

Technical Specification

DX 150

Capacity

Max. Swing Over Bed	mm	375
Maximum Turning Length	mm	350*
Std. Turning Dia.	mm	150
Max. Turning Dia.	mm	250

Slides

Cross(X-Axis)Travel	mm	150
Longitudinal (Z axis) Travel	mm	350
Rapid Feed (X & Z axis)	m/min	24

Main Spindle

Spindle Motor Power (S6-40% / S1)	kW	10.5 / 7
Spindle Bore	mm	50
Spindle Nose		A ₅
Max Bar Capacity	mm	38
Spindle speed Range	rpm	50-4500
Full Power speed Range	rpm	1333-4000

Turret (Servo)

Number of Station		8
Max Boring Bar Capacity	mm	32
Tool Size (Cross Sectional)	mm	20x20

Tailstock

Quill Diameter	mm	75
Quill Stroke	mm	100
Thrust (adjustable)	Kgf(Max)	300

Accuracy (As per VDI / DGQ 3441)

Positioning Uncertainty (P)	mm	0.007
Repeatability (Ps medium)	mm	0.005

Other

Weight (Approx.)	Kg	3000
Dimension (Approx.) (L x W x H)	mm	1950x1375x1950

* Depends on Work holding device, Tooling & Workpiece

Note : • All above information is subject to change arising out of continuous product improvement. • The description 'standard accessories / feature' conforms to its list; not the photo of machine shown in the catalogue.

JYOTI CNC AUTOMATION LTD.

G-506, Lodhika G.I.D.C., Village : Metoda, Dist : Rajkot - 360 021, Gujarat (INDIA).
 Phone : +91-2827-306100/287081/287082,
 Fax : +91-2827-306161/287811, E-mail : info@jyoti.co.in, sales@jyoti.co.in

Controller

The CNC System offered with the DX series machine is the latest SIEMENS SINUMERIK 828D Basic T digital control system. FANUC Oi Mate TD latest digital control system is also available as option.

- Simultaneous 4 Axes Control
- 8.4" TFT Color Screen
- Real Time Simulation
- PLC Ladder Display for Diagnostic
- Spindle Load meter
- Background Editing
- 1 MB Memory Auto Referencing
- Oriented Spindle Stop
- Inch/ Metric Switchable
- Online Help Multiple Repetitive Cycles
- Thread Cutting Cycles
- Constant Surface Speed Control
- Rigid Tapping Pitch Error Compensation
- Tool Nose Radius Compensation
- Backlash Compensation
- Direct Drawing Dimension
- G-Code Compatibility
- Inbuilt Calculator
- Electronic Handwheel
- PCMCIA Card Slot
- USB Port

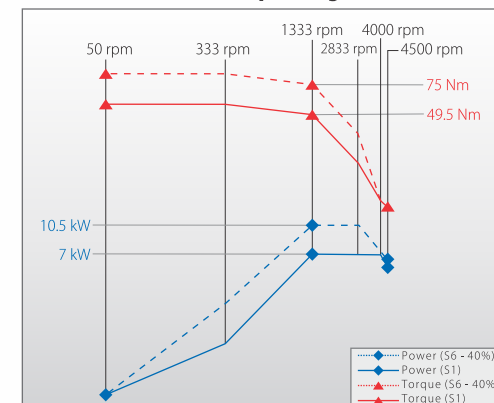
Standard Features

- AC Spindle Drive
- AC SERVO Digital Drive
- L. M. Guideways
- Hyd. Chucking
- 8 Station Bi-directional Servo Turret
- Auto & Manual Coolant System
- Centralised & Programmable Lubrication
- Laser Calibrated Axis for highly precise positioning Accuracy and Repeatability
- Electricals with Quality Devices & Panel with A. C.
- Tailstock with hyd. quill

Possible Options

- Chip Conveyor (Rear or Front)
- Bar Feeder
- Bar Puller
- Part Catcher
- Tool Life Management
- Hyd. Collet Chuck
- Auto Door
- Auto Loader
- Automatic Tool Setting
- Fully tooled up solution to meet customer needs
- Easy SMS System (Siemens)
- CNC System (Fanuc)

Power-Torque Diagram



DX 150 CNC Turning Center



DX 150

CNC Turning Center

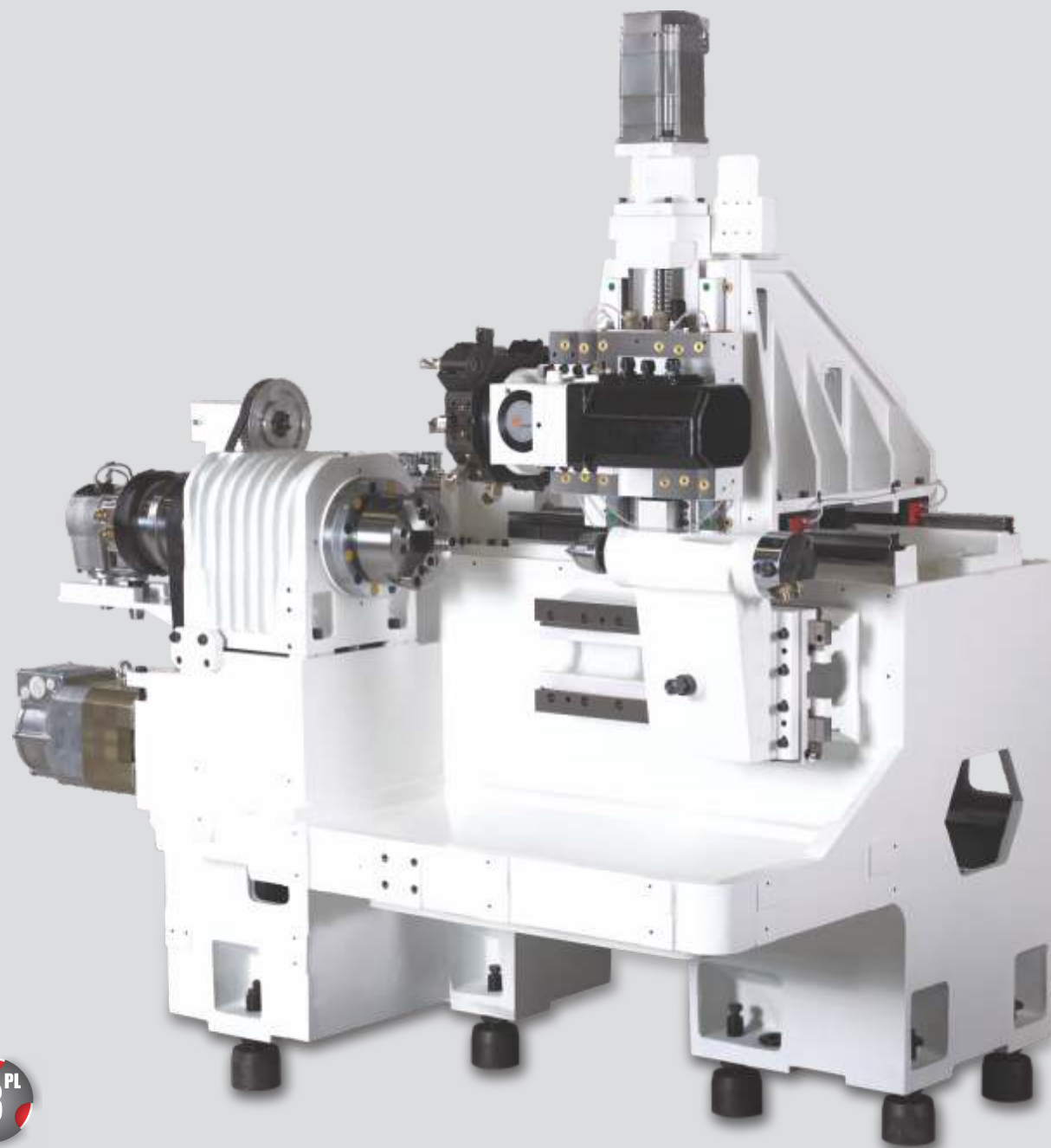
Overview

A turning machine with a cutting edge technology and an neophilic design now opens up a new era for the Dry Machining Technology world. Specially conceptualized design keeps the machine at an angle of 90° so it can provide added advantages. One of the advantages allows vertical fall of chip and coolant, preventing any damages to linear motion guideways and ball screws, thus increasing overall machine life.

Structure

State of the Art 90° Vertical Monoblock structure is made out of FG 300 Grade Cast Iron using nobake method providing stability and least distortion enabling heavy cuts and faster production. The Z-Axis is moving on a well spaced High Precision Linear Motion Guide ways, High Precision Ball Screws and pre-tensioned Double Nut assembly Lubricated through a Centralized & Programmable Lubrication System. Axis Motors are directly coupled to the Ball screws through precision Bellow Coupling assembly for transmitting full power without transmission loss resulting optimum Tool Life.

- Compact Foot Print
- Allows Vertical chip and Coolant fall preventing any damages to Linear Motion Guideways & Ball Screws, thus increasing overall Machine Life
- Smooth Dry Machining

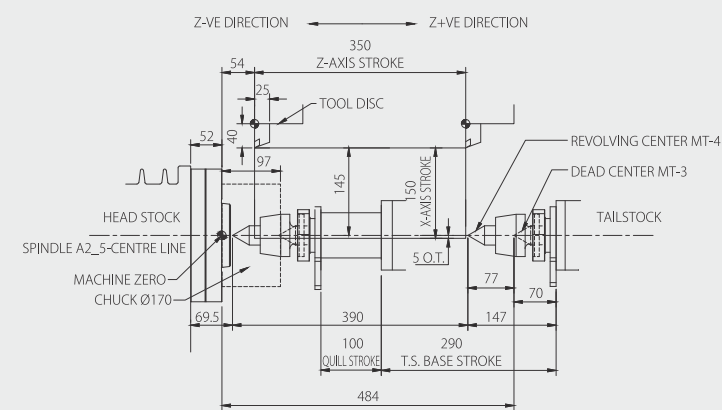


Head Stock & Spindle

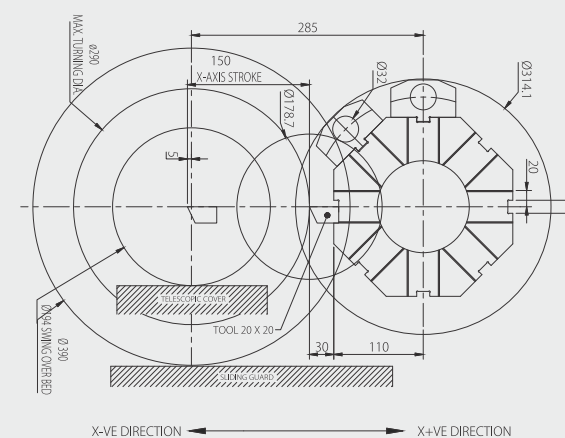
Head Stock Made out of closed grain FG 300 casting and is provided with fins for better heat dissipation.

The main Spindle is housed in a cartridge containing a match pair of three super precision angular contact bearings in front and a match pair of two super precision angular contact bearings at the rear, greased for life. The spindle is driven by toothed belt for optimum power transmission.

Machining Range Diagram For DX 150



Interference Diagram For DX 150



3 point leveling

Structural design followed with the concept of 3 point leveling provides it with higher base rigidity due to which twisting of bed is eliminated during actual working load conditions. Also this feature enables DX 150 to be installed and relocated quickly and easily.

Operator Panel

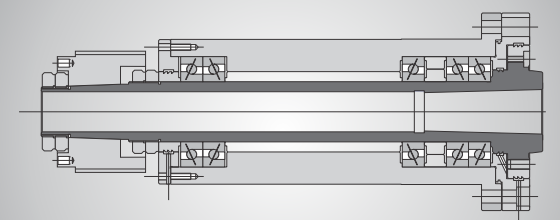
The newly designed Easy-to-Operate operator panel of the machine is made considering operator friendliness and TPM concept.

Tail Stock

Tail Stock is made out of closed grain FG 300 casting and the quill is hydraulically actuated through foot switch, provided with revolving center.

High Speed Servo Tool Turret

DX 150 machine is equipped with high speed and high precision Bi-directional Servo Turret with hydraulic clamping system achieved by 3-piece hirth coupling. Tool change time is just 0.5 second...



Spindle



Operator Panel



Tail Stock



High Speed Servo Tool Turret

