



**B**  **B-TEC**  
Werkzeugmaschinen

**B**  **B-Turn**

*Produktkatalog*





Alle Maschinen sind mit Teileeinleger von unserem Hersteller,  
oder Roboterbeladung von unserem Zulieferer



sowie Absaugungen der Firma LTA erhältlich



Stangenlader von verschiedenen Herstellern erhältlich!

## Advantages

Highlights  
Technologies  
Options  
Automation Solutions  
Environment Friendly  
Processing Capacity  
Technical Data

## Super Rigidity

The machine structure is integrated into a strong base, lower barycenter, 45° saddle design to achieve better vibration damping and reduce deformation, providing headstock & turret with a very stable base.  
45° slant bed structure, more convenient for bar loading & unloading, smoother for chip removal.

## Customized CNC Package

HT series have optional FANUC Oi-TF+ control with Manual Guide I package & Siemens 828D control with Shopturn package, 10.4" display, extra interfaces etc. ready for customers.

## Abundant Options

Servo turret, servo-driven turret, upgrade spindle power, upgrade spindle torque, upgrade bore of cylinder & chuck, drawer type coolant tank, tool probe, oil-mist separator etc. options ready for customers.

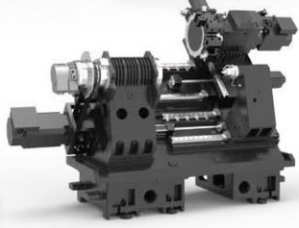
## High efficiency line operation (optional)

Thanks to the advanced truss transmission device, it is possible to combine multiple machines with a single task, greatly reducing the transmission time between each process and increasing efficiency.

## HT2



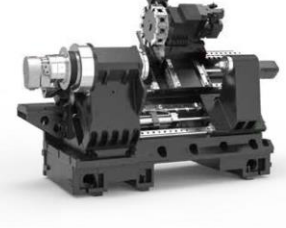
## HT3



## HT5



## HT6



## Advantages

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## Twin Turret

Quick and precise production thanks to the rapid servo-driven turret for maximum process reliability. One time clamping finish turning, milling, drilling & tapping operations.  
HT2M: 12positions VDI30 / 8 positions BMT45  
HT3M: 12positions VDI30/12positions BMT55  
HT5M: 12positions BMT55/12positions VD140  
HT6M/Y: 12positions BMT55/12positions VD140/16 positions BMT45 Driven tools for machining complex workpieces 12 tool stations, 4,000 rpm, 362Nm, 3 kW

## Ultimate cutting capability

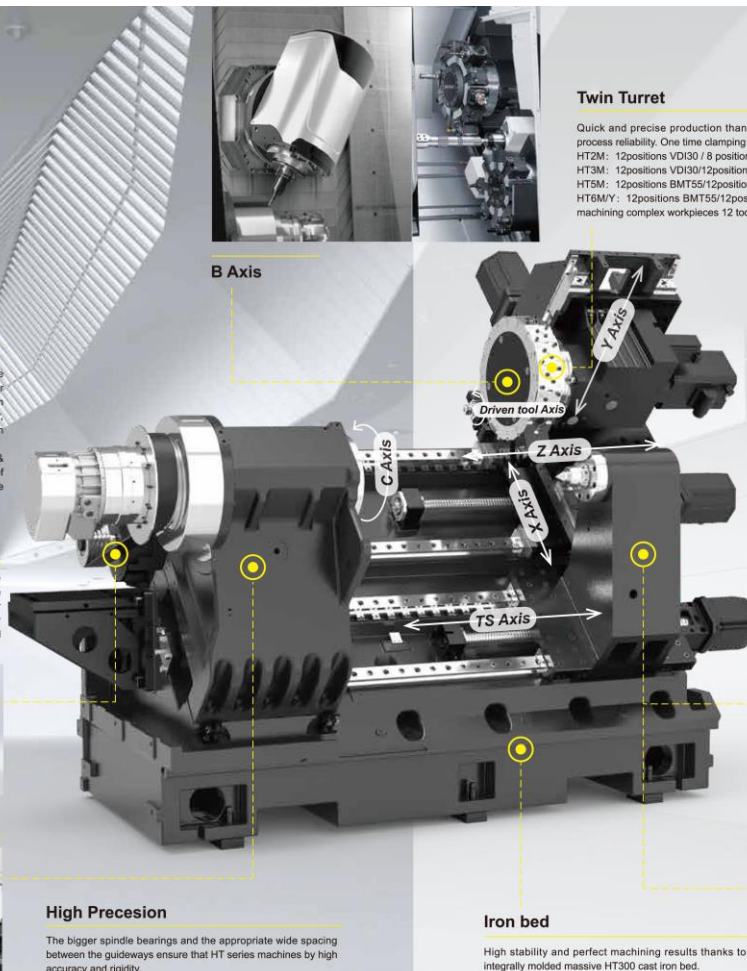
Headstock with heat sink design is integrated casting. Rigid tapping function as standard to realize high-speed precise tapping without floating tapping collets. Easy to program & better tapping accuracy, offers maximum tapping productivity. With high performance V-belt driving spindle, make maintenance easier, also reduce the impact of the spindle accuracy from the heat on spindle motor conducting.  
By adjusting pulley reduction ratio, to synchronize the spindle & the motor maximum rpm, thereby reducing the minimum rpm of the maximum power output & increasing torque, which maximize spindle motor's potential & achieve maximum turning capability.

## Main Drive Spindle Motor

Main drive system using FANUC/SIEMENS high performance servo spindle motor, through V-belt transmission power, to the patent design of high rigidity spindle structure with 3 angular contact ball bearings in front and 2 large aperture angular contact ball or roller (optional) bearings in rear side, to fulfil axial and radial cutting carrying requirements at same time.



## Built-in motor spindle



## High Precision

The bigger spindle bearings and the appropriate wide spacing between the guideways ensure that HT series machines by high accuracy and rigidity.

## Iron bed

High stability and perfect machining results thanks to the integrally molded massive HT300 cast iron bed.

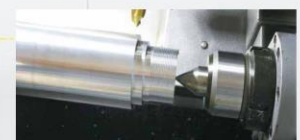
## Y Axis

CT5: 12positions BMT55 turret, Y axis travel ±35  
CT6: 12positions BMT55 turret, Y axis travel ±50  
16positions BMT45 turret, Y axis travel ±45



## Servo Tailstock

Substantially shorten un-processing time due to servo driven high rigidity tailstock.  
Less operation steps.  
Setup time: reduce 50%  
Operation time: reduce 20%  
Program different pressure by codes

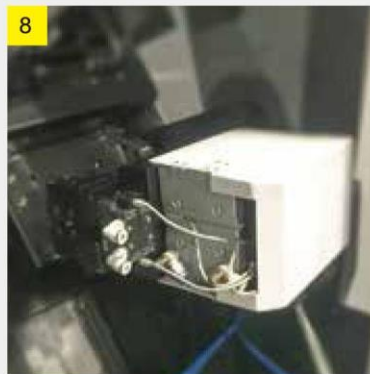
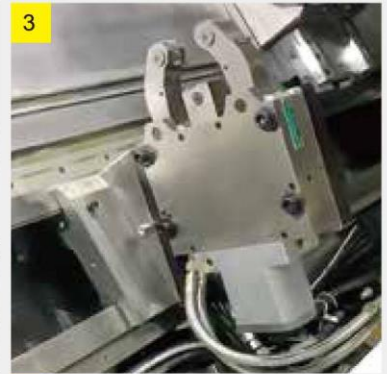


## Sub Spindle



# Abundant Options

Providing advanced operability



- ① Yaxis(Orthogonal)  $\pm 35\text{mm}/\pm 50\text{mm}$
- ② Tool Pre-setter
- ③ Steady Rest
- ④ Automatic Top/Front Door
- ⑤ High Pressure Coolant Pump
- ⑥ Bar Feeder
- ⑦ Linear Scale
- ⑧ Secondary clamping jaws
- ⑨ Customized chuck
- ⑩ Oil-Mist Collector
- ⑪ Oil-Water Separator

Advantages  
Highlights  
Technologies  
Options

## Automation Solutions

Environment Friendly  
Processing Capacity  
Technical Data



### Automation Solutions

- Compact design delivery system provide unmanned production capacity with maximum work piece weight up to 6KG.
- Sieglo is prepared to design customized product process for all HT series endusers.

Intelligent Manufacturing



## Features



- Thanks to intergrated into machine CNC control, programming & setup is direct and simpler.
- Automatic truss delivery system with 3 jaws clamping grapper and rotating cylinder.
- Optimized housing simplified equipment maintenance.
- Linear robot system with high speed & high precesion gear & rack structure.
- Telescop arm optional ready for low workshop roof endusers.
- Work piece measuring system & tool measuring system.
- All new overall outlook design style.

Automatic truss delivery system optional for all HT series machine models  
Developed automatic truss delivery system based on HT series, is specially designed for HT models. Sieglo provides one-stop service of complete intergrated system including turning center and automation system.

Therefore machines and automatic system only need one control system to manage all jobs. This helps maintain and operate the whole system more easier.

Up to 6 KGs work piece loading capacity, faster, simpler to operator and more flexible.

Maximum availbale work piece size is  $\phi 200 \times 150$ mm.

Advantages  
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## Environment Friendly

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# We only build environment friendly machine tools & technologies

Under normal temperature environment, achieve same processing precision performance compared to constant temperature workshop, no need to equip air conditioning system for precision control purpose.

## Energy saving Functions & Technologies

- Spindle Chiller System
- Automatic power-off all accessories after automation producing cycles.
- Automatic power saving mode under no load rotating
- Lightweight design & low inertia design ideas
- High performance single CPU structure
- Simplified mechanic structure design for energy saving
- Displayer auto power saving mode
- Complete thermal equilibrium design ideas

## Environmental Protection

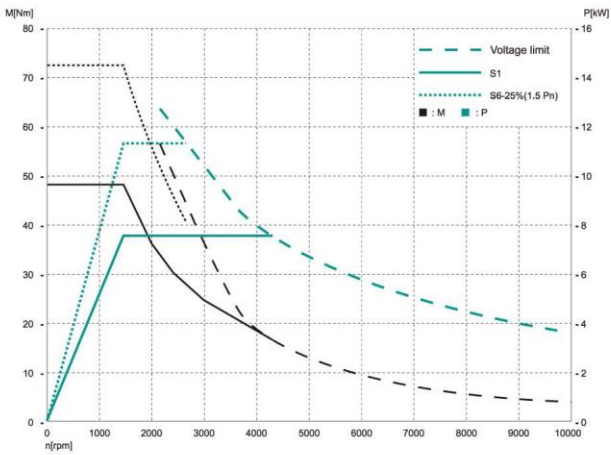
- Oil recycling system as standard
- Oil-water separator as standard for HT5 and above
- Self-recycle system of coolant tank in case of long term machine power-off



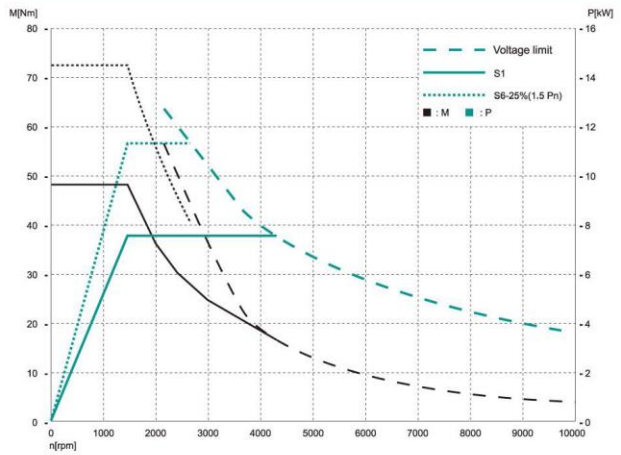
Advantages  
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**Processing Capacity**  
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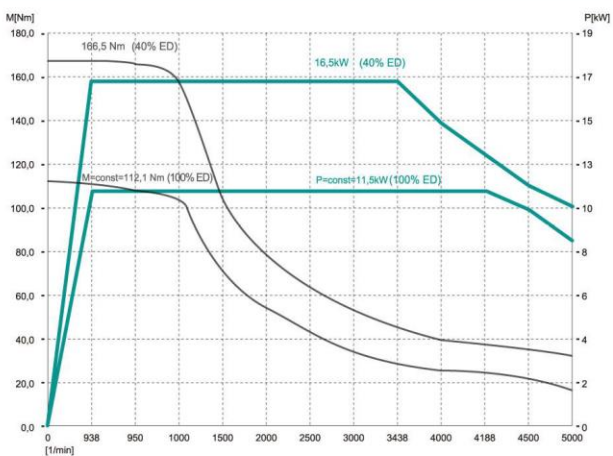
HT2 Series power torque chart



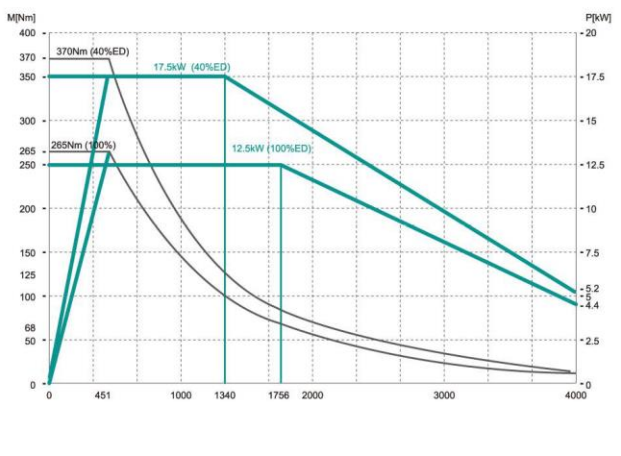
HT3 Series power torque chart



HT5 Series power torque chart



HT6 Series power torque chart



Advantages  
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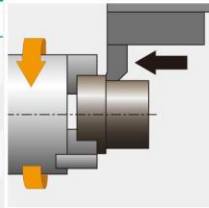
## Processing Capacity

Technical Data

**HT6**

### Heavy-duty cutting (OD)

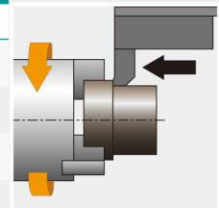
Material	AL 6061
Diameter	Φ50 mm
Insert nose	R0.4 mm
Spindle speed	2,200 min <sup>-1</sup>
Feed rate	0.1 mm/rev
Depth of cut	0.11 mm
Cut length	60 mm
Roundness	2-5 μ
Cylindricity	3-7 μ
Roughness	Ra0.3-0.6



**HT6**

### Heavy-duty cutting (OD)

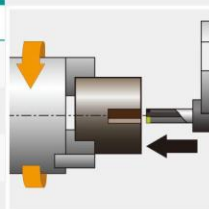
Material	C45
Cutting speed	130 m/min
Spindle speed	414 min <sup>-1</sup>
Feed rate	0.3 mm/rev
Depth of cut	6.0 mm
Cut length	60 mm



**HT6**

### U-Drill

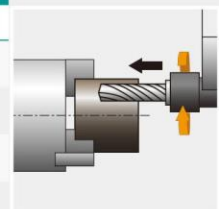
Material	C45
Tool diameter	Φ55 mm
Cutting speed	180 m/min
Spindle speed	1,042 min <sup>-1</sup>
Feed rate	0.1 mm/rev



**HT6**

### Drill (Driven tool)

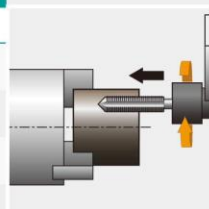
Material	C45
Tool diameter	Φ16 mm
Rotation speed	1000 min <sup>-1</sup>
Feed rate	200 mm/min



**iHT6**

### Tap (Driven tool)

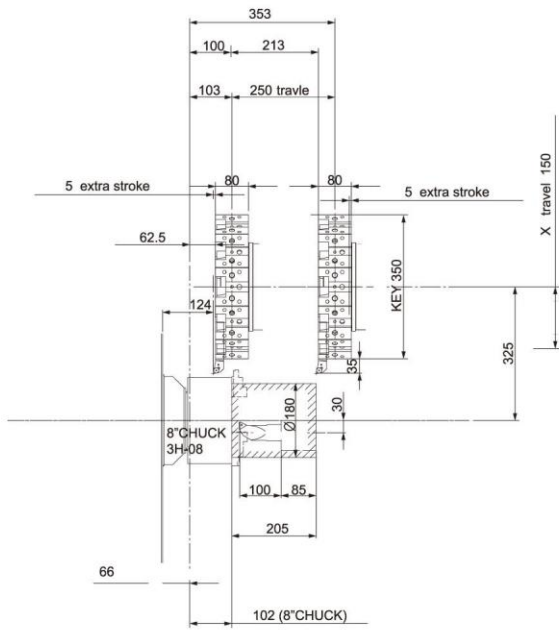
Material	C45
Tool Spec	M12 × P1.5
Rotation speed	300 min <sup>-1</sup>
Feed rate	450 mm/min



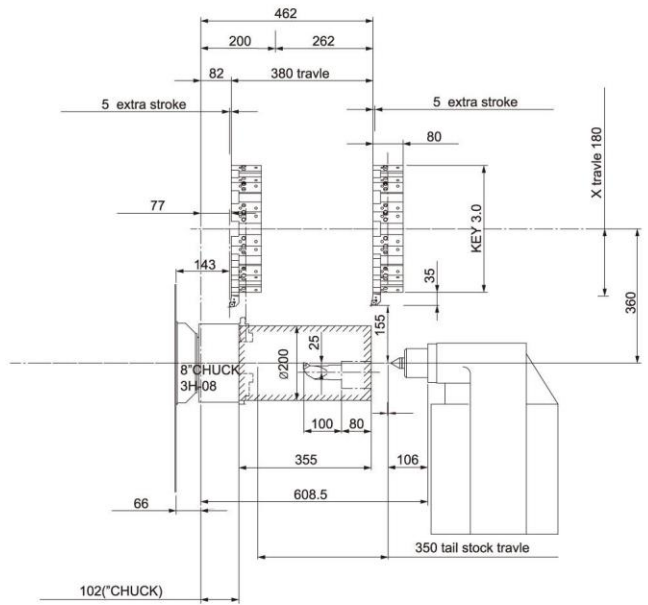


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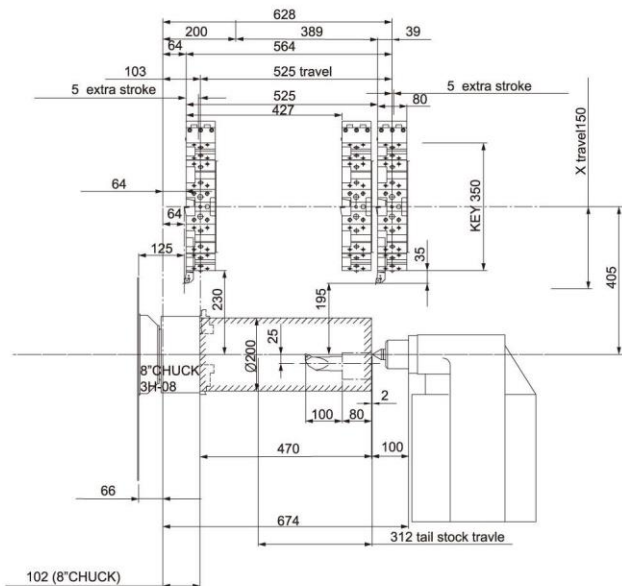
### HT2 Series Working area



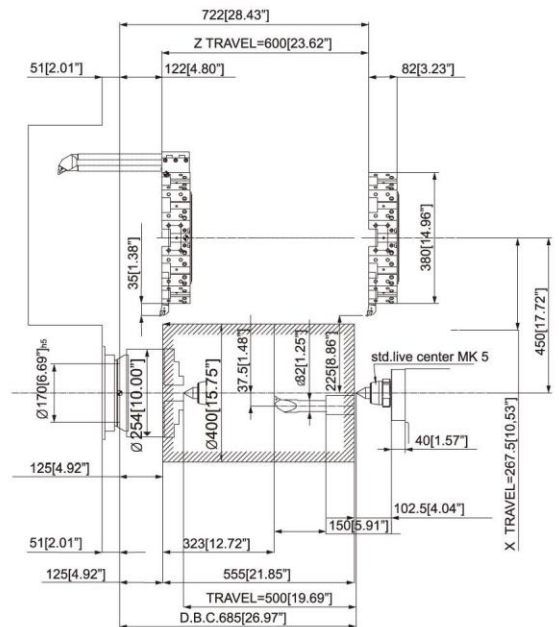
### HT3 Series Working area



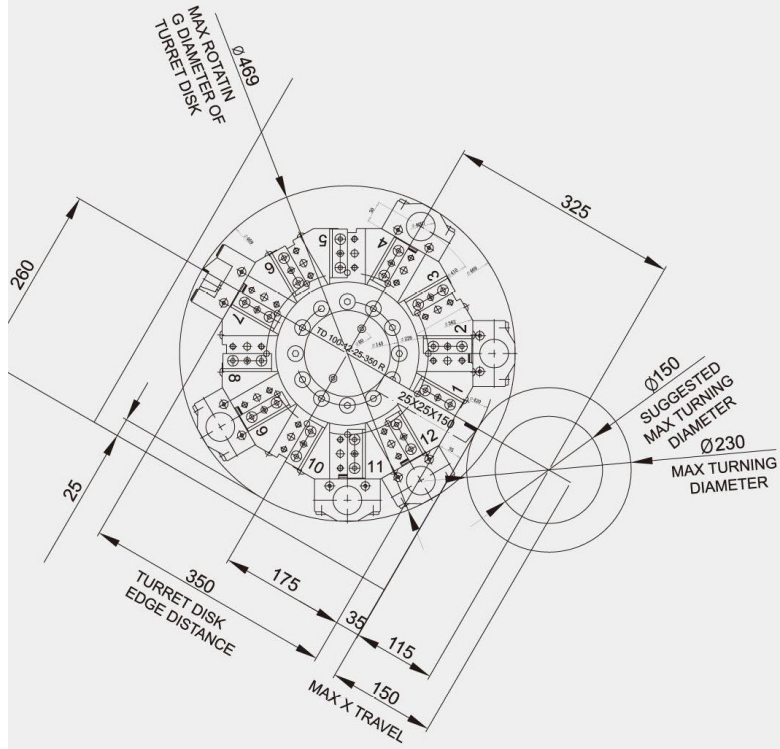
### HT5 Series Working area



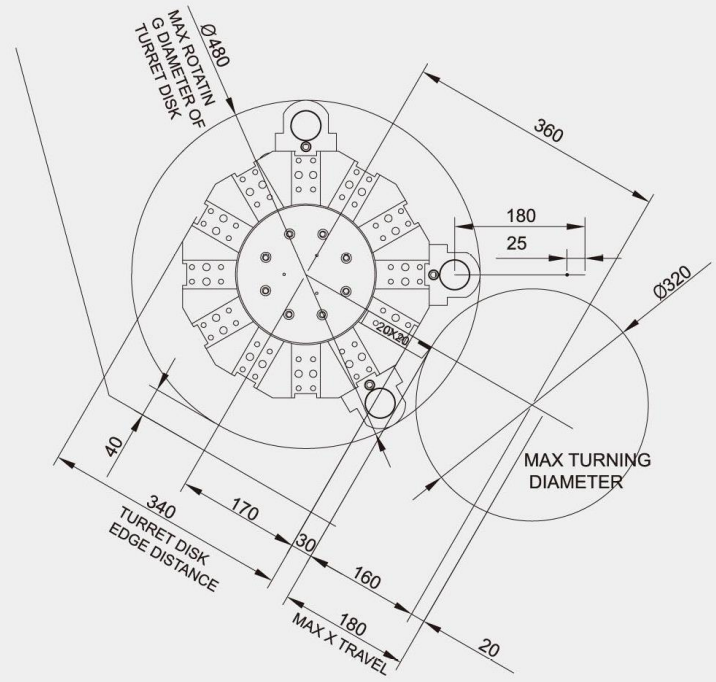
### HT6 Series Working area



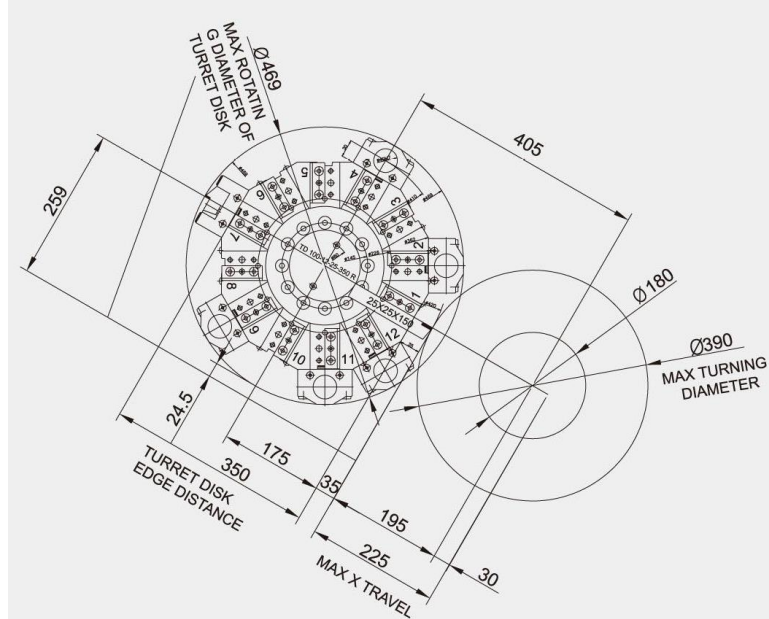
### HT2 Series Tool interference



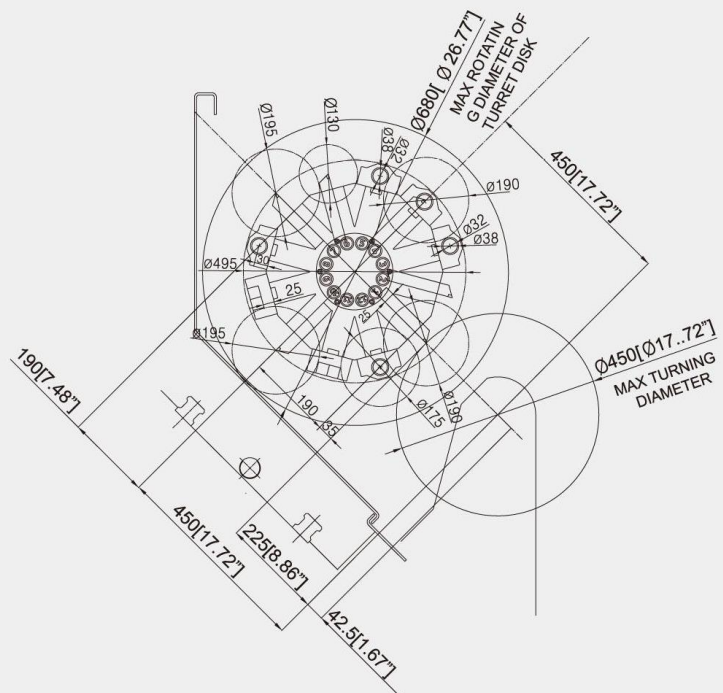
### HT3 Series Tool interference



### HT5 Series Tool interference



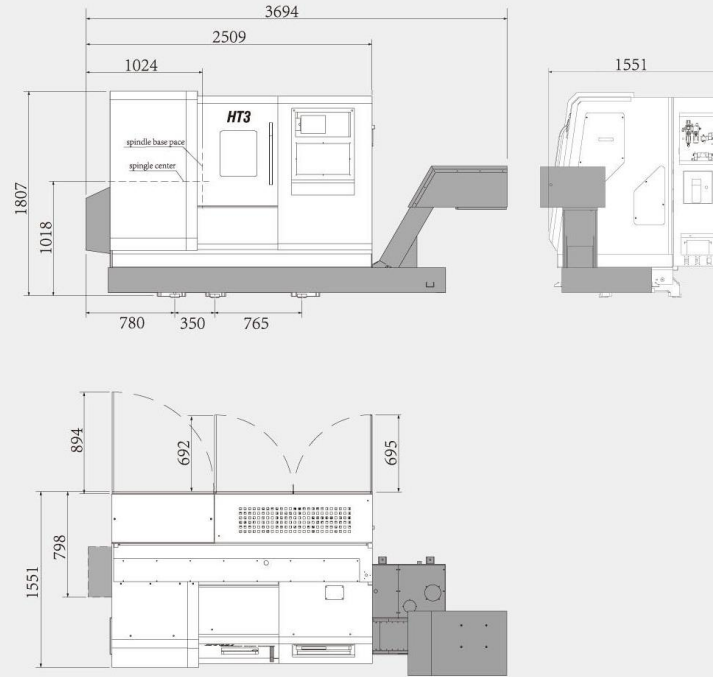
### HT6 Series Tool interference



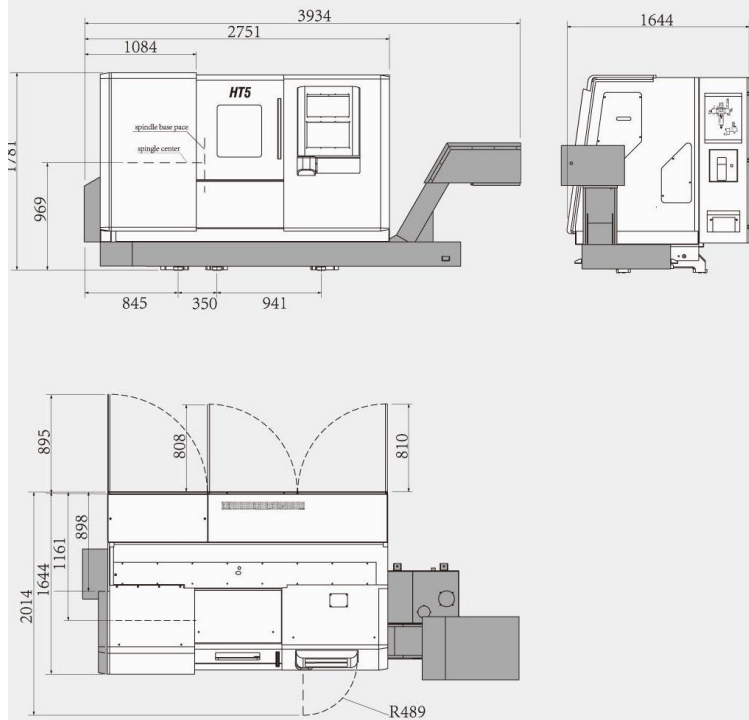
## HT2 Series Floor Plans



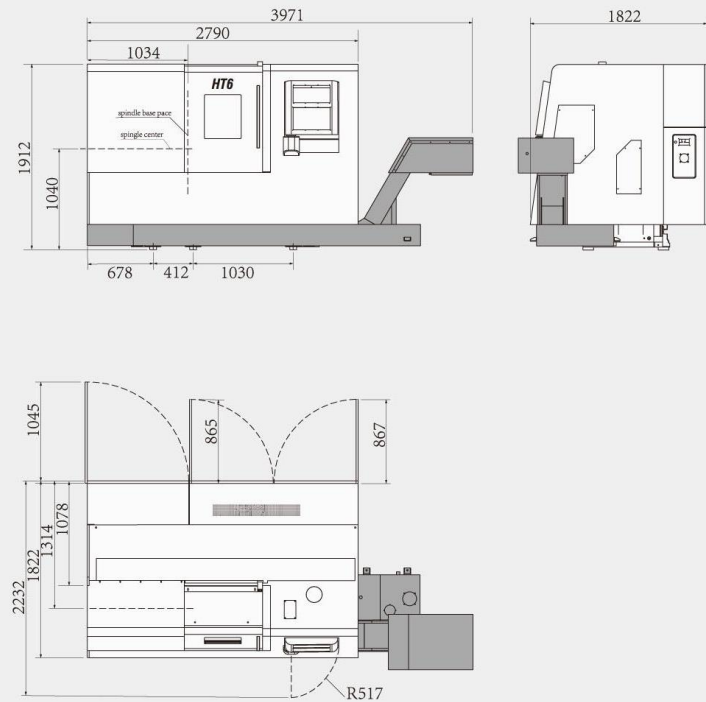
## HT3 Series Floor Plans



## HT5 Series Floor Plans



## HT6 Series Floor Plans



**HT2**

<b>Technical Parameters</b>		
Spindle head	Type	A2-5
Spindle max speed	rpm	5000
Torque 40% ED	N	76
Spindle power	kW	5.5-7.5 / 7.5-11
Chuck diameter	mm	165
Spindle bore	mm	56
Front bearing diameter	mm	80
Spindle bearing lubrication	Type	Grease
Linear motion lubrication	Type	Oil
Speed range	rpm	5-5000
<b>Working area</b>		
Maximum swing over bed	mm	520
Maximum cutting diameter	mm	260
Suggested cutting diameter	mm	150
Maximum machining length	mm	200
Maximum bar capacity	mm	41
Travel Z	mm	250
Travel X	mm	150
<b>Ballscrew</b>		
X / Z axes ballscrew D x P	mm	32 x 10
Feed		
Rapid traverse Z	m/min	30
Rapid traverse X	m/min	30
<b>Measuring system</b>		
X / Z axes measuring system	mm	Absolute rotative
Positioning(X / Z);VDI/DGQ 3441	mm	0.008/0.008
Repeatability(X/ Z);VDI/DGQ 3441		0.004/0.005
<b>Tool attachments</b>		
Servo turret	-	Pragati/Sauter
No. of tool stations	-	8 / 12
Turret disk type	mm	Slot type
Tool attachment	Type	20 / 25
Driven tools turret	#	<b>SAUTER</b>
No. of tool stations(Driven tools)	-	12
Turret disk type	N	VD130
Maximum clamping force	mm	4000
OD tool size	rpm	20
Maximum speed	kW	3000
Drive power (40 % DC)	N	3
Torque (40 % DC)		20
<b>Electrical specifications</b>		
Voltage	Hz	380 ±10%
Frequency	KVA	50 ± 1%
Max. installed power	mm2	20
<b>Hydraulic unit</b>		
Max. working pressure	bar	45 / 50
Reservoir capacity	l	15
Pump flow	l/ min	24
<b>Coolant system</b>		
Capacity with tank	l	100
Pump delivery	l /min	30
Pump pressure	bar	5
<b>Noise level</b>		
Noise control	dB (A)	≤80
<b>Control system</b>		
CNC		FANUC 0iTF+/SIEMENS828D
<b>Weight</b>	kg	About 2800
<b>Slant angle, Material</b>	°	45°, HT300
<b>Size (length × width × height)</b>	mm	1600 x 1500 x 1750

**HT3**

**Technical Parameters**

Spindle head	Type	FL 140 h5 / A2-6
Spindle max speed	rpm	4500
Torque 40% ED	N	112
Spindle power	kW	7.5-11/11-15
Chuck diameter	mm	165/210
Spindle bore	mm	74
Front bearing diameter	mm	100
Spindle bearing lubrication	Type	Grease
Linear motion lubrication	Type	Oil
Speed range	rpm	5-4500

**Working area**

Maximum swing over bed	mm	558
Maximum cutting diameter	mm	340/328
Suggested cutting diameter	mm	185
Maximum machining length	mm	350
Maximum bar capacity	mm	42/51/65
Travel Z	mm	380
Travel X	mm	180

**Ballscrew**

X / Z axes ballscrew D x P	mm	32 x 10
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**Feed**

Rapid traverse Z	m/min	30
Rapid traverse X	m/min	30

**Measuring system**

X / Z axes measuring system		Absolute rotative
Positioning(X / Z);VDI/DGQ 3441	mm	0.008/0.008
Repeatability (X / Z);VDI/DGQ 3441	mm	0.004/0.005

**Tailstock (Option)**

Stroke	mm	350
Tailstock moving	Type	Hydraulic Programed / Servo
Pressure	N	4000
Centre location	Type	MT 4

**Tool attachments**

Servo turret	Type	Pragati
No. of tool stations	-	8/12
Turret disk type	-	Slot type
Tool attachment	mm	25
Driven tools turret	Type	SAUTER
No. of tool stations(Driven tools)	#	12
Turret disk type	-	BMT55
Maximum clamping force	N	4000
OD tool size	mm	25
Maximum speed	rpm	3000
Drive power (40 % DC)	kW	3
Torque (40 % DC)	N	20

**Electrical specifications**

Voltage	V	380 ±10%
Frequency	Hz	50 ± 1%
Max. installed power	KVA	20/25

**Hydraulic unit**

Max. working pressure	bar	45/55
Reservoir capacity	l	35
Pump flow	l/ min	24

**Coolant system**

Capacity with tank	l	150
Pump delivery	l /min	30
Pump pressure	bar	5

**Noise level**

Noise control	dB (A)	≤80
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**Control system**

CNC		FANUC0iTf / SIEMENS 828D
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<b>Weight</b>	kg	About 3500
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<b>Slant angle, Material</b>	°	45°, HT300
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<b>Size (length × width × height)</b>	mm	2550 x 1600 x 1850
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		HT5	HT5L
<b>Technical Parameters</b>			
Spindle head	Type	FL 140 / A2-6	FL 140 / A2-6
Spindle max speed	rpm	4500	4500
Torque 40% ED	N	112	112
Spindle power	kW	11-15	11-15
Chuck diameter	mm	210	210
Spindle bore	mm	74	74
Front bearing diameter	mm	100	100
Spindle bearing lubrication	Type	Grease	Grease
Linear motion lubrication	Type	Oil	Oil
Speed range	rpm	5-4500	5-4500
<b>Working area</b>			
Maximum swing over bed	mm	576	576
Maximum cutting diameter	mm	390 / 348	390 / 348
Suggested cutting diameter	mm	200	200
Maximum machining length	mm	500	800
Maximum bar capacity	mm	51/65	51/65
Travel Z	mm	525	850
Travel X	mm	225	225
Travel Y (Option)	mm	±35	±35
<b>Ballscrew</b>			
X / Z axes ballscrew D x P	mm	32 x 10	32 x 10
<b>Feed</b>			
Rapid traverse Z	m/min	30	30
Rapid traverse X	m/min	30	30
<b>Measuring system</b>			
X / Z axes measuring system		Absolute rotative	Absolute rotative
Positioning(X / Z);VDI/DGQ 3441	mm	0.008/0.008	0.008/0.008
Repeatability (X / Z);VDI/DGQ 3441	mm	0.005/0.005	0.005/0.005
<b>Tailstock</b>			
Stroke	mm	500	800
Tailstock moving	Type	Hydraulic Programed / Servo	Hydraulic Programed / Servo
Pressure	N	4000	4000
Centre location	Type	MT 4	MT 4
<b>Tool attachments</b>			
Servo turret	Type	Pragati	Pragati
No. of tool stations	-	12	12
Turret disk type	-	Slot type	Slot type
Tool attachment	mm	25	25
Driven tools turret	Type	SAUTER	SAUTER
No. of tool stations(Driven tools)	#	12	12
Turret disk type	-	BMT55	BMT55
Maximum clamping force	N	4000	4000
OD tool size	mm	25	25
Maximum speed	rpm	3000	3000
Drive power (40 % DC)	kW	3	3
Torque (40 % DC)	N	20	20
<b>Electrical specifications</b>			
Voltage	V	380 ±10%	380 ±10%
Frequency	Hz	50 ± 1%	50 ± 1%
Max. installed power	KVA	25	25
<b>Hydraulic unit</b>			
Max. working pressure	bar	45/50	45/50
Reservoir capacity	l	35	35
Pump delivery	l / min	24	24
<b>Coolant system</b>			
Capacity with tank	l	180	180
Pump delivery	l / min	30	30
Pump pressure	bar	5	5
<b>Noise level</b>			
Noise control	dB (A)	≤80	≤80
<b>Control system</b>			
CNC		FANUC 0iTF / SIEMENS 828D	FANUC 0iTF / SIEMENS 828D
Weight	kg	About 4000	About 4800
Slant angle, Material	°	45°, HT300	45°, HT300
Size (length × width × height)	mm	2750 x 1700 x 1850	3100 x 1700 x 1850

		HT6	HT6L
<b>Technical Parameters</b>			
Spindle head	Type	FL 170 h5	FL 220 h5
Spindle max speed	rpm	4000	3000
Torque 40% ED	N	300	420
Spindle power	kW	15-18.5	15-18.5
Chuck diameter	mm	250/310	250/310
Spindle bore	mm	87	102
Front bearing diameter	mm	130	140
Spindle bearing lubrication	Type	Grease	Grease
Linear motion lubrication	Type	Oil	Oil
Speed range	rpm	5-4000	5-3000
<b>Working area</b>			
Maximum swing over bed	mm	670	680
Maximum cutting diameter	mm	450/420	500/450
Suggested cutting diameter	mm	250	300
Maximum machining length	mm	550	1000
Maximum bar capacity	mm	65/75	75/90
Travel Z	mm	600	1050
Travel X	mm	267	300
Travel Y (Option)	mm	±45/±55	±45/±60
<b>Ballscrew</b>			
X / Z axes ballscrew D x P	mm	40 x 10	40 x 10
<b>Feed</b>			
Rapid traverse Z	m/min	30	30
Rapid traverse X	m/min	30	30
<b>Measuring system</b>			
X / Z axes measuring system		Absolute rotative	Absolute rotative
Positioning(X / Z);VDI/DGQ 3441	mm	0.008/0.008	0.008/0.008
Repeatability(X/ Z);VDI/DGQ 3441	mm	0.005/0.005	0.005/0.005
<b>Tailstock</b>			
Stroke	mm	500	850
Tailstock moving		Hydraulic Programed / Servo	Hydraulic Programed / Servo
Pressure	N	8000	8000
Centre location	Type	MT5	MT5
<b>Tool attachments</b>			
Servo turret	Type	Pragati	Pragati
No. of tool stations	-	12	12
Turret disk type	-	Slot type	Slot type
Tool attachment	mm	25	25
Driven tools turret	Type	SAUTER	SAUTER
No. of tool stations(Driven tools)	#	12/16	12/16
Turret disk type	-	BMT55/BMT45/VD140	BMT55/BMT45/VD140
Maximum clamping force	N	4000	4000
OD tool size	mm	25 x 25	25 x 25
Maximum speed	rpm	3000	3000
Drive power (40 % DC)	kW	3	3
Torque (40 % DC)	N	45	45
<b>Electrical specifications</b>			
Voltage	V	380 ±10%	380 ±10%
Frequency	Hz	50 ± 1%	50 ± 1%
Max. installed power	KVA	35	35
<b>Hydraulic unit</b>			
Max. working pressure	bar	45/50	45/50
Reservoir capacity	l	35	35
Pump delivery	l/ min	24	24
<b>Coolant system</b>			
Capacity with tank	l	180	180
Pump delivery	l /min	30	30
Pump pressure	bar	5	5
<b>Noise level</b>			
Noise control	dB (A)	≤80	≤80
<b>Control system</b>			
CNC		FANUC 0iTF0iTF / SIEMENS 828D	FANUC 0iTF0iTF / SIEMENS 828D
Weight	kg	About 5200	About 7500
Slant angle, Materia	°	45°, HT300	45°, HT300
Size (length × width × height)	mm	2800 x 1850 x 1950	3900x 1900 x 2050

**BOB-tec**

# Werkzeugmaschinen

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Tel:05032/9646460

**Vertriebs Partner**

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