ER25 / ER16	-
	Max. Tool Size	mm	Ø13	Ø16 / Ø10	-
	X1 / X2 Servo Motor	kW	1.8 (X1)	1.8 (X1)	1.2 (X2)
	Z1 / Z2 Servo Motor	kW	1.8 (Z1)	1.8 (Z1)	1.8 (Z2)
	Y1 Servo Motor	kW	1.8	1.8	-
	Turret Servo Motor	kW	0.75	0.75	-
	Coolant Pump	kW	0.9	0.9	0.9
	High Pressure Cutting Fluid Pump	kW	0.4	0.4	-
	Hydraulic Pump	kW	3.75	3.75	-
Motor Power	Parts Conveyor Motor	kW	0.03	0.03	-
	Chip Conveyor Motor	kW	0.2	0.2	-
	Lubrication Pump	kW	0.003	0.003	-
	Oil Mist Collector	kW	0.75	0.75	-
	Hydraulic Capacity	Liter	55	55	-
	Lubrication Tank Capacity	Liter	2	2	-
	Coolant Tank Capacity	Liter	250	250	-
Machine Dimension (W x D x H)		mm	2750x1950x2000	2780x1950x2000	-
Machine Weight		kg	5000	5100	-
Machine Area (W x D)		mm	4950 x 3640	4985 x 3640	-

Standard Accessories:

- Fanuc Controller
- Collet Chuck
- Workpiece Ejector
- 12-Station Power Turret
- Gang Tool System
- Auto Lubrication System
- Coolant System
- Sub-Spindle Inner Coolant & Air Blow
- Coolant Level Sensor
- Auto Power Shut-Off
- Signal Tower
- High Pressure Coolant System (20 Bar)

Optional Accessories:

- Live Tool Holder
- Static Tool Holder
- 6" Power Chuck for SP1
- 5" Power Chuck for SP2
- Air Blow for SP1/SP2
- High Pressure Coolant System (50 Bar/100 Bar)
- Chip Conveyor
- Oil Mist Collector
- Bar Feeder
- Transformer
- Regulator
- Mitsubishi Controller
- Parts Catcher
- Parts Conveyor
- Tailstock

We reserve the right to modify the above specifications without notice.