

## NC Specification / FANUC Oi-TF

Item	Description	
Controlled axes	Controlled axes	2-axis(X,Z)
	Max. simultaneously controlled axes	위치(G00) / 직선 보간(G01) 원호 보간(G02, G03)
	Least input increment	0.001mm
Spindle function	Spindle speed control	S5 (5자리수)
	Spindle speed override	50~120%
	Spindle orientation	M19
Feed function	Feedrate override (10% increase)	0~200%
	Dwell	G04
	Reference position return	G27, G28
	Manual pulse generator	0.001/0.01/0.1mm
	Dry run	F0(Fine Feed), 25/50/100%
	Rapid traverse override	F0(Fine Feed), 25/50/100%
Tool function	Tool number command	T2(2자리수)
	Tool nose radius compensation	G40 ~ G42
	Tool offset pairs	128EA
	Tool geometry / wear offset	GEOMETRY & WEAR DATA
Programming function	Canned cycle	G70~G72, G74~G76
	Decimal point input	Able to input up to decimal point
	SUB program	4 phase
	Work coordinate system	G52~G59
	Max program dimension	±99999.999mm
Tape Functions	M function	M3 (3 digit)
	Input code	ISO/EIA auto recognition
	I/O interface	RS232C
	Program storage space	1280M(512kb)
	Number of stored programs	400개
Other features	Display unit / MDI	8.4" color LCD / Soft input type MDI
	Display unit / MDI	10.4" color LCD / Soft input type MDI
	Synchronized tapping	Rigid tapping function
	Background editing	Program saving / editing during automatic operation
	Backlash compensation	Pitch error offset compensation for each axis
	Search function	Sequence / program number search
	Safety function	Emergency stop / overtravel
	Program test function	Machine Lock / Single Block
	Control function	Memory / MDI / Manual
	Mirror image	
	Run hour and parts count display	
	Custom macro	#100 ~ #199, #500 ~ #999

# SMEC

# PL 25DC

## CNC LATHE TURNING CENTER

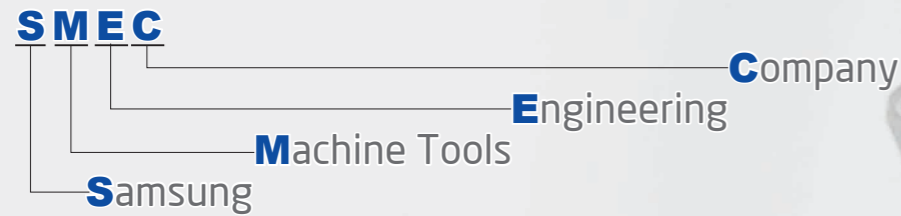


### SMEC Co., Ltd.

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- 1988 - Started as Samsung Heavy Industries Machine Tools Business
- 1989 - Horizontal and vertical machining center technology partnership with OKK Japan
- 1991 - Turning center and vertical machining center technology partnership with Mori Seiki
- 1996 - 5-sided processing center technology partnership with Toshiba
- 1999 - Spun out from Samsung Aerospace Industries and established SMEC Co., Ltd



## PL 25DC

### Dedicated Machine for Diff. Case

- Readily accessible HYD fixtures and Tool change apparatus
- High rigidity bed and high precision spindle
- Large capacity coolant pump to easily remove chips
- Less time needed for work setting compared to current methods
- Spherical and flat machining for each diff case part possible

## High Accuracy, High Rigidity Spindle

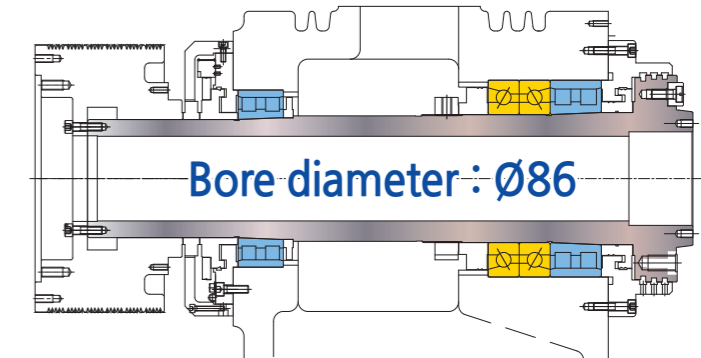
### Head assembly with radiator fins to minimize thermal expansion

The radiator fin structure of head assembly minimizes thermal expansion of the spindle, preventing loss of precision due to increasing temperature. Also, thermal expansion is minimized with the symmetric design.



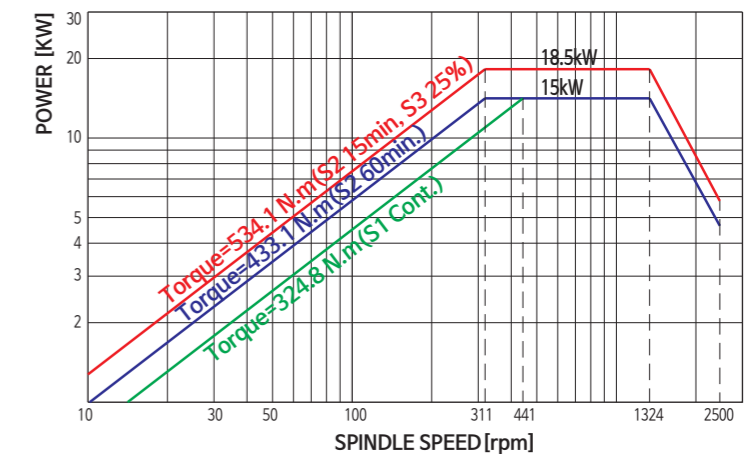
### SPINDLE & HEADSTOCK

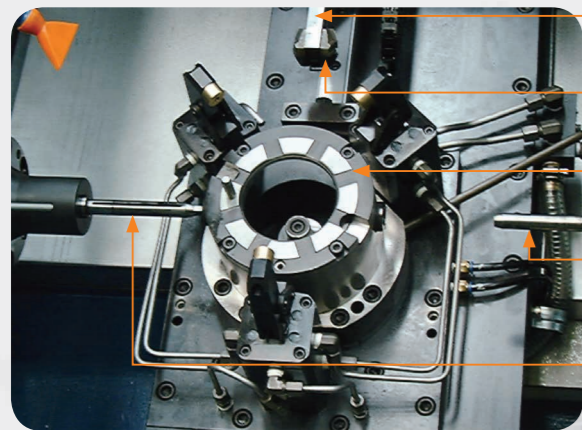
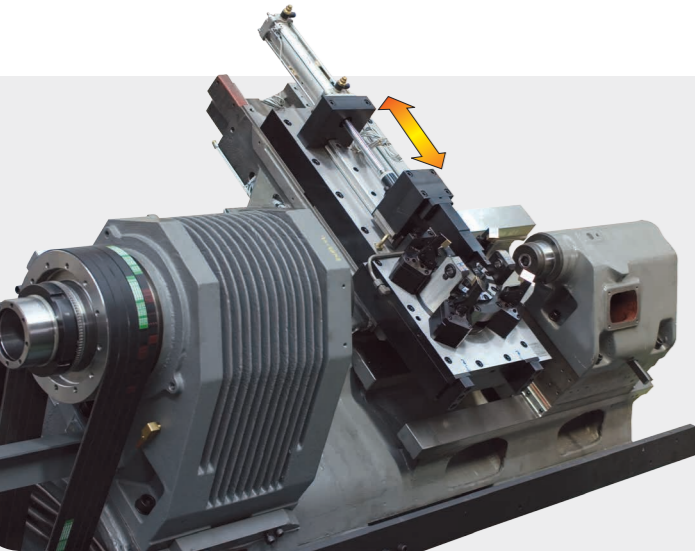
The spindle and headstock are machined and polished in controlled temperature conditions and assembled in clean room environments.



A Double Row of High Precision Cylindrical Roller Bearings and Angular Ball Bearings are positioned in front and a Double Row of High Precision Cylindrical Roller Bearings are positioned in the rear to ensure high precision and high speed turning.

### Spindle Power & Torque Diagram





- Tool removal apparatus
- Cutter
- Work clamping apparatus
- Dedicated arbor(R) for spherical/flat cutting
- Dedicated arbor(L) for spherical/flat cutting



Tailstock

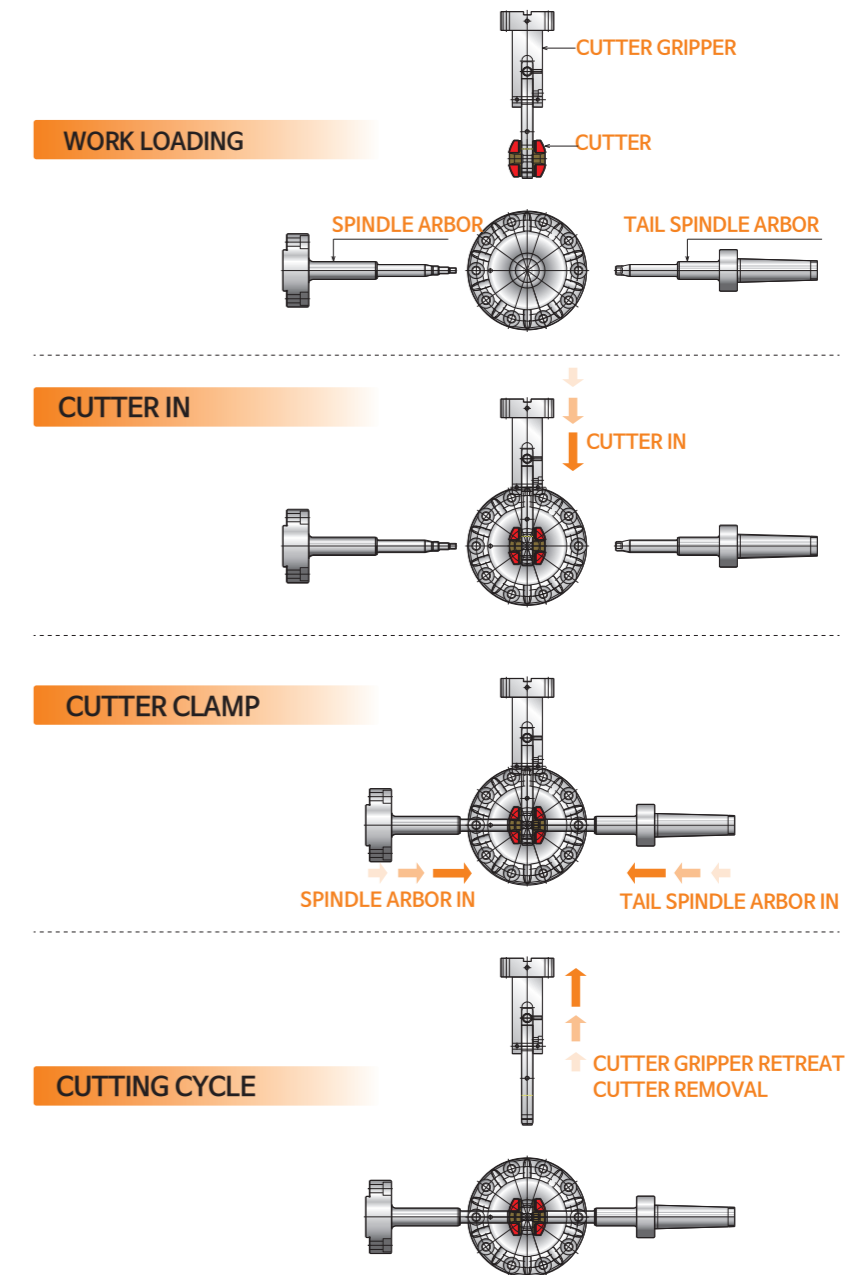
The tailstock that maintains superb high precision during heavy duty cutting can be manually traversed using the MPG handle. Also, when the programmable tailstock option is mounted, the tailstock and quill may be operated back and forth automatically using M-codes.

Double Anchored Pre-tensioned Ballscrews

All axes are driven using large diameter ballscrews are pre-tensioned and heat-treated and are supported on both ends using P4 class high precision angular bearings.

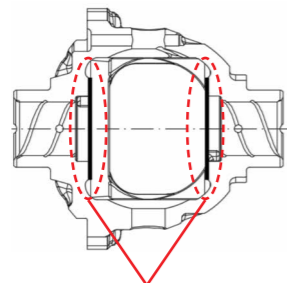
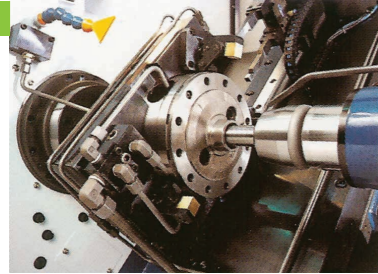


CASE DIFF SPHERICAL CUTTING PROCESS(구면가공)



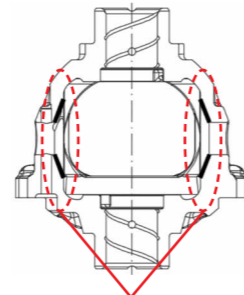
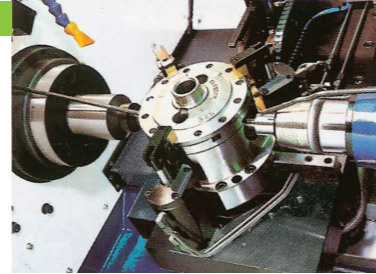
### High Precision

Flat Cutting JIG



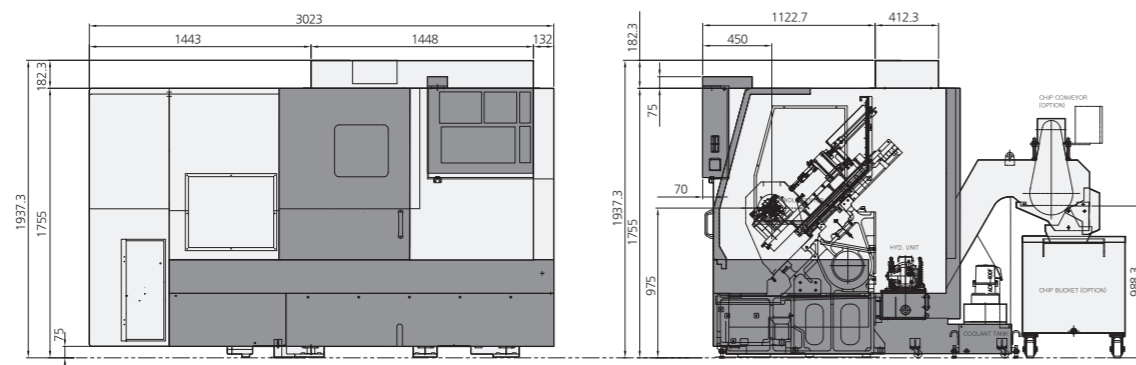
Flat cutting

Spherical Cutting JIG

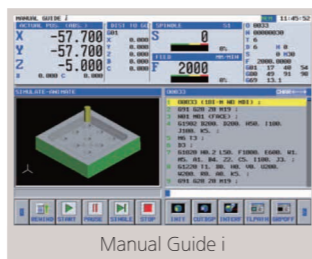
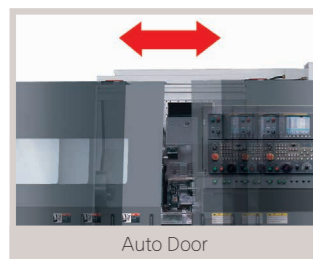


Spherical cutting

### Machine Dimensions



### Accessories



### Specifications

Item			PL 25DC
Capacity	Swing over bed	mm	520
	Swing over cross slide	mm	350
Spindle	Spindle speed	rpm	2,500
	Spindle nose	ASA	A2-8
	Bore diameter	mm	86
	Max. Torque	N.m	534.1
Travel	X/Z axis travel	mm	-/290
	X/Z rapid traverse rate	m/min	-/30
Motor	Main Motor (Max / Cont)	kW	18.5/15
	X / Z Axis	kW	-/3.0
Tailstock	Tailstock travel	mm	160(200)
	Tailstock quill travel	mm	100
	Tailstock Taper	MT	MT4 (Built-In)
	Tailstock quill diameter	mm	110
Electric power supply	kVA/V	30 / 220	
Req. floor space(L×W×H)	mm	3,023 × 2,068 × 1,937	
Machine weight	kg	5,000	
Controller		Fanuc Oi-TF	

※Specifications subject to change without prior notification.

#### Standard Accessories

- Work light (Led lamp)
- Splash guard with side coolant tank
- Tool/Work box
- Leveling unit
- Main spindle orientation
- Manual/Part list
- Safety precaution name plate
- Door interlock
- HYD Jig apparatus
- Tool removal apparatus
- Dedicated cutter & arbor for spherical or flat cutting
- Large coolant unit
- 2-step HYD tailstock

#### Optional Accessories

- Side chip conveyor
- Rear chip conveyor with coolant tank
- Chip bucket
- Auto door
- Air gun
- Air blower
- Oil skimmer
- Oil mist collector
- Coolant gun
- Coolant chiller
- Signal tower (Yellow, Red, Green, Buzzer)