



AERO

Aero Turn

BT-380

CNC Turning Center

With 10" Chuck & Fanuc 0i-Tc Control

STANDARD FEATURES

POWERFUL 30 HP SPINDLE OUTPUT
3,500 RPM MAXIMUM SPINDLE SPEED
10" HYDRAULIC CHUCK, 3.05" BAR CAPACITY
493 FT-LBS. OF TORQUE @ 195 RPM (30 MINUTE RATING)
RIGID ONE PIECE 30° SLANT BED
PRECISION HARDENED & GROUND BALLSCREWS
HARDENED & GROUND BOXWAY CONSTRUCTION
HEAT EXCHANGER FOR ELECTRICAL CABINET
AUTOMATIC LUBRICATION SYSTEM/ FLOW ALARMS
FLUORESCENT WORK LAMP
HIGH QUALITY & RUGGED MEEHANITE® CASTINGS
45 GAL. HIGH CAPACITY COOLANT TANK
SET OF HARD & SOFT JAWS
MT-5 LIVE CENTER

FAST 12 POSITION SERVO TURRET
NON-STOP BI-DIRECTIONAL TOOL INDEXING
HYDRAULIC CLAMPING/ CURVIC COUPLING
TAILSTOCK ^{W/} PROGRAMMABLE QUILL
ABSOLUTE POSITIONING ENCODERS
AC DIGITAL SERVO & SPINDLE DRIVES
8.4" LCD COLOR MONITOR
TOOL PATH GRAPHICS/ MAUAL GUIDE I
MACRO B & HIGH SPEED SKIP FUNCTION
640 METERS MEMORY
PCMCIA EXPANSION SLOT/ RS 232 INTERFACE
SWIVEL DESIGNED CONTROL PANEL
AIR GUN

BASIC SPECIFICATIONS

SPINDLE

Horse Power
Spindle Nose
Through Hole / Bar Capacity
Spindle Speed Range (10" Chuck)

BT-380

30 HP (30 Min.)
A2-8
3.62"/ 3.05"
3,500 RPM

TRAVEL

X Axis Travel (Maximum Cross Travel)
Z Axis Travel
Swing Over Bed
Swing Over Carriage
Max. Turning Diameter
Distance Between Center
Max. Turning Length

9.05"
21.65"/31.5"/41.4"
23.62"
15.74"
16.14"
21.46"
19.68"/29.57"/39.4"

FEED

X-Axis Rapid
Z-Axis Rapid

788 IPM
945 IPM

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TURRET

Number of Tools	12
Tool Size (O.D. / I.D.)	□1.0" / Ø1.0"
Tooling	4 ea. 1.5" ID Tool Holders, 2 ea. CTT(coolant thru) 2 ea. Face Tool Holders 1 set of boring sleeves

TAIL STOCK

Quill Diameter	3.35"
Max. Quill Travel	3.94"
Quill Taper	MT-#5
Tailstock Travel	22.83"/32.7"/42.5"

GENERAL

Machine Net Weight	11,000 lbs.
Shipping Weight	12,200 lbs.
Power Consumption	35 kVA
Floor Spacing (W x D x H)	108"+ 34" x 68" x 73"

DETAILED SPECIFICATIONS

WORKING CAPACITY

Swing over Bed	23.62"
Swing over Carriage	15.74"
Maximum Turning Diameter	16.14"
Bar Working Capacity	Ø2.55"
Distance Between Center	21.46"
Max. Turning Length	19.68"

SPINDLE

Spindle Motor	FANUC ALPHA P30 Digital Spindle Motor
Horsepower	30 HP (30 min.)
Spindle Drive	
Chuck Diameter	10"
Spindle Nose	A2-8
Spindle thru-hole Diameter	Ø 3.62"
Bar Capacity	3.05"
RPM Range Low/High	3500 rpm
Spindle Center Height from Floor	38.9"
Maximum Torque	493 ft-lbs.

X AXIS

Ballscrew: Diameter	Ø 1.26" / 32mm
Class	JIS C3
Pitch	0.472" / 12mm
Feed Rate: Rapid Traverse	787 ipm
Travel:	9.05"
Motor Horse Power	4
Maximum Axial Thrust Force	6,980 ft. lbs.



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Z AXIS

Ballscrew: Diameter	Ø 1.57" / 40mm
Class	JIS C3
Pitch	0.630" / 16mm
Feed Rate: Rapid Traverse	945 ipm
Travel:	21.65"
Motor Horse Power	4
Maximum Axial Thrust Force	5,817 ft. lbs.

DETAILED SPECIFICATIONS

BT-380

TURRET

Number of Tools	12
Turret Type	Servo
Shank Height for Square Tool	1"
Boring Bar Holder Diameter	Ø 1.5"
Turret Maximum Swing Diameter	22.8"
Turret Holding Force	7,800 lbs
Tool Indexing Time (adj. Tool)	.1 sec
Tooling	(4)ea. ID Tool Holders (2) ID w/ CTT 1 set of boring sleeves 2 ea. Face / ID Holders

TAILSTOCK

Quill Diameter	3.35"
Quill Taper	MT # 5
Quill Stroke	3.94"
Tailstock Stroke	22.83"

CAPACITY

Hydraulics Tank Capacity	26.4 gal
Lubrication Capacity	.53 gal
Coolant tank capacity	45 gal

DIMENSIONS

Floor Space w/ Chip Conveyor (W x D x H)	108" + 34" x 68" x 73"
Shipping Dimensions (W x D x H)	

WEIGHT

Net (w/ chip conveyor)	11,000 lbs.
Shipping	12,200 lbs.

POWER REQUIREMENTS

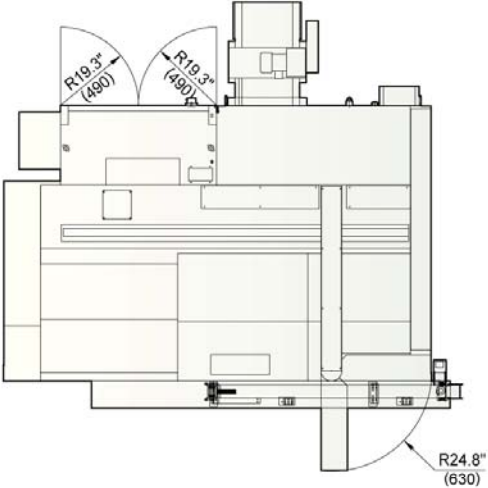
220 Volt AC 3 Phase / 66 AMPS / 25 KVA



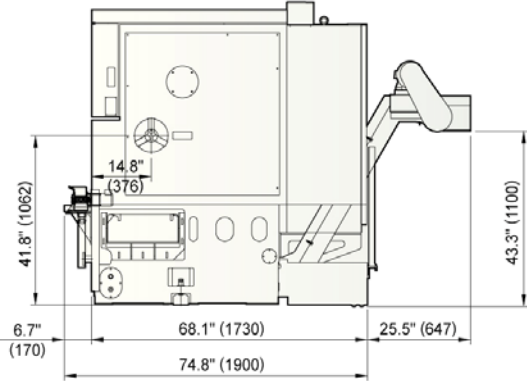
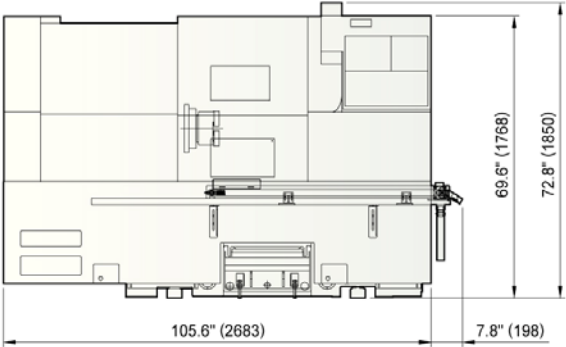
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MACHINE DIMENSIONS



UNIT: Inch (mm)



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Fanuc 0i-TC Standard Features:

- Controlled Path, 1 path
- Controlled Axis, 2 axis
- Simultaneously Control Axes, maximum 4 axis
- Axis Name, base axis, x, z, option y, a, b, c
- Least Input Increment, 0.001mm, 0.001°, 0.001"
- Servo HRV Control, HRV3
- Inch/mm Change, G20, G21
- Machine Lock
- Positions, G00
- Skip Function, G31
- Reference Position Return, G28
- Return Check, G27
- Feed Override, 0-254%
- JOG Override, 0-655.34%
- Rapid Traverse Override, F0,25,50,100%
- Cutting Feedrate Clamp
- TAPE Code, EIA RS244/ISO840
- Plane Select, G17, G18, G19
- Workpiece Coordinate System, G52-G59
- Programming Data Input, G10
- Multiple Repetitive Cycle 2, Pocket Profile
- Manual Guide 0i (8.4" Color LCD)
- Conversational Programming with Graphic Function
- G Code System, A/B/C
- Custom Macro B
- Chamfering/Corner R
- Canned Cycles
- External Workpiece Number Search, 9999
- External Tool Offset
- External Message
- Reader/Puncher Interface, Ch1, Ch2
- Cannel Cycles for Drilling
- Sub Program Call
- Multiple Repetitive Cycle
- Manual Absolute On and Off
- Part Program Storage, 640m
- Registerable Programs, 400
- Program Protect
- Background Editing
- Tool Offset Pars, ± 6 digits 64
- Tool Offset
- Tool Life Management
- Tool Offset Value Counter Input
- Spindle Override, 0-254%
- 1st Spindle Orientation
- Rigid Tapping
- Spindle Positioning
- Spindle Synchronous Control
- Actual Spindle Speed Output
- Multiple Command of Auxiliary Function
- Dynamic Graphic Display
- Graphic Function
- Data Protection Key, 4 types
- Program Display, 31 characters
- Parameter Setting and Display
- Alarm Display

Fanuc Oi-TC Optional Features:

- Angular Axis Control
- Macro Executor, 512KB, 2MB, 4MB
- Manual Guide I (10.4" color LCD required)
Servo Guide