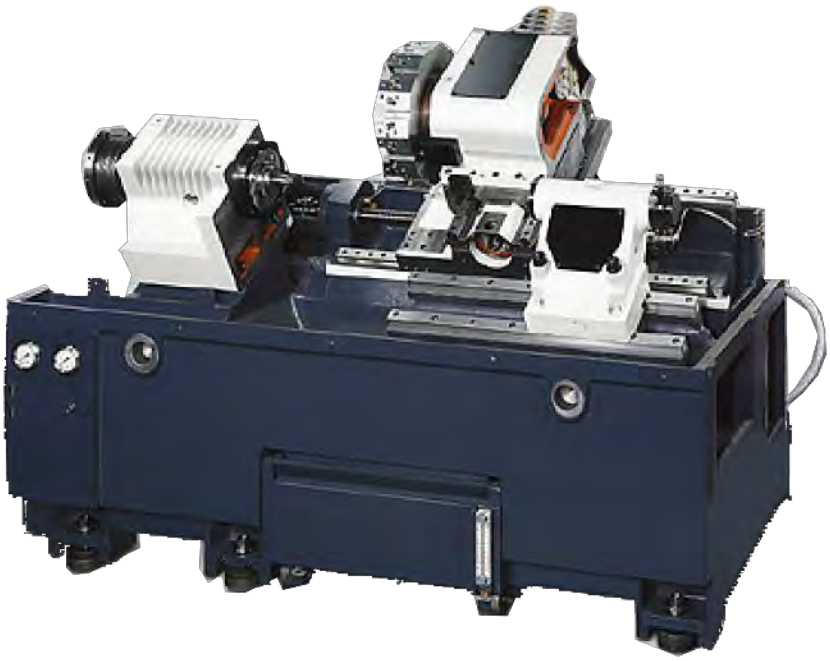
NEX-105

Horizontal Turning Center Specifications

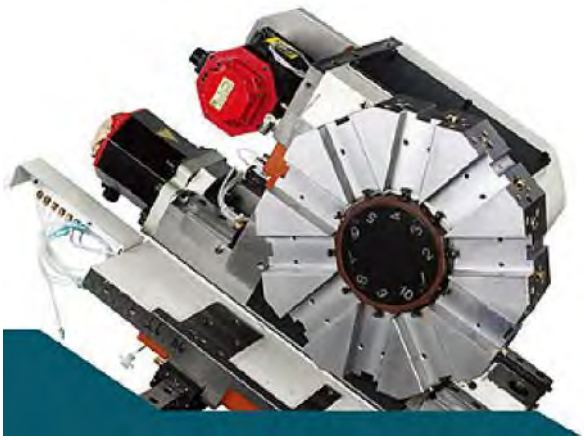
All specifications are subject to change without prior notice
Verification of technical changes may be confirmed after receipt of order

NEX-105

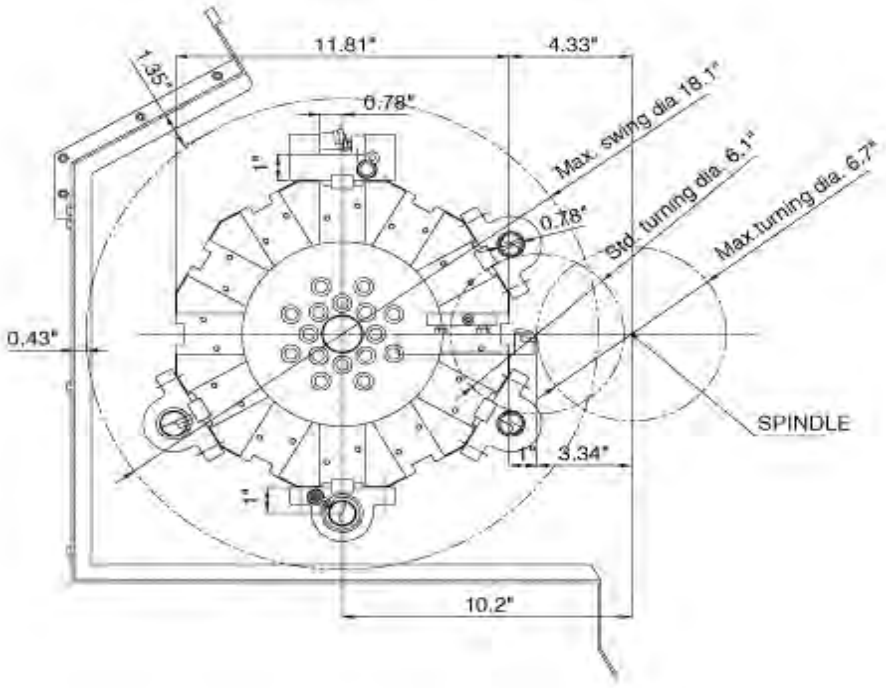
The heavy duty one-piece slant bed machine base features an extremely rigid structure with a best in class Linear Roller Bearing Guideways, a design promoting the highest levels of machining accuracy to compliment high speed production machining.

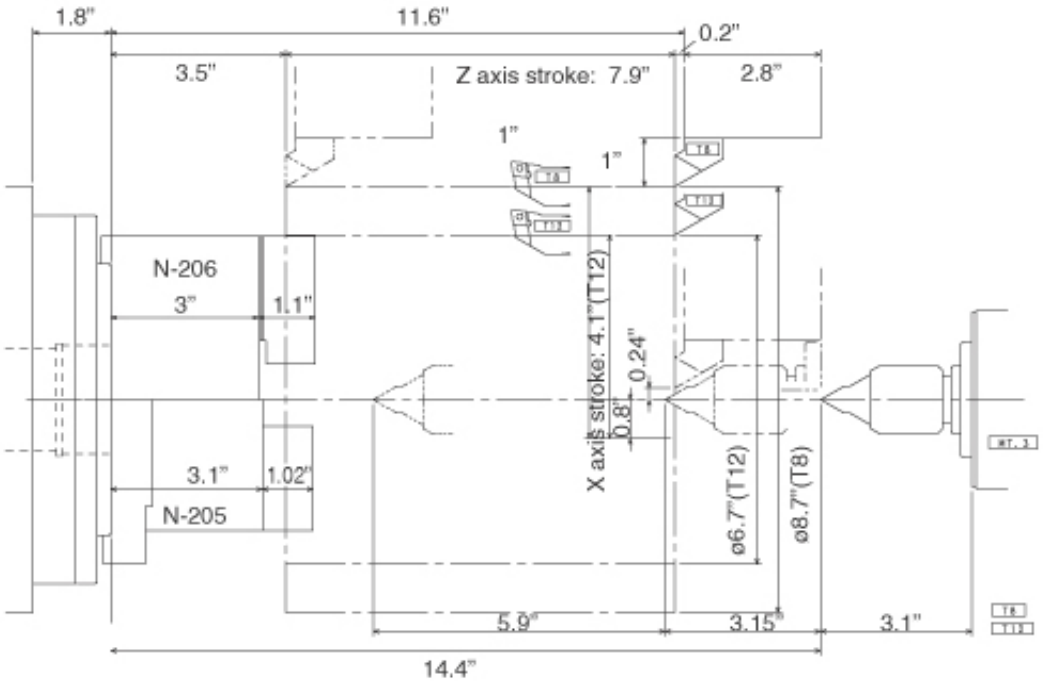


The turret is designed for extreme rigidity with its wide and heavy build, heavy duty oversized couplings and enhanced clamping pressure.



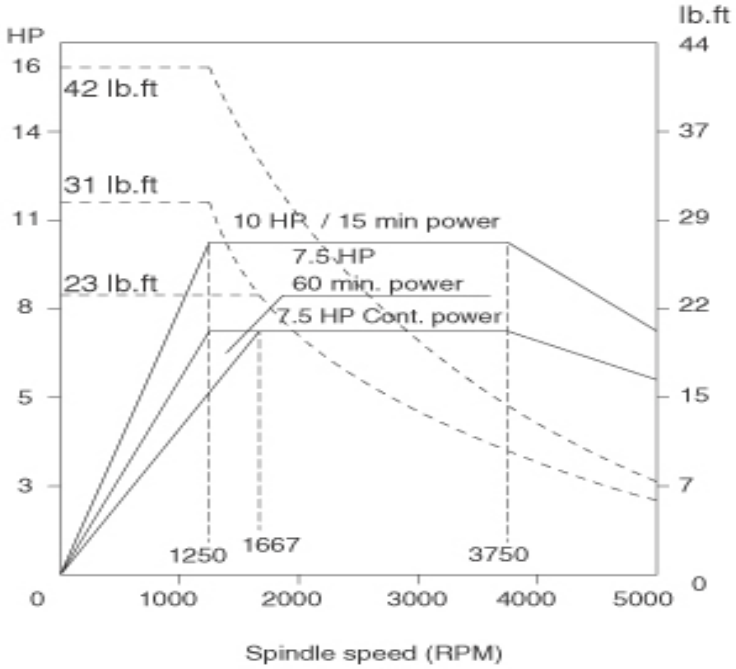
Interference Diagram | Working Range



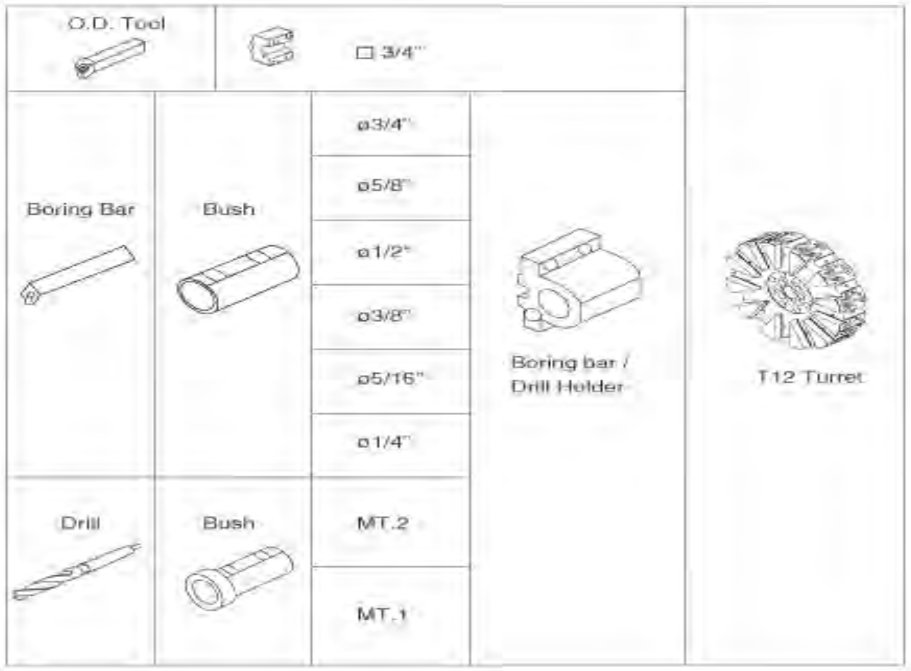


Spindle Output Diagram

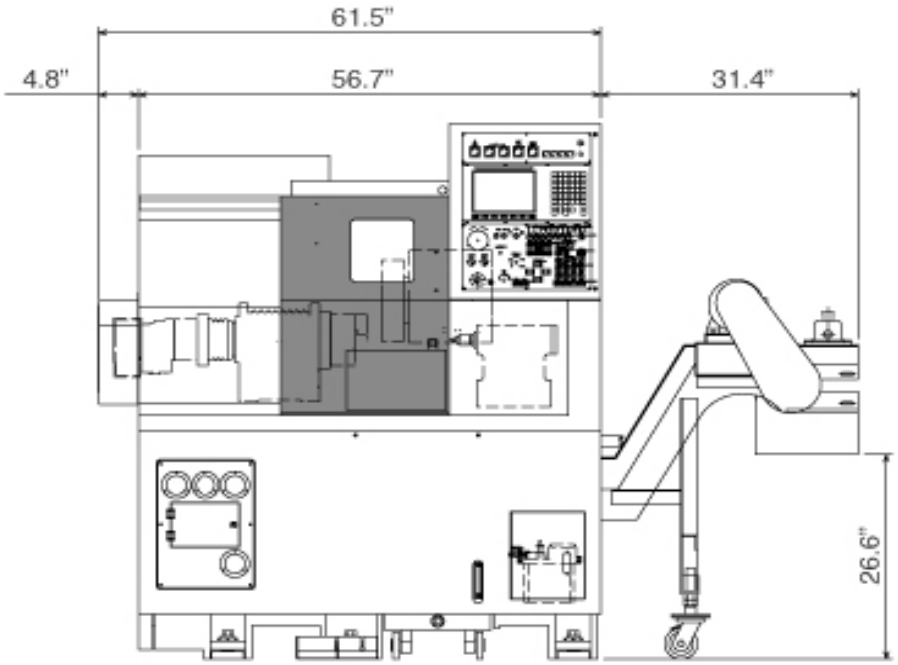
Powered by FANUC

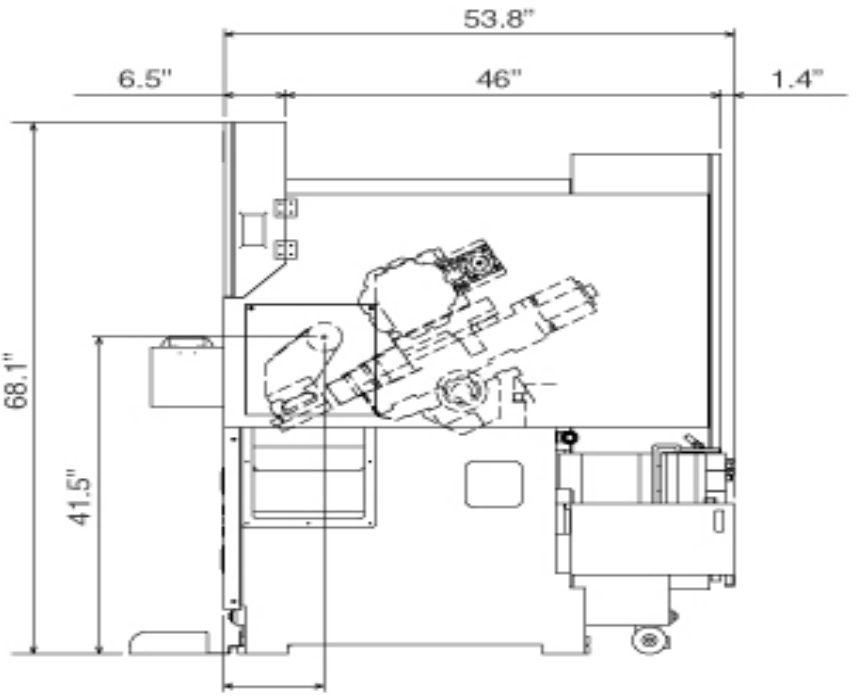


Tooling System



Machine Dimensions





Designed and built by Takisawa Taiwan Technology Co., LTD in Taiwan, this CNC turning center is sold and serviced by JTEKT Toyoda Americas Corporation and our exclusive distribution partners.

Machine Specifications	
Capacity	
Swing Over Bed	400 mm (15.7")
Swing over Cross Slide	280 mm (11")
Distance Between Center	360 mm (14.15")
Standard Chuck Diameter	152 mm (6")
Max. Turning Length	170 mm (6.7")
Max. Turning Diameter	185 mm (7.3")
Bar Capacity	42 mm (1.7")
Travel	
X Axis Stroke	104 mm (4.1")
Z Axis Stroke	200 mm (7.9")
Spindle	
Max. Spindle Speed	6000 RPM
Spindle Nose	FLAT140
Spindle Thru-Hole Diameter	53 mm (2.1”)
Spindle Bearing Diameter	80 mm (3.1”)
Spindle Motor	7.5 / 5.5 Kw (10 / 7.5 HP)
Turret	
Type Of Turret	12 stations
O.D. Tool Shank	3/4” Square
Dia. of Boring Bar Holder	1”
Time Of Tool Change	0.6 secs.
Tailstock	
Stroke Of Tailstock	150 mm (5.9”)
Stroke Of Tailstock's Shaft	80 mm (3.1”)
Taper Of Tailstock	MT 3
Tailstock's Shaft Hole Dia.	55 mm (2.2”)

Machine Specifications	
Rapid Feeds	
X Axis	20 m/min (787 ipm)
Z Axis	20 m/min (787 ipm)
Jog Feed Rate	
X Axis	0-1.27 m/min (0-50 ipm)
Z Axis	0-1.27 m/min (0-50 ipm)
Servo Motors	
X Axis	1.2 Kw (1.6 HP)
Z Axis	1.2 Kw (1.6 HP)
Power Requirement	
Electrical	16 KVA
Fluid Supply Systems	
Coolant Tank Capacity	120 l (32 gal)
Coolant Pump Power	0.4 Kw (0.5 HP)
Hydraulic Supply	26.8 l (7 gal)
Hydraulic Pump Power	1.1 Kw (1.5 HP)
Dimensions	
Machine Length	1,562 mm (61.5”)
Machine Width	1,366 mm (53.8”)
Machine Height	1,730 mm (68.1”)
Weight of Machine	2,656 Kg (5843 lbs)

Standard Equipment

- Fanuc 0i-T Mate Control
- Fanuc Motors
- 12 Station Servo Turret
- 6” Hydraulic Power Chuck
- Parts Catcher
- Chip Conveyor - Side Discharge
- G54-G59 Workpiece Coordinate System
- Chuck Foot Switch
- 1/2 HP Coolant Pump
- Halogen Work Light
- 3-Color Operation Status Light
- Auto Lubrication System
- One(1) set Leveling Pads
- One(1) set of Adjusting Tools and Tool Box
- Manuals: Instructional Manual, Parts List, Electrical Diagram

FANUC 0i-Mate TD CONTROL SPECIFICATIONS

CONTROL	1-1	SIMULTANEOUSLY CONTOURING CONTROLLED 2 AXIS
	1-2	LEAST INPUT INCREMENT: 0.001MM/0.0001 INCH
	1-3	LEAST COMMAND INCREMENT: 0.001MM/0.0001 INCH
FEED	2-1	FEEDRATE OVERRIDE: 0.254%
	2-2	DWELL: G04
	2-3	ORIGINAL POINT RETURN: G27, G28, G30
	2-4	MANUAL HANDLE FEED RATE: 0.001/0.01/0.1MM
	2-5	DRY RUN
	2-6	RAPID TRAVERSE OVERRIDE: F0, 25%, 50%, 100%
	2-7	FEED PER MINUTE/FEED PER REVOLUTION:G98, G99
TOOL FUNCTION	3-1	TOOL NUMBER DISPLAY
	3-2	TOOL NOSE RADIUS COMPENSATION
	3-3	TOOL OFFSET PAIRS: 64 PAIRS
	3-4	TOOL OFFSET
PROGRAMMING FUNCTION	4-1	ABSOLUTE/INCREMENTAL PROGRAMMING
	4-2	MULTIPLE REPETITIVE CYCLE: G70~G76
	4-3	CANNED CYCLES: G90, G92, G94
	4-4	DECIMAL POINT INPUT
	4-5	INCH/METRIC CONVERSION
	4-6	CHAMFERING/CORNER R
	4-7	CIRCULAR INTERPOLATION BY R PROGRAMMING
	4-8	SUB-PROGRAM CALL
	4-9	COORDINATE SYSTEM SETTING
	4-10	MANUAL GUIDE 0i
	4-11	WORK PIECE COORDINATE SYSTEM G52—G59
	4-12	CONSTANT SURFACE SPEED CONTROL
	4-13	AUXILIARY FUNCTION

FANUC 0i-Mate TD CONTROL SPECIFICATIONS

PROGRAM FUNCTION	5-1	INPUT CODE: EIA/ISO AUTOMATIC RECOGNITION
	5-2	INPUT/OUTPUT INTERFACE: RS 232C
	5-3	PART PROGRAM STORAGE LENGTH: 320M
	5-4	NUMBER OF REGISTERABLE PROGRAMS: 400
	5-5	SEARCHING FUNCTION
	5-6	LABEL SKIP
	5-7	PARITY CHECK
	5-8	OPTIONAL BLOCK SKIP
OTHER FUNCTION	6-1	MDI/CRT UNIT: 8.4 LCD COLLOR
	6-2	STORED STROKE CHECK
	6-3	BACKGROUND EDITING
	6-4	HELP FUNCTION
	6-5	LOAD METER
	6-6	SELF-DIAGNOSIS FUNCTION
	6-7	1’st SPINDLE ORIENTATION
	6-8	LOAD INSPECTION FUNCTION
	6-9	SAFETY CLUTCH FOR CRASH PROTECTING