

DUGARD

Machine Tools That Create Solutions Since 1939

Dugard 400 Slant Bed High Precision CNC Lathe



Superb Performance, Maximum Stability, Maximum Reliability

Precision, Power and Capacity Make the Dugard 400 a Super Performer

A heavy duty CNC lathe with hardened slideways ideal for extra heavy duty cutting on large diameter workpieces at low speed

Equipped with the latest Fanuc Oi control with high resolution, colour LCD screen. The superior operational features of this control assure top machining performance

Designed with Big Capacity in Mind

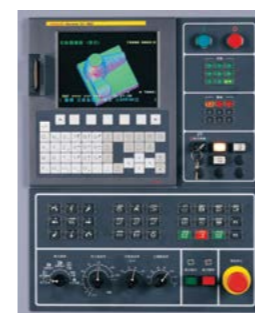
- Swing over bed at Ø770mm
- Swing over carriage at Ø550mm
- Maximum cutting diameter Ø486mm
- 45° slant bed
- High rigidity box ways
- 10 position hydraulic turret
- Spindle is driven through a ZF two speed maintenance free gear box
- Fanuc Oi control with LCD screen



State of the Art CNC Controls

Makes turning a fast and easy operation

Standard Control



Fanuc OiTD

- 8.4" TFT LCD colour monitor
- New D series high speed
- PC flash card storage
- Industry standard programming

Optional Control



Siemens 828D

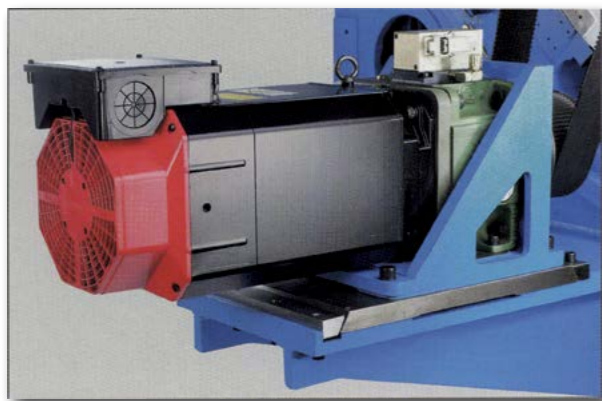
- 10.4" TFT LCD colour monitor
- Shopmill conversational programming
- Super high speed
- USB/PC card storage



Various interfaces for programme saving, loading and software updating including:

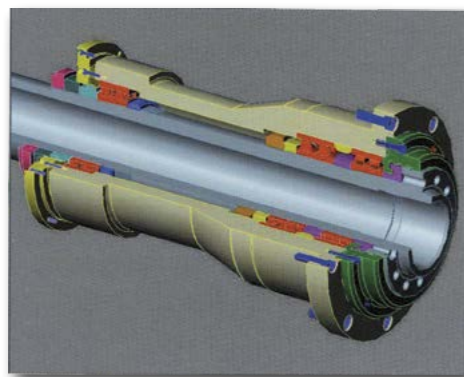


- CF memory card
- RS-232C
- Ethernet



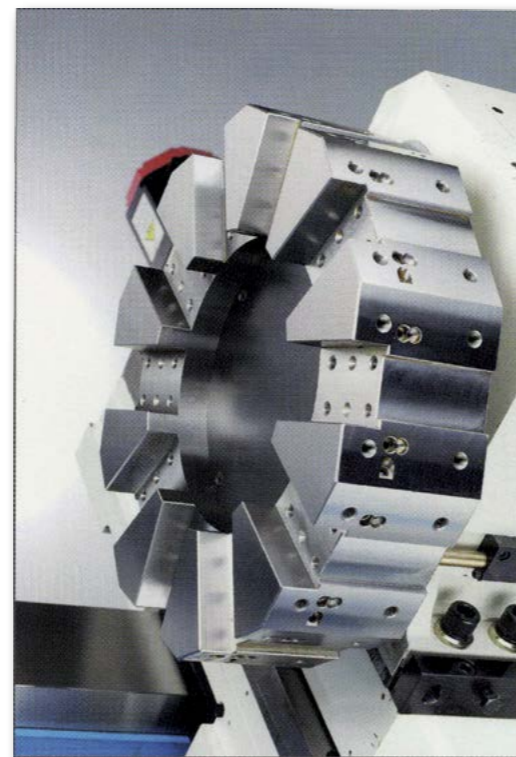
High Torque Spindle Drive System

- The spindle is driven through a two speed ZF gearbox providing high torque output at low speed 250rpm. This ensures that the machine has superb high cutting capability
- Top quality durable timing belt assures full power transmission without slippage. Externally mounted transmission mechanism features low noise, reduced heat transfer, excellent heat dissipation, easy adjustment and maintenance free operation



Rigid Spindle

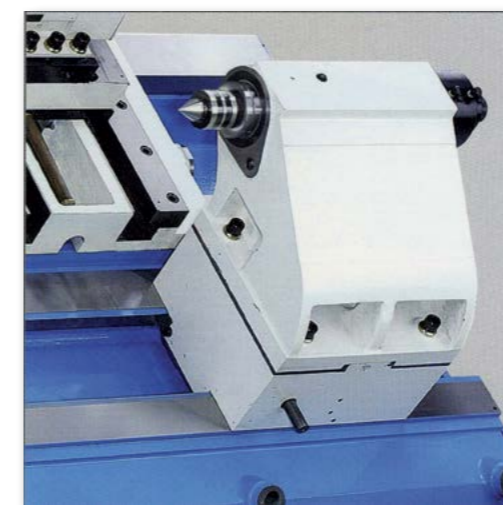
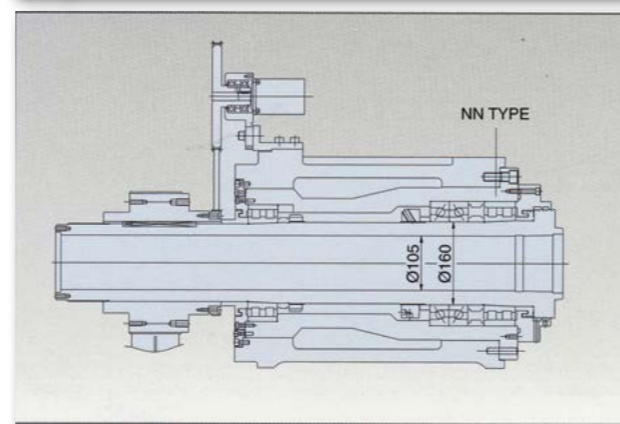
- Modular spindle structure. The bearing is supported by a sleeve, which provides superior accuracy and service life compared to conventional housing type



Powerful Turret

- The powerful hydraulic turret enhances cutting capacity. The rigid construction allows for the most rigorous cutting demands
- 12 position turret is optional

Spindle Structure

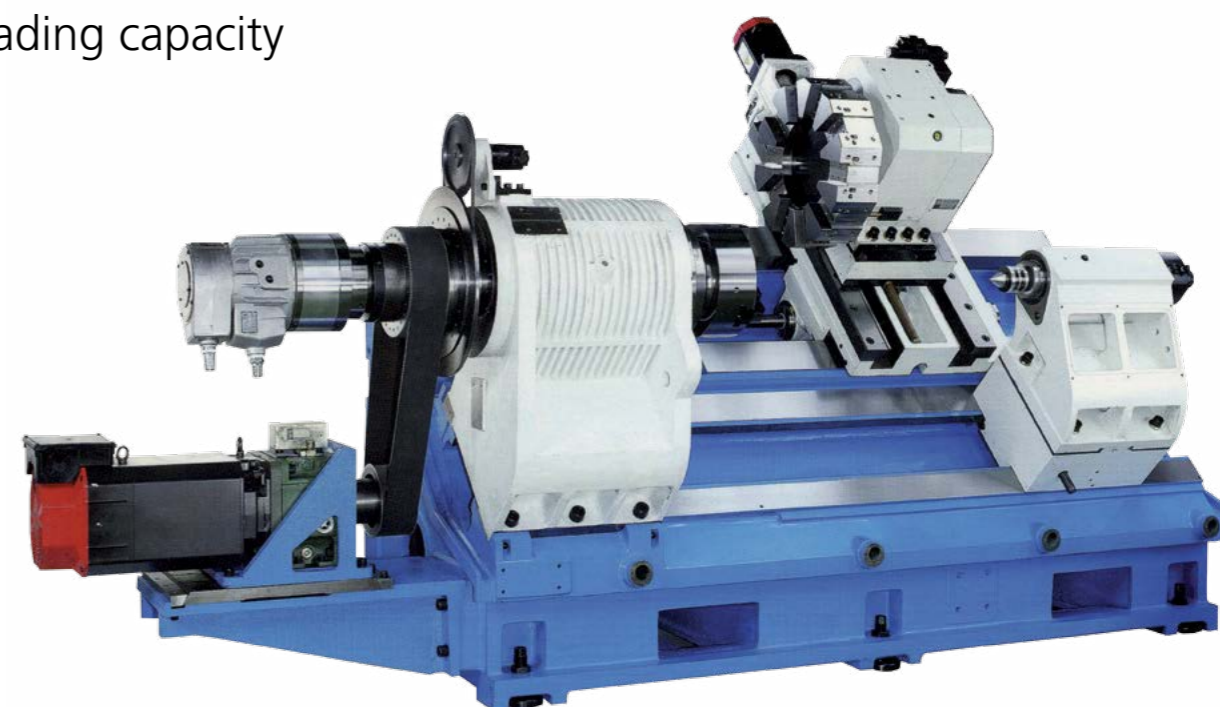


Programmable Tailstock

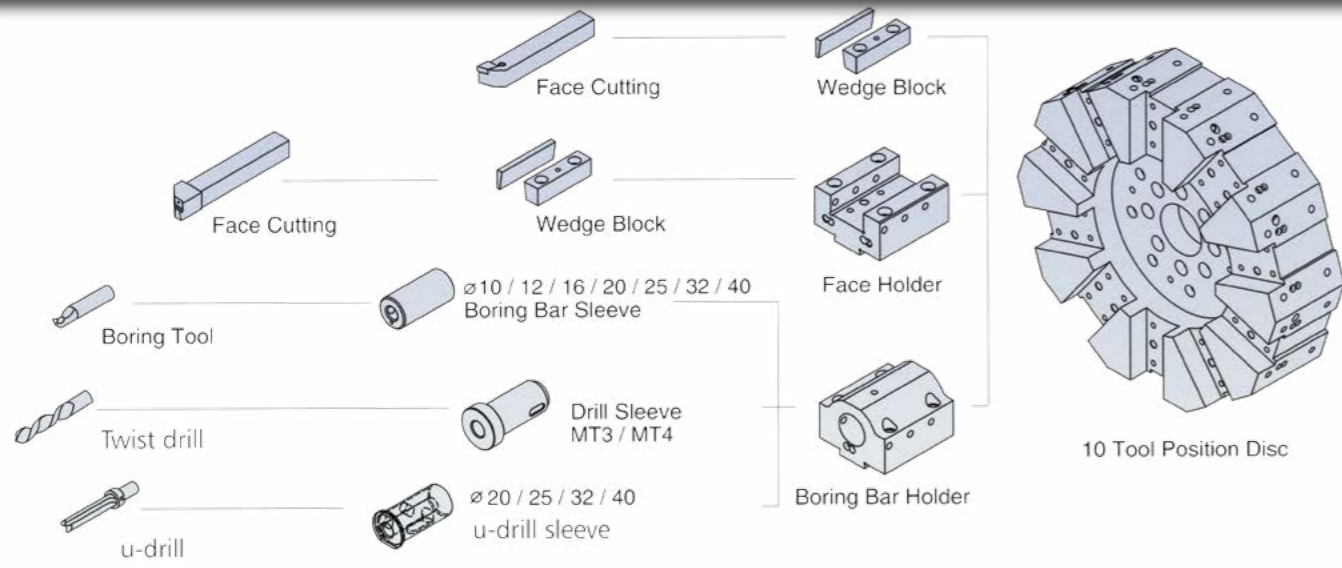
- Rigid construction of the tailstock body assures excellent damping capability
- Tailstock movement is controlled through Z axis saddle programmes
- Available with rotating quill for increased loading capacity

Optimum Rigidity and Stability Through Quality Construction

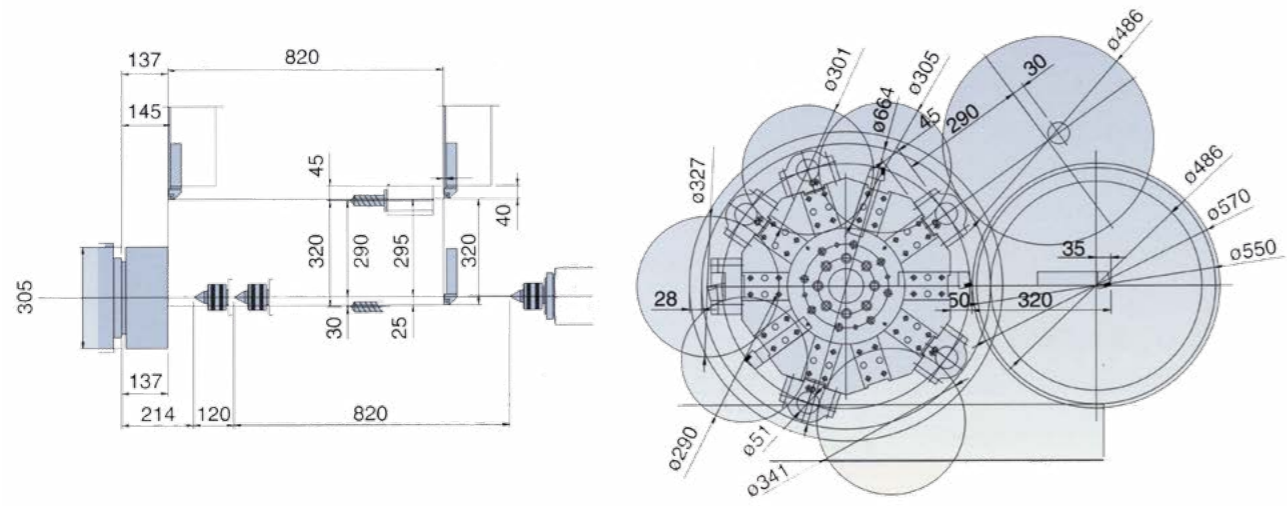
- Rigid box ways. Way surfaces are precision scraped with carefully designed oil grooves for outstanding slideway lubrication characteristics
- 45° slant bed is a box type one piece construction with low vibration properties for lifetime accuracy
- Structural parts are manufactured from high grade SG cast iron. Finite element analysis has been used to provide rib reinforcement which equips the machine with the best possible stability during heavy duty machining



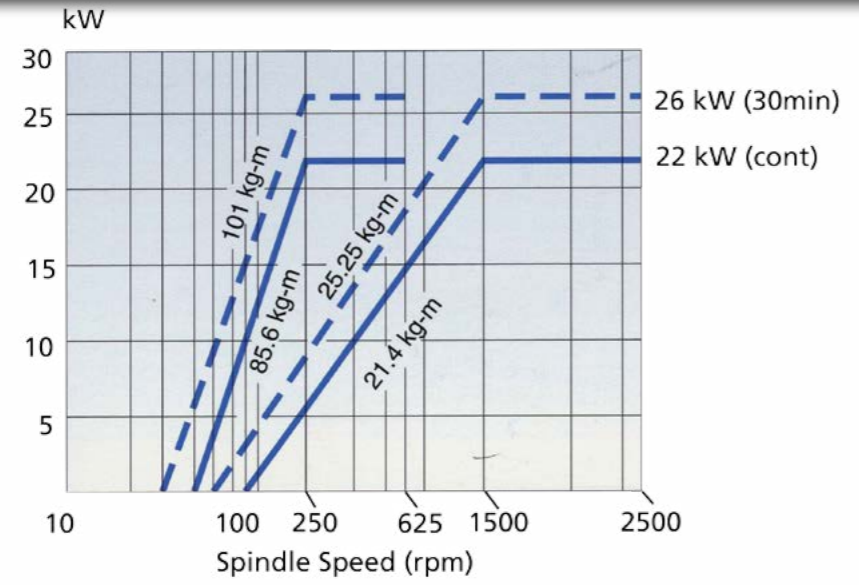
Tooling System



Working Capacity



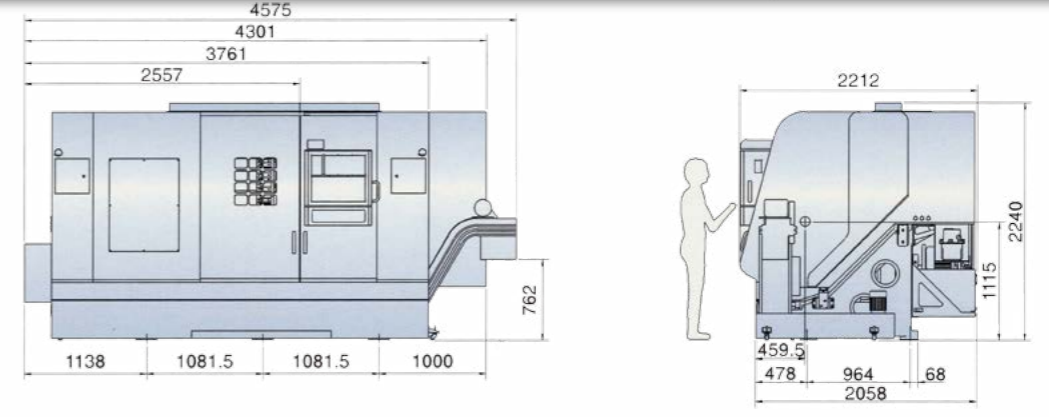
Spindle Motor



Specification	Dugard 400
Capacity	
Swing over bed	Ø770mm
Max turned diameter	Ø550mm
Max turned length	820mm
Distance between centres	1020mm
Headstock	
Spindle nose	ASA A2-8
Spindle speed (with 2 speed programmable gearbox)	30~2500rpm
Spindle power with Fanuc drive	26 kW AC
Chuck size	315mm (opt 381mm)
Bar capacity with 315mm chuck	91mm
Travels	
X axis	240mm
Z axis	820mm
Feedrates	
Rapid traverse X axis	12m/min
Rapid traverse Z axis	15m/min
Turret	
Type	hydraulic
Number of tools	10
Tool shank	□32 x 32mm
Boring bar size	Ø50mm
Index time (next tool)	0.7 sec
Index time (180°)	1.9 sec
Tailstock	
Tailstock body travel	820mm
Quill travel	120mm
Quill diameter	Ø110mm
Quill taper hole	MT - 4
Quill activation	hydraulic
Tailstock body positioning	auto
General Specifications	
Floor space	4575 x 2212mm
Net weight (approx)	9500kg

*Specifications are subject to change without prior notice

Machine Dimensions



Standard Accesories

- Boring bar bushes (7pcs) (Ø10, Ø12, Ø16, Ø20, Ø25, Ø32, Ø40) x OD 50
- Hydraulic 12 tool turret
- Through bore 12" hydraulic chuck
- Manual tool setting probe
- Programmable tailstock with MT no 5 quill
- Set of travelling bolts and pads
- End of programme light
- Grease lubrication
- Soft jaws 1 set
- Coolant system
- Swarf conveyor and bin
- Work light
- Tool kit

Optional Accesories

- Through bore 450mm hydraulic power chuck
- Extra hard/soft jaws
- Bar feed
- Bar feed interface
- High pressure coolant pump
- Foot pedal for tailstock
- Auto tool setting probe
- Hydraulic steady rest
- VDI turret and VDI tool holders
- Auto door

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