

T-6 SMY/MY

CNC TURNING CENTER

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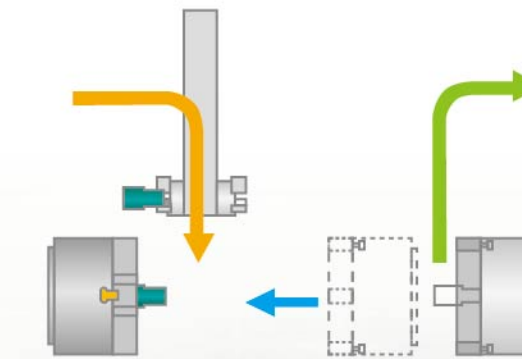
www.leadwell.com.tw

※ All performance are based on 220V/3PH/60HZ. Specification are subject to change without notice.

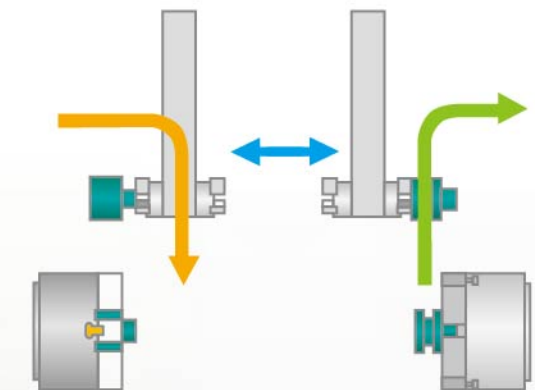


CNC TURING CENTER

• Innovative new design for the outstanding performance.



Robot Arm Loading System: The sub-spindle can continue the machining program on the rear side.



The loading of work-pieces become more efficient with the incorporation of the automatic Gantry Robot System.

► MORE POWER

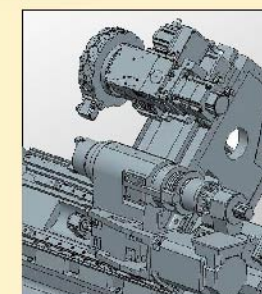
- Powerful main spindle with high torque and 6000 R.P.M. spindle speed

► INCREASED CAPACITY

- 6 inch chuck as standard.
- $\varnothing 52\text{mm}$ bar capacity standard
- Y axis travel: $\pm 50\text{mm}$

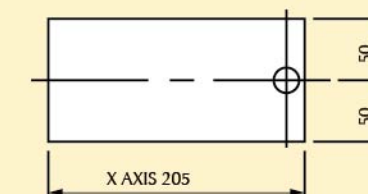
► FASTER / MORE PRODUCTIVE

- Fast rapid rates X axis 15 m/minute & Z axis 30 m/minute.
- Tool to tool turret indexing time 0.25 sec, 180° indexing 1.0 sec.



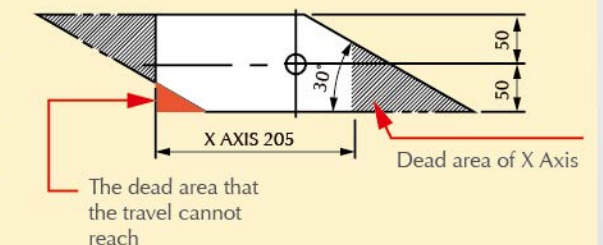
Orthogonal Y Axis Explanation

Y axis is orthogonal placed on the X axis to ensure the full range of travel and to maximize the machining purposes.



Orthogonal Y axis

No dead area within it's travel

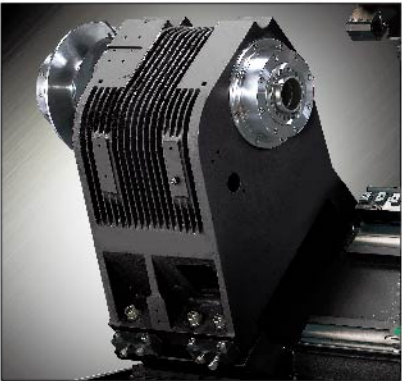


Virtual Y axis

There will be dead area within it's travel, and requires complex programs.

STRUCTURE

Rigid Construction

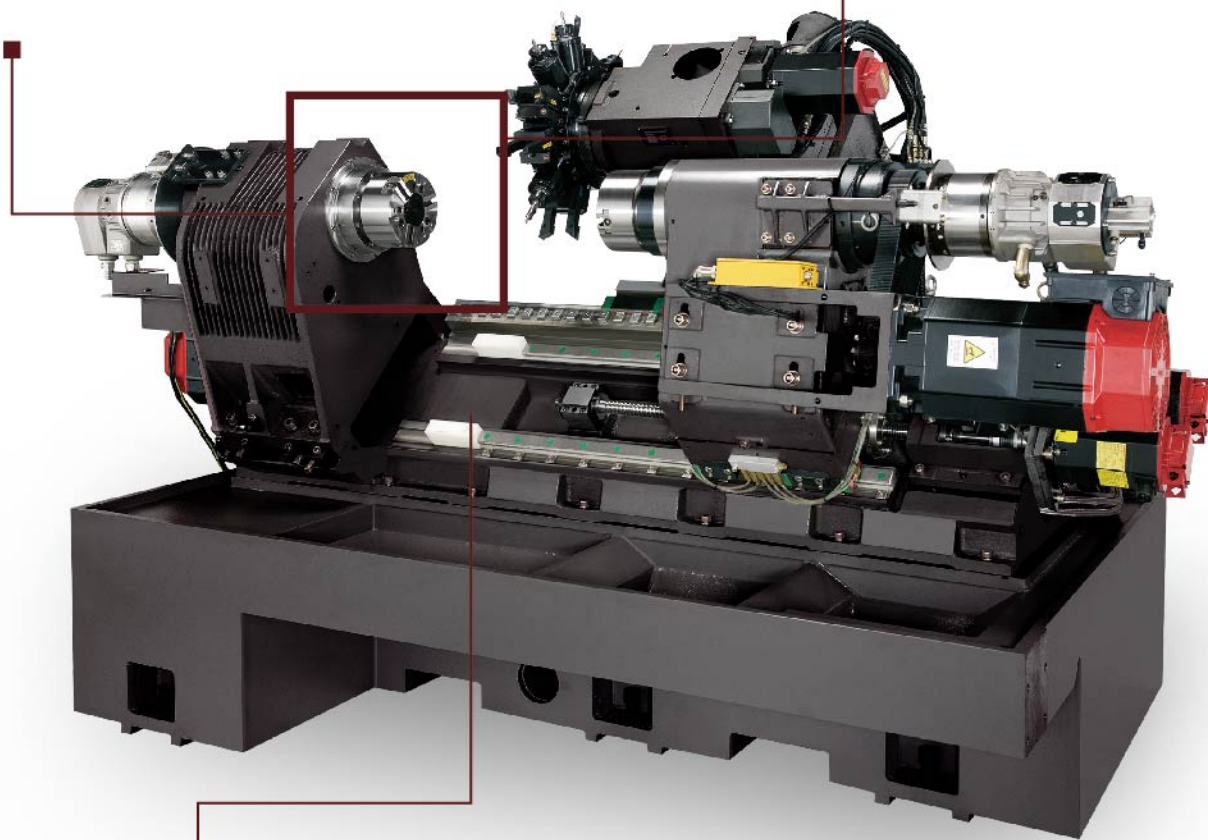


CARTRIDGE TYPE SPINDLE

- The heavy-duty spindle utilizes high quality bearings to support heavy cutting.
- Heavy duty A2-5 spindle nose
- Wide bearing spacing for high rigidity
- Special heat treatment on relevant parts
- Highly accurate draw tube mechanism
- Precision Labyrinth seal
- Large diameter quill for high rigidity
- Optimum spacing of front bearings to spindle nose for highest rigidity

HEADSTOCK

- Heavy duty thermally symmetrical headstock design with heat dissipating fins to minimize thermal distortion during long machining cycles. All important components are machined in a temperature controlled environment and assembled in a clean-room.
- Cartridge style spindle provides quick and easy replacement.



- The 45 degree slant bed design allows chips to fall directly into the chip tank, avoiding accumulation inside the machine.



TAILSTOCK DRIVE BY SERVO MOTOR (FORT-6MY)

- Heavy duty tailstock with large diameter quill and precision #5 Morse taper provides outstanding rigidity.
- The tailstock is driven by servo motor to increase the accuracy.

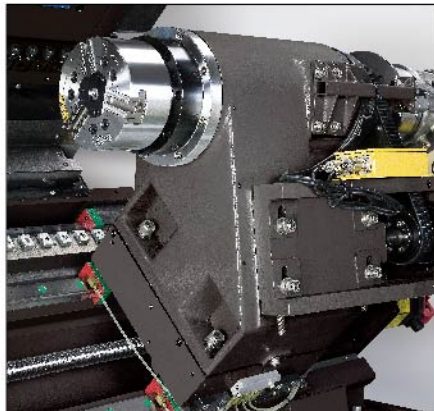
FEATURE



SUB-SPINDLE

The sub-spindle replaces the standard tailstock on turning centers. A position CZi sensor is attached to the sub-spindle so the sub-spindle can then be synchronized with the main spindle. Special software allows the work piece to be transferred from the main spindle to the sub-spindle at any speed for secondary machining operations. This eliminates the need for operator intervention.

- * Allows machining on both end of parts.



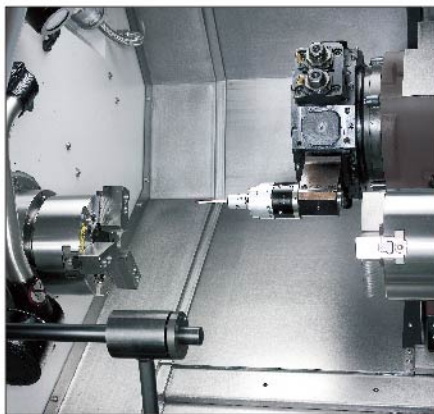
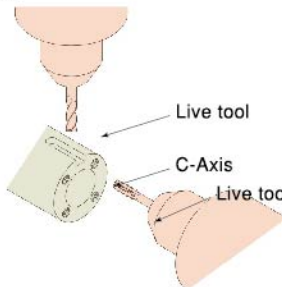
LIVE TOOL TURRET

Each tool can become a rotating tool for both milling and drilling operations.

- Tools can be either radially or axially oriented.

Power Turret Cutting Capacity:

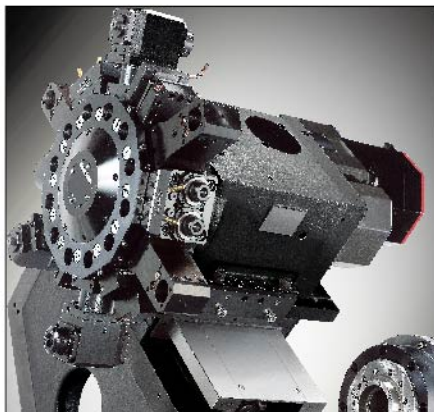
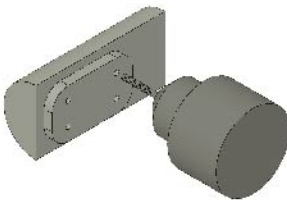
Tool	12 live tools
Drill	10mm
End Mill	12mm
Tapping	M10xP1.5



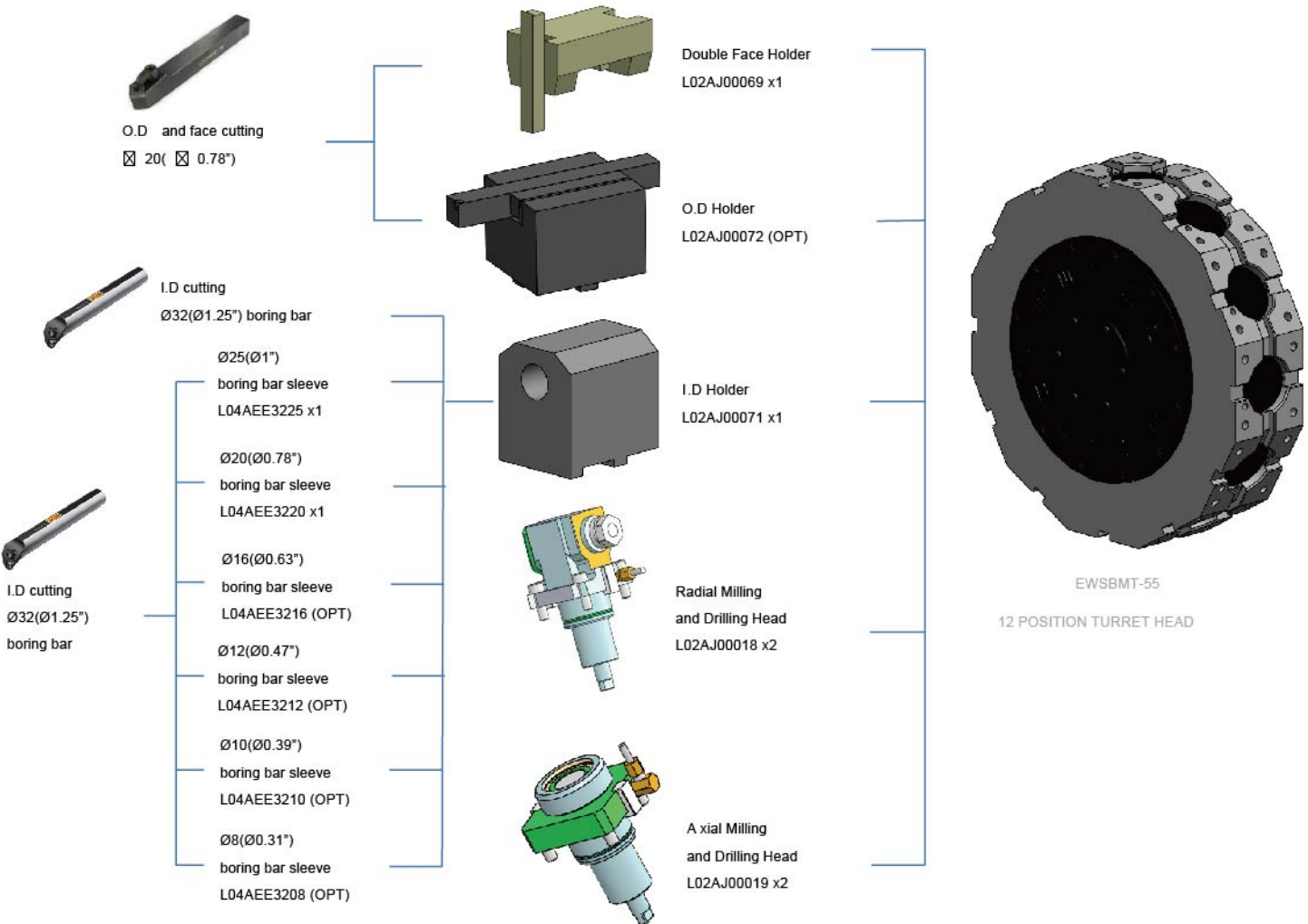
A turning center can operate like a column moving machining center

Y axis

The Y axis design can decrease inaccuracy from machining and arithmetic error. (Patent no. M257917)

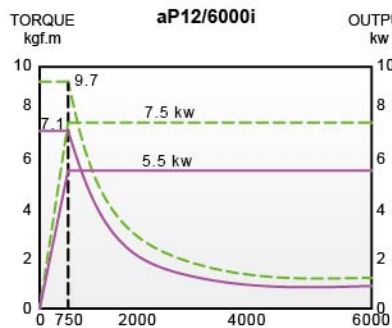


TOOLING SYSTEM

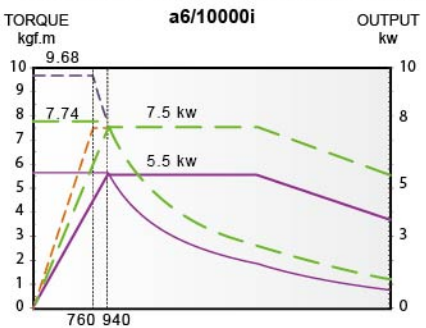


SPINDLE POWER CURVE

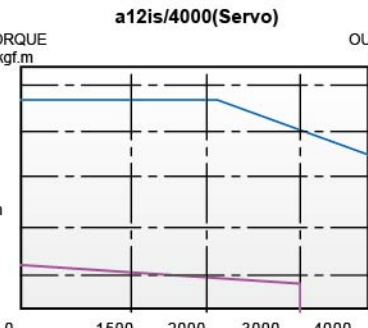
T-6SMY SPINDLE MOTOR TORQUE DRAWING



T-6SMY SUB-SPINDLE MOTOR TORQUE DRAWING



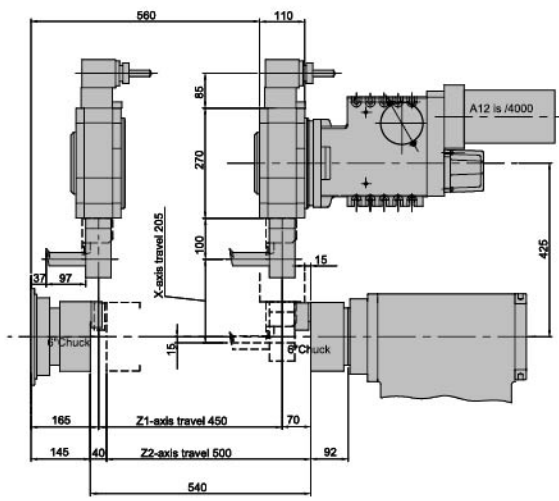
T-6SMY TURRET MOTOR TORQUE DRAWING



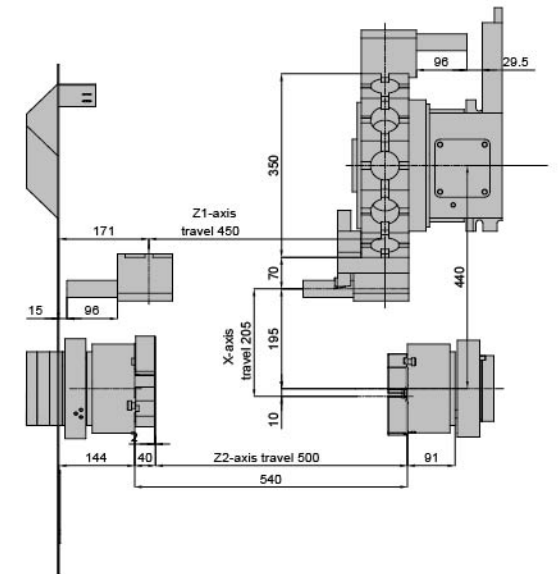
DRAWING

Working Capacity

► **T-6SMY / VDI 30**

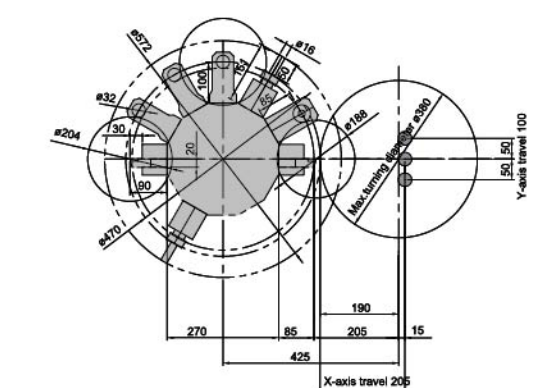


► T-6SMY / BMT 55

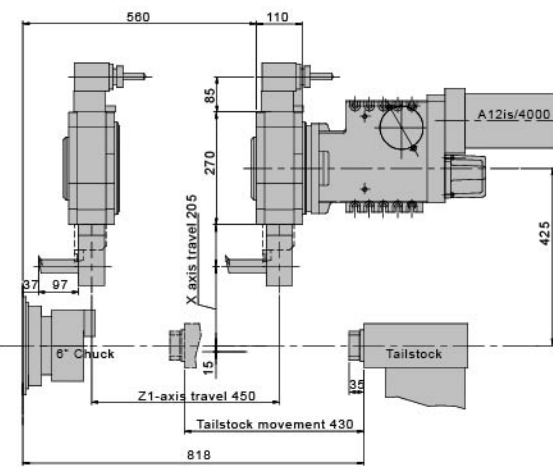


Tooling Interference

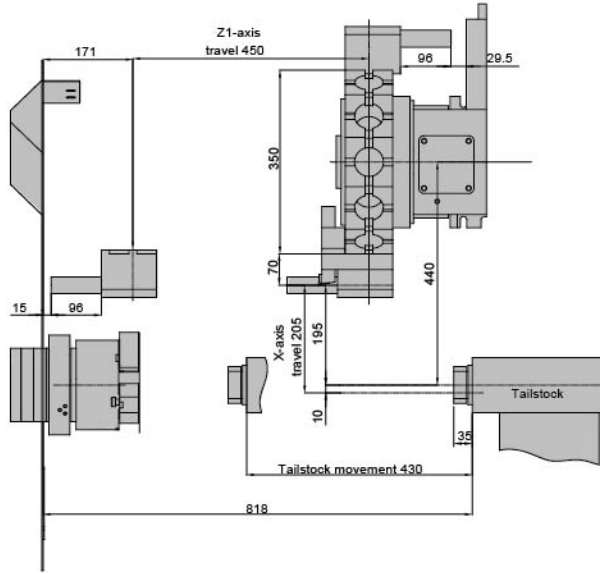
► T-6SMY/T-6MY (VDI 30)



► T-6MY / VDI 30

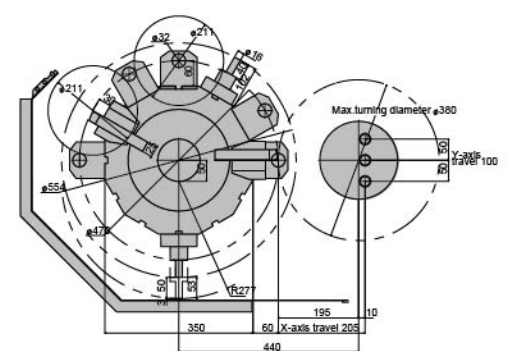


► T-6MY / BMT 55



Unit:mm

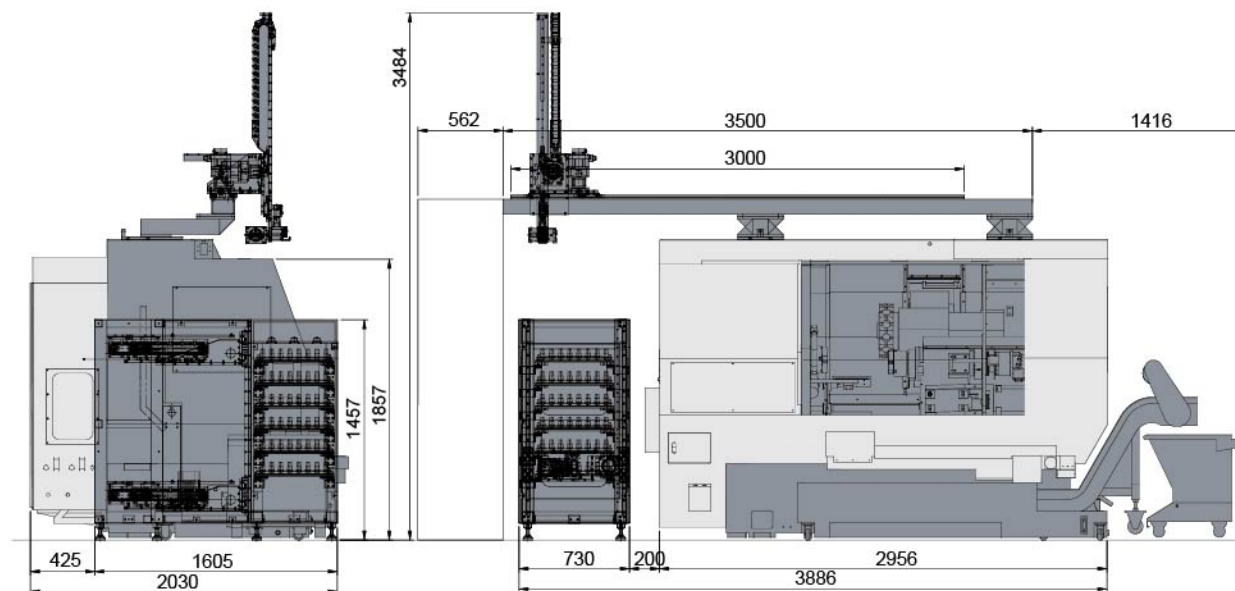
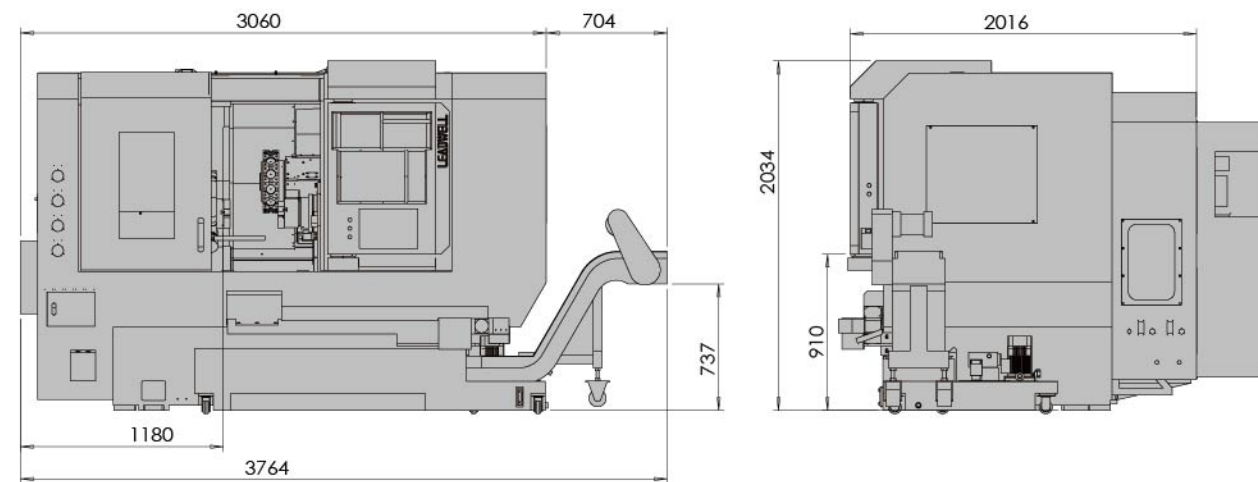
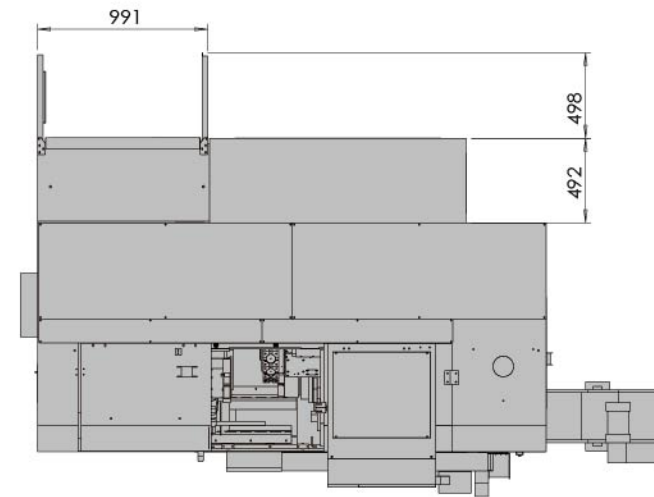
► T-6SMY/T-6MY (BMT 55)



DRAWING

Outline Dimension

Unit:mm



MACHINE SPECIFICATIONS

ITEM	MODEL	T-6SMY	T-6MY
CAPACITY	Unit		
Max. swing	mm(in)	630(24.8)	
Max. turning diameter	mm(in)	390(15.35)	
Max. turning length	mm(in)	541(21.3)	
Bar capacity	mm(in)	52(2)	
TRAVEL			
X axis	mm(in)	195+10(7.67+0.4)	
Y axis	mm(in)	±50(±1.96)	
Z axis	mm(in)	450(17.7)	
Z2 axis/with parts catcher(OPT)	mm(in)	500(19.68)/430(16.93)	-
SPINDLE			
Spindle speed	rpm	6000	
Chuck size	mm(in)	152(6)	
Spindle motor power	KW(HP)	7.5(10)	
Min. spindle indexing increment		±0.001	
SUB SPINDLE			
Sub spindle speed	rpm	4500	-
Sub chuck size	mm(in)	152(6)	-
Sub spindle motor power	KW(HP)	7.5(10)	-
Sub spindle feed motor	KW(HP)	1.6(2.1)	-
TURRET			
Number of tool stations	pcs	12	
Shank height for square tool	mm(in)	20(0.8) BMT 55	
Shank diameter for boring bar	mm(in)	32(1.3) BMT 55	
Turret indexing time (adjacent tool)	sec	0.25/1.0	
Rotary tool spindle speed range:axis units	rpm	4000	
TAILSTOCK			
Tailstock movement type		-	SERVO
Quill inside taper	M.T	-	4
Quill Max.thrust	Kg-f	-	392
FEED RATE			
X/Z/Y axis rapid traverse	m(ft)/min	15/30/7.5(49.2/98.4/24.6)	
MOTORS			
X/Z/Y axis motor	KW(HP)	1.6(2.1)	
MACHINE SIZE			
Total machine weight	kg	4600	
Height of machine (H)	mm(in)	2000(78.7)	
Floor space (LXW)	mm(in)	3014x2060(118.6x81.1)	
Power requirement	KVA	40	30
Controller	FANUC	31 i	

*AVAILABLE CONTROLLER:SIEMENS/FAGOR

STANDARD ACCESSORIES

- RS232 interface
- Fully enclosure guarding
- Work light
- Metric disc
- Leveling screws and pads
- Maintenance tool box
- Buzzer
- 3" jaw open center chuck
- Foot peddle switch
- Wide angle v-belt
- Bullet proof glass
- Spindle side coolant nozzle
- C axis

OPTIONAL ACCESSORIES

- Tool setter
- Parts catcher
- Alarm lamp
- Bar feeder
- Auto door
- Tool tip air blow nozzles
- High pressure coolant
- Collet chuck
- Oil mist collector
- Linear scales
- Chuck with high / low pressure
- Oil skimmer
- Transformer
- Air conditioner in cabinet
- Chip conveyor outside machine
- Chip bucket