

DUGARD

Machine Tools Since 1939

Dugard 300 Slant Bed High Precision CNC Lathe



www.dugard.com

Dugard 300 Series

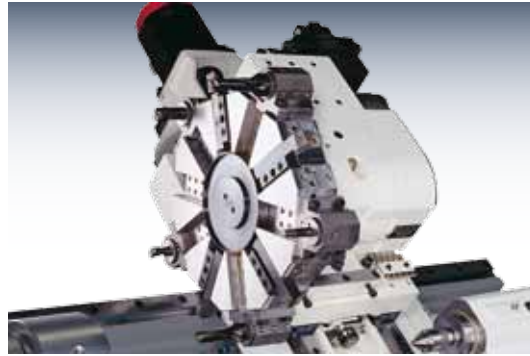
Outstanding features that guarantee faster, more accurate turning and lower production costs



Heavy Duty Precision Spindle

Dugard 300P / 300MC

The spindle is supported by twin track high rigidity NN type ball bearings and large diameter high precision angular contact ball bearings making it ideal for heavy duty machining at low speeds



12 Tool Hydraulic Cam Turret

Dugard 300P / 300MC

The compactly constructed hydraulic cam operated turret has a loading capacity of 12 tools. An extremely fast tool change of 0.3 seconds tool to tool. Outstanding repeatability accuracy of below 0.003mm

20-24m/min Rapids, X & Z Axes Linear Guideways

Linear guideways provide high speed rapid traverses, high rigidity and precise positioning



High Precision C Axis Spindle Indexing

Dugard 300MC

High accuracy C axis spindle indexing system with spindle driven by high precision C axis servo motor providing high resolution feedback

Headstock

Massively proportioned heavily ribbed casting for maximum heat dissipation with large bed-contact area for maximum rigidity



Efficient Chip Removal System

Pull out swarf and coolant tray keeps downtime to a minimum and allows for easy integration of a chip conveyor

Slant Bed CNC Lathe

A Lathe Designed with Productivity and Dependability in Mind

Now you can step up your parts turning capacity with greater efficiency while reducing your operating costs. Dugard 300 series slant bed CNC lathes make such profitable production possible through their exceptional capacity and accuracy. The 45° slant bed combined with rugged construction throughout allow for heavy duty cutting with ease. They provide extra high stability when performing heavy cutting. To increase the competitive edge for your business, consider the Dugard 300 series CNC lathe.

Turret

High speed, heavy duty construction. Outstanding rigidity and accuracy.

45° Slant Bed

Heavy duty cast construction allowing optimum chip clearance.

Hydraulic Tailstock

Quill can be controlled by programme or manually, auto sensing device to control pressure. Programmable body optional



Servo Turret Dugard 300MC Combine Milling and Turning in One

- The advanced servo turret employs the latest tool selection system, featuring the fastest tool change
- 3 disc clutch gears design provides high accuracy positioning with fast hydraulic locking
- The extremely fast tool change from tool to tool is completed in only 0.2 seconds
- Versatile functions include drilling, milling, turning, tapping and end milling that greatly upgrades machining efficiency

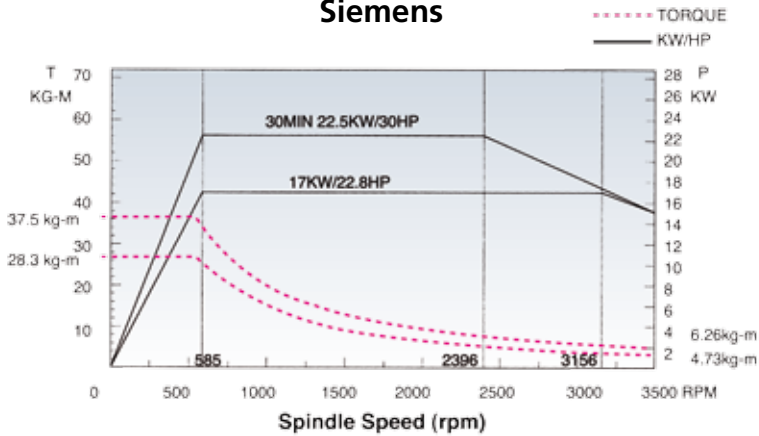
Options include

- 315mm 3 jaw hydraulic chuck
- Parts catcher
- Chip conveyor
- Bar feed

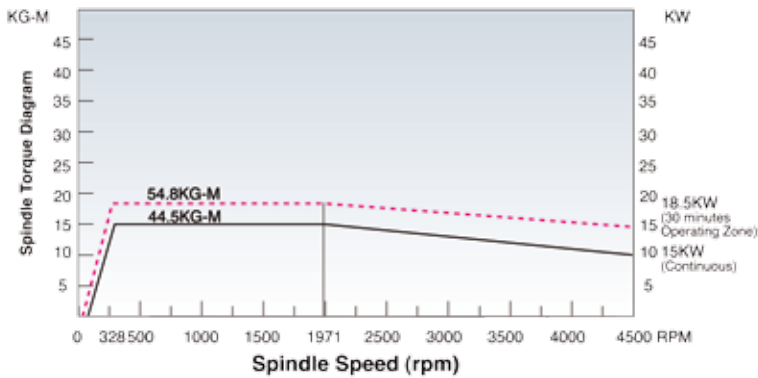
Dugard 300 Series

Spindle Motor

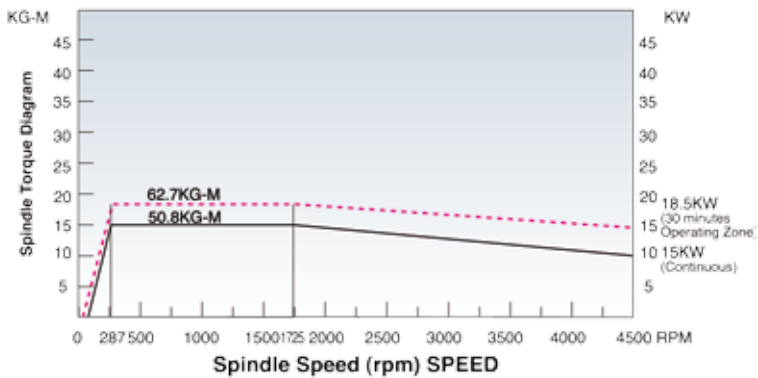
**Dugard 300P
Siemens**



**Dugard 300MC
Fanuc**



**Dugard 300P
Fanuc**



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

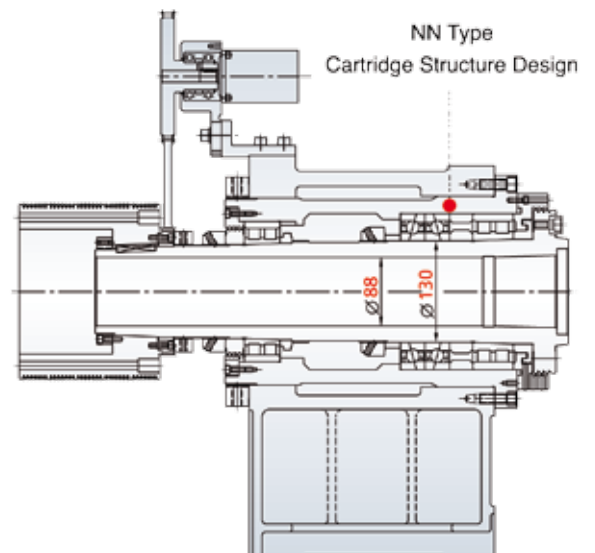


Various interfaces for programme saving, loading and software updating including:

- CF memory card
- RS-232C
- Ethernet

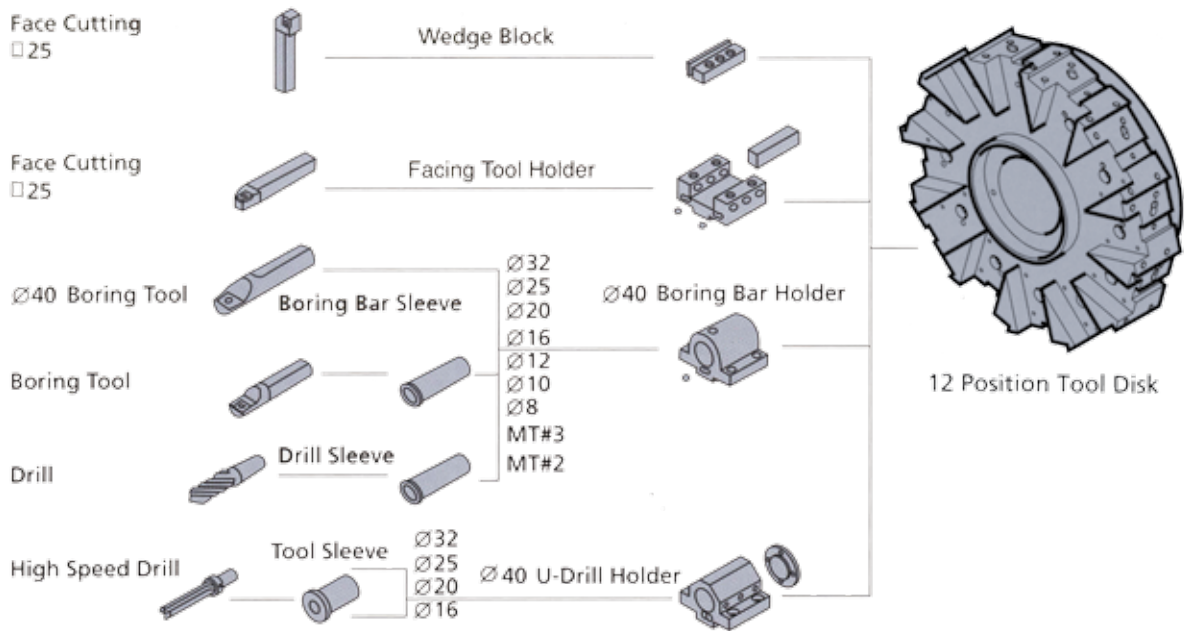


Spindle Structure

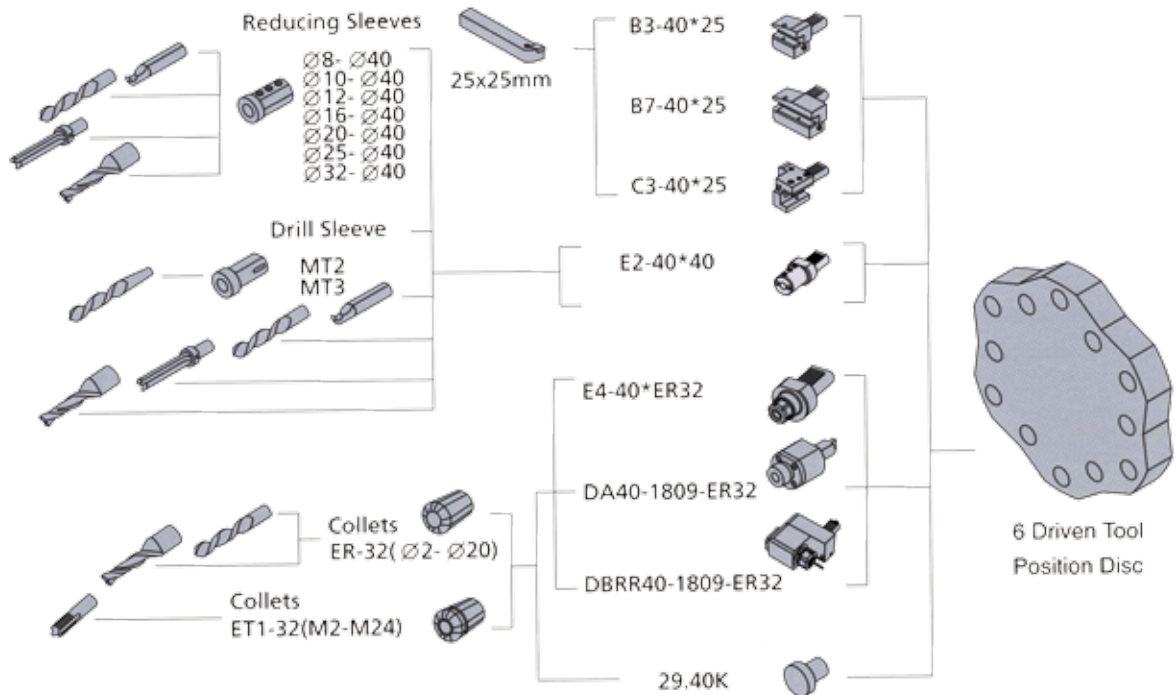


Dugard 300 Series

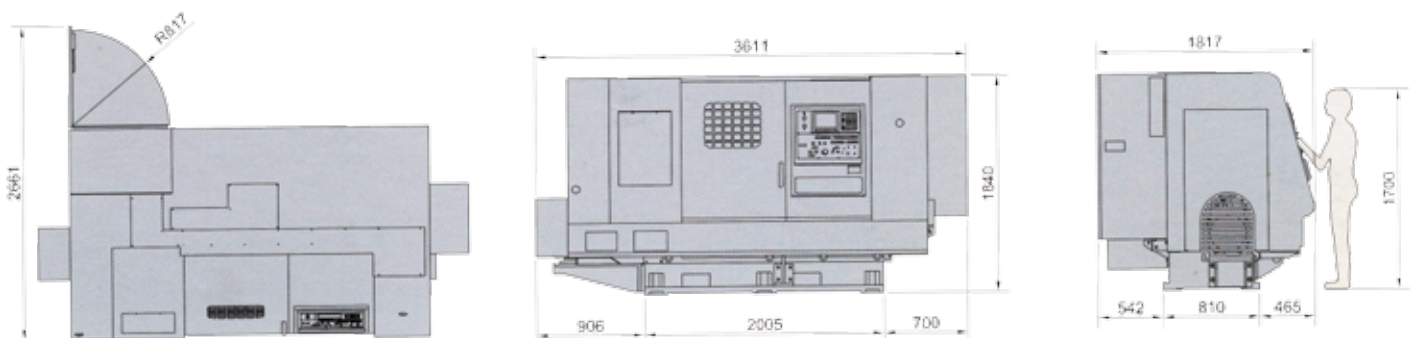
Dugard 300P Tooling System



Dugard 300MC Tooling System



Machine Dimensions



Slant Bed CNC Lathe

Specification	Dugard 300P	Dugard 300MC
Capacity		
Swing over bed	Ø600mm	Ø600mm
Max cutting diameter	Ø450mm	Ø470mm
Max cutting length	700mm	669mm
Distance between centres	810mm	810mm
Headstock		
Spindle nose	ASA A2-8	ASA A2-8
Spindle bore diameter	Ø88mm	Ø88mm
Spindle speed	2500rpm	2500rpm
Spindle runout	0.003mm	0.003mm
Bar capacity	Ø77mm	Ø77mm
3 jaw hydraulic chuck	252mm (10")	252mm (10")
Travels		
X axis	260mm	260mm
Z axis	762mm	762mm
Feedrates		
Rapid traverse X axis	20m/min	20m/min
Rapid traverse Z axis	24m/min	24m/min
Accuracy		
Positioning X axis	0.002mm	0.002mm
Positioning Z axis	0.004mm	0.004mm
Repeatability X axis	±0.00125mm	±0.00125mm
Repeatability Z axis	±0.0025mm	±0.0025mm
Turret		
Type	hydraulic/servo (opt)	servo
Number of tools	12	12
Tool shank	□25 x 25mm	□25 x 25mm
Boring bar size	Ø40mm	Ø40mm
Index time (next tool)	0.3 sec	0.3 sec
Index time (180°)	1.5 sec	0.9 sec
Tailstock		
Tailstock body travel	627mm	627mm
Quill travel	120mm	120mm
Quill diameter	Ø85mm	Ø85mm
Quill taper hole	MT - 4	MT - 4
Quill activation	hydraulic	hydraulic
Tailstock body positioning	manual / auto (opt)	manual / auto (opt)
General Specifications		
Floor space	3611 x 1817mm	3611 x 1817mm
Net weight (approx)	5600kg	5700kg

*Specifications are subject to change without prior notice

Standard Accessories

- Boring bar bushes (6pcs)
(Ø8,Ø10,Ø12,Ø16,Ø20,Ø25) x OD 32
- Servo 12 tool turret
- Face cutting holder 2 sets
- Boring bar holder 5 sets
- Hydraulic tailstock with MT #4 quill
- Through bore 10" hydraulic chuck
- Set of leveling bolts and pads
- End of programme light
- 1 set soft jaws
- 1 set hard jaws
- Coolant system
- Grease lubrication
- Worklight
- Tool kit

Optional Accessories

- Live tooling (C axis)
- 12" chuck
- Parts catcher
- Extra hard/soft jaws
- Bar feed
- Bar feed interface
- High pressure coolant pump
- Programmable tailstock body
- Foot pedal for tailstock
- Manual tool setting probe
- Chip conveyor/chip bin
- VDI 30 turret

European headquarters for Dugard CNC Machine Tools

DUGARD.com

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