

# DUGARD

Machine Tools Since 1939

## Dugard 400 Slant Bed High Precision CNC Lathe



[www.dugard.com](http://www.dugard.com)

## Superb Performance, Maximum

### 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



## Stability, Maximum Reliability



### State of the Art CNC Controls

Makes turning a fast and easy operation

#### Standard Control



##### Fanuc 0iTD

- 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:

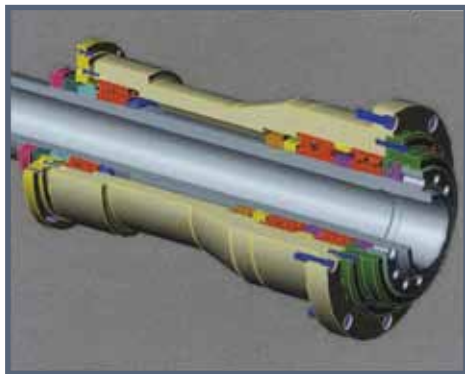


- CF memory card
- RS-232C
- Ethernet



## 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

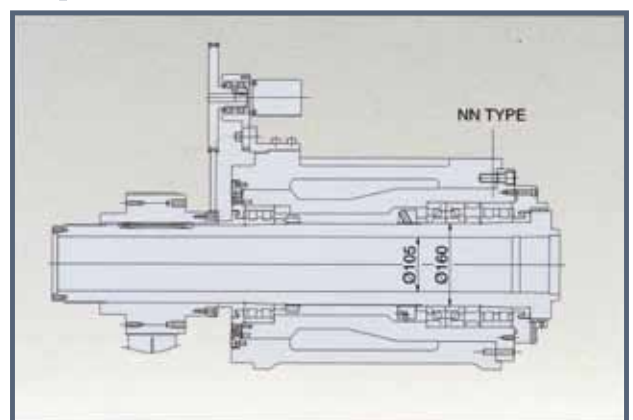
- Modular spindle structure. The bearing is supported by a sleeve, which provides superior accuracy and service life compared to conventional housing type



## 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



# Slant Bed CNC Lathe



## 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

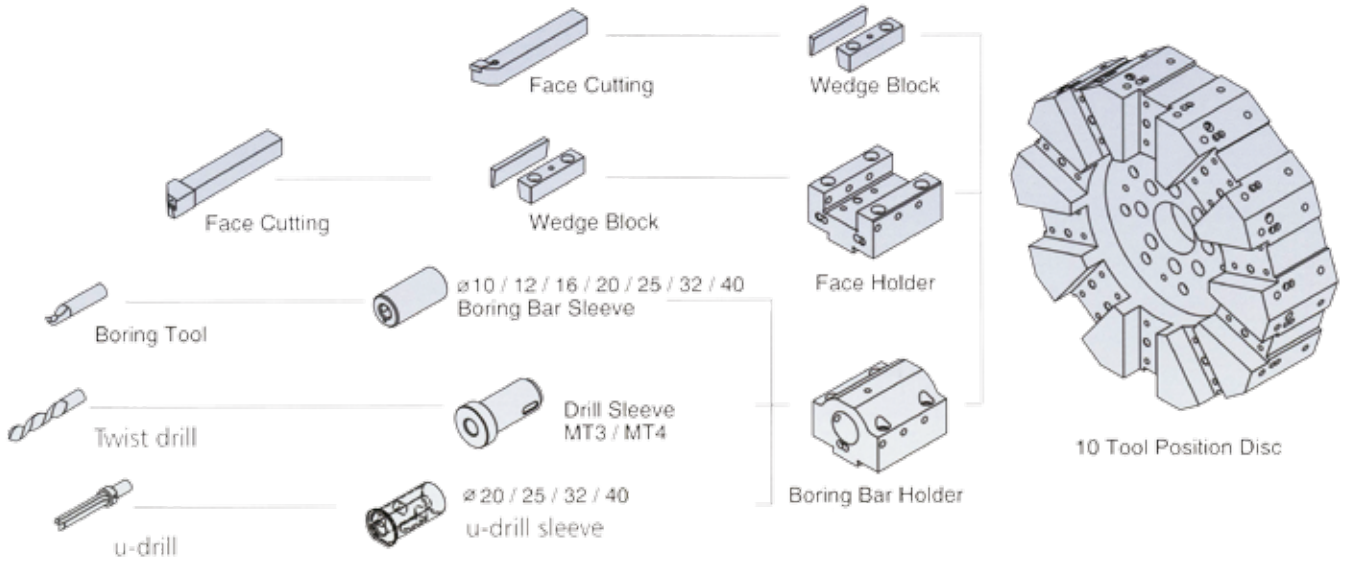
## Optimum Rigidity and Stability Through Quality Construction

- 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

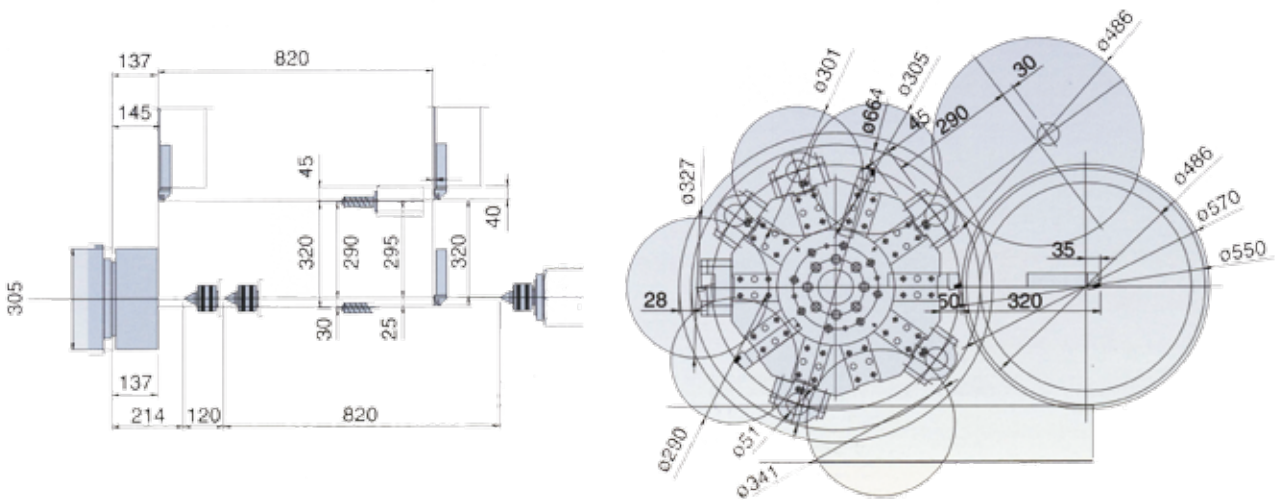


# Dugard 400

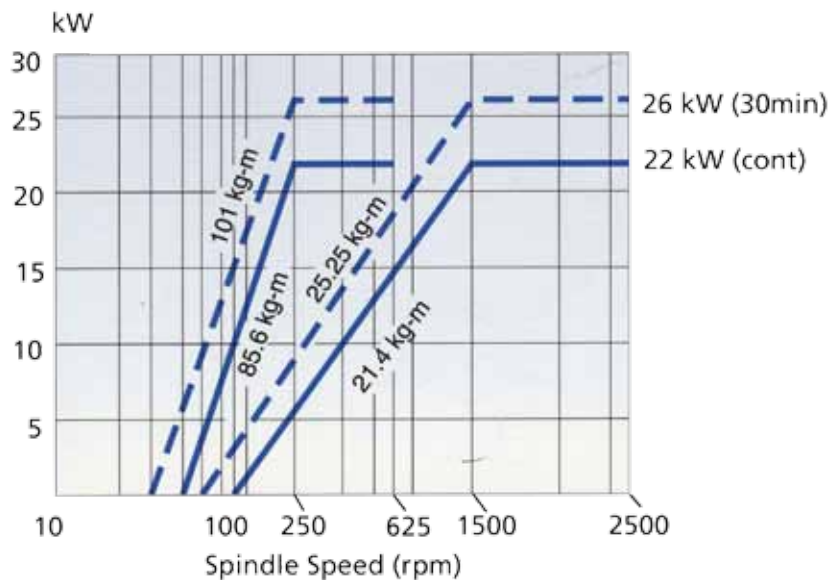
## Tooling System



## Working Capacity



## Spindle Motor



# Slant Bed CNC Lathe

Specification	Dugard 400
<b>Capacity</b>	
Swing over bed	Ø770mm
Max turned diameter	Ø550mm
Max turned length	820mm
Distance between centres	1020mm
<b>Headstock</b>	
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
<b>Travels</b>	
X axis	240mm
Z axis	820mm
<b>Feedrates</b>	
Rapid traverse X axis	12m/min
Rapid traverse Z axis	15m/min
<b>Turret</b>	
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
<b>Tailstock</b>	
Tailstock body travel	820mm
Quill travel	120mm
Quill diameter	Ø110mm
Quill taper hole	MT - 4
Quill activation	hydraulic
Tailstock body positioning	auto
<b>General Specifications</b>	
Floor space	4575 x 2212mm
Net weight (approx)	9500kg

\*Specifications are subject to change without prior notice

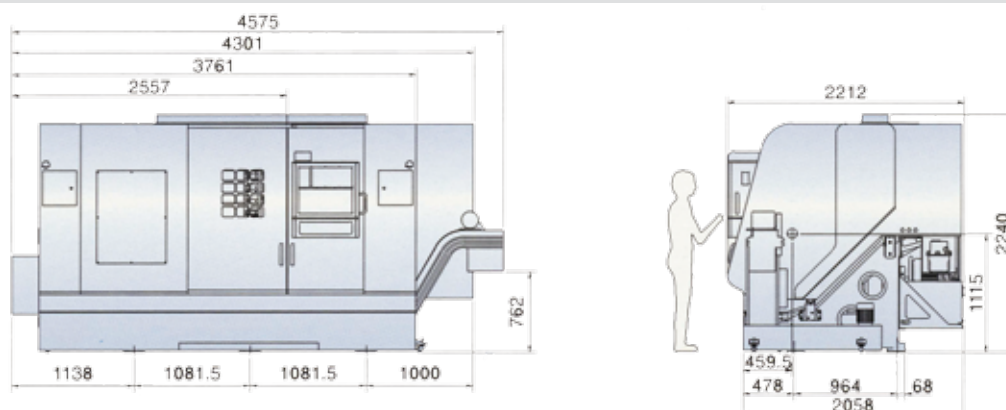
## Standard Accessories

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

## Optional Accessories

1. Through bore 450mm hydraulic power chuck
2. Extra hard/soft jaws
3. Bar feed
4. Bar feed interface
5. High pressure coolant pump
6. Foot pedal for tailstock
7. Auto tool setting probe
8. Hydraulic steady rest
9. VDI turret and VDI tool holders
10. Auto door

## Machine Dimensions



European headquarters for Dugard CNC Machine Tools

**DUGARD.com**

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