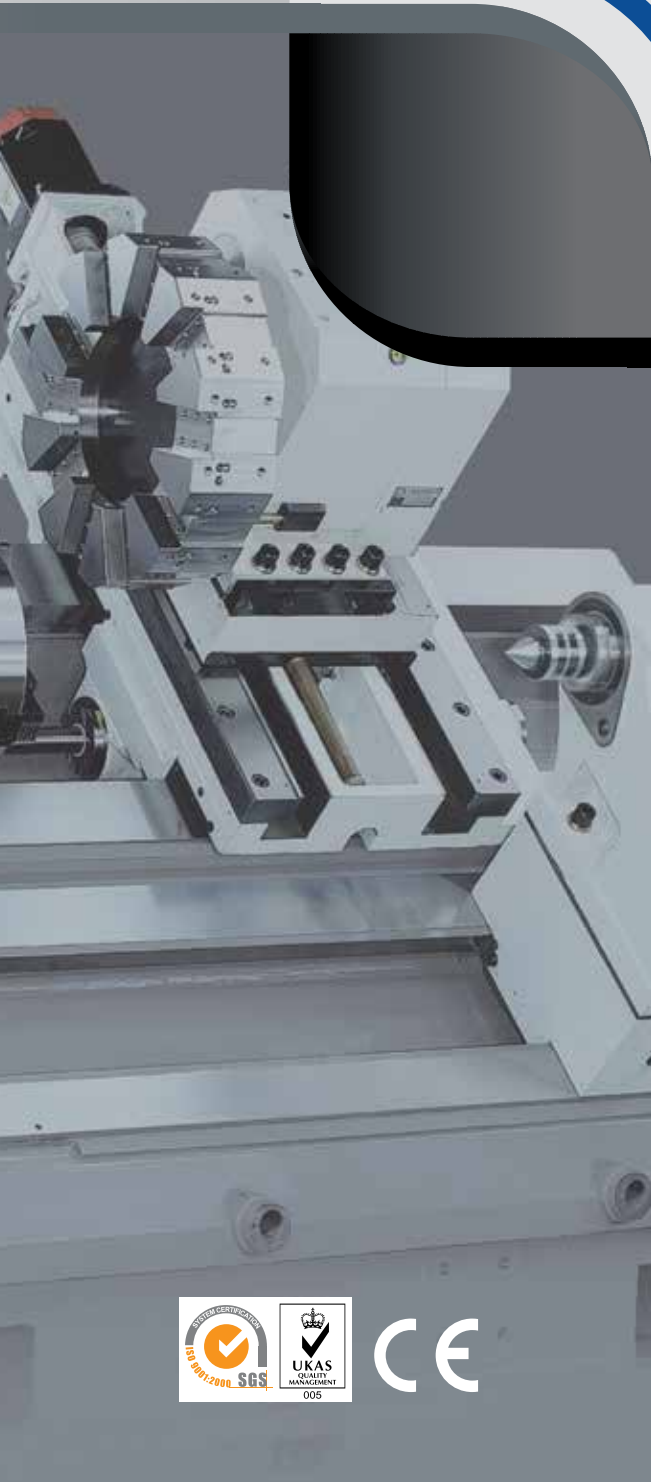




**FOCUS***CNC*®

**CNC slant bed lathes  
CNC turning-milling machines  
Heavy duty CNC lathes**



# About



## Award

Group named quality central grade-a manufacturer and awarded product excellence label by central government.

Group decorated product design excellence award by CETRA.

Year 2004 certificated by the SGS U.K for ISO 9001 qualification.

Year 2005 complete series of machine models gain the CE certificate by PMC

## FOCUS CNC In Brief

Founded in January 2000. Daya Dist., Taichung City, Taiwan, FOCUS CNC CO., LTD. is a professional machine tool manufacturer concentrating all its resources on developing and building CNC slant bed lathes, Ever since its early days, FOCUS CNC has operated with “elitism” as its business philosophy, focusing upon efficient management of human resources.

Exploring bravely into a new word for fine machine tools with the principles of “precision, technology, and humanity” in mind, FOCUS CNC rounds up Taiwan is the best talents in the machine tools manufacturing fields and comes up to the machine tool market with products of superb quality as well as engineering precision.



## Serving the Worldwide Customers

"Footing Locally, Thinking Globally" is FOCUS' strategy.

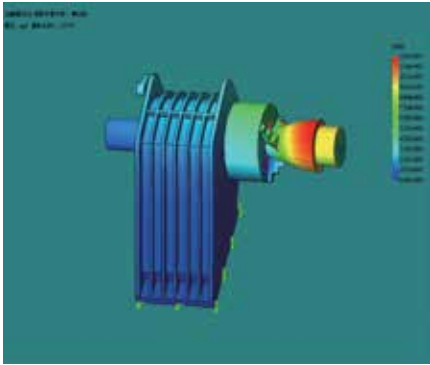
To meet this commitment, we are not only dedicated to development of new products, but also achieve international quality standards. These allow FOCUS product to fully meet the international market demands, Furthermore, through years of efforts in hard cultivation of market, FOCUS products have been sold to a number of countries around the world, and we have established long term relationship of dependability with our customers.



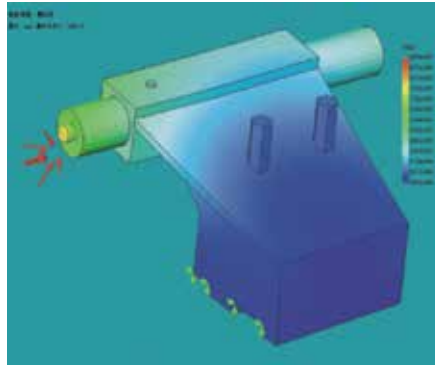
# Optimal Structure Design

## Computerized Simulation for Structural Rigidity Analysis

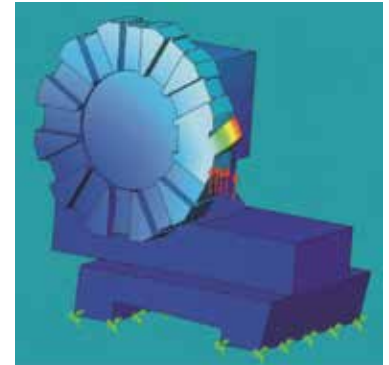
During machine design stage, the structural strength is simulated according to machining condition. This allows for structure design adjustment to achieve an optimal rigidity of structure.



Spindle rigidity analysis diagram



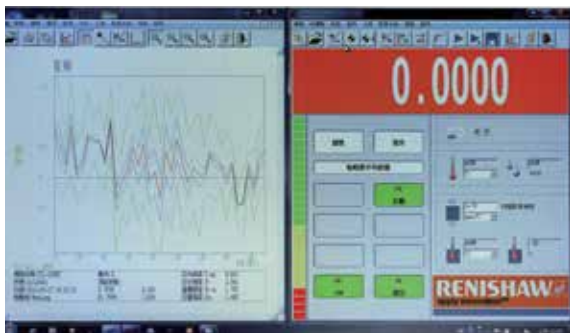
Tailstock rigidity analysis diagram



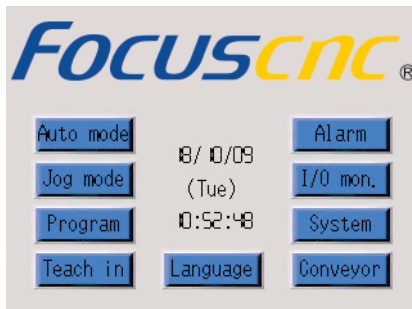
Turret rigidity analysis diagram

## Rigorous Quality Control

Quality is FOCUS' insistence and the cornerstone of everything we do at FOCUS. Each machine is subject to rigorous inspection and test during manufacturing process and before shipment. Our objective is to ensure each machine from FOCUS will fully exhibit outstanding dynamic stability, machining accuracy, performance dependability and minimum trouble.

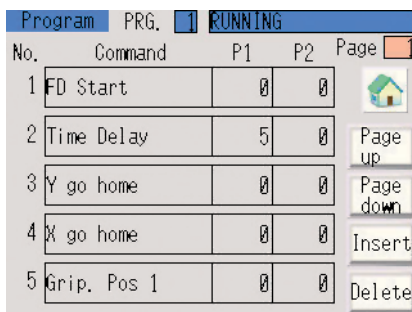


# Auto Load / Unload System



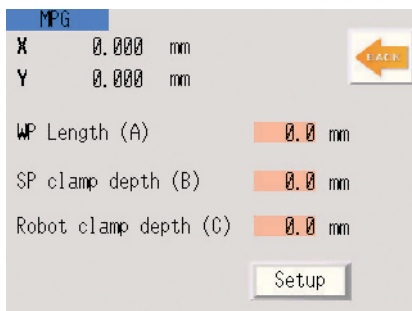
## Graphical User Interface

The operation of robot system is easy with graphical user interface and 5.7" TFT-LCD.



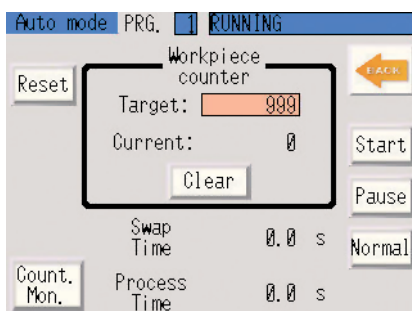
## Customized Program

It's easy to operate the robot system with build-in robot program. You can edit your own robot program according to your processing requests.



## Quick Setup for Different Workpieces

Process different workpieces with build-in robot program, what you have to setup are 3 values only. You can start the work with new workpieces in short time.



## Workpiece Counter

The built-in workpiece counter makes the workpiece management easier.

## Parallel Type Gripper

### Efficient Loading / Unloading

The loading of raw workpiece and unloading of finished workpiece can be processed at the same time with parallel type gripper. It shortens the producing time.



### Easy Jaw Modification

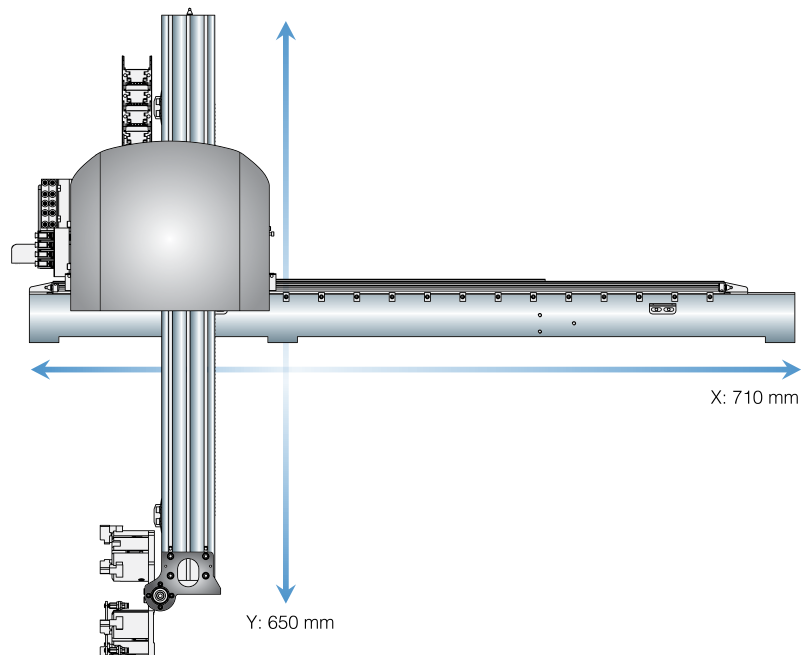
Easy to modify the soft jaws on robot grippers with the molds as standard accessory when you want to process different workpieces.

### Fast & Accurate Movement

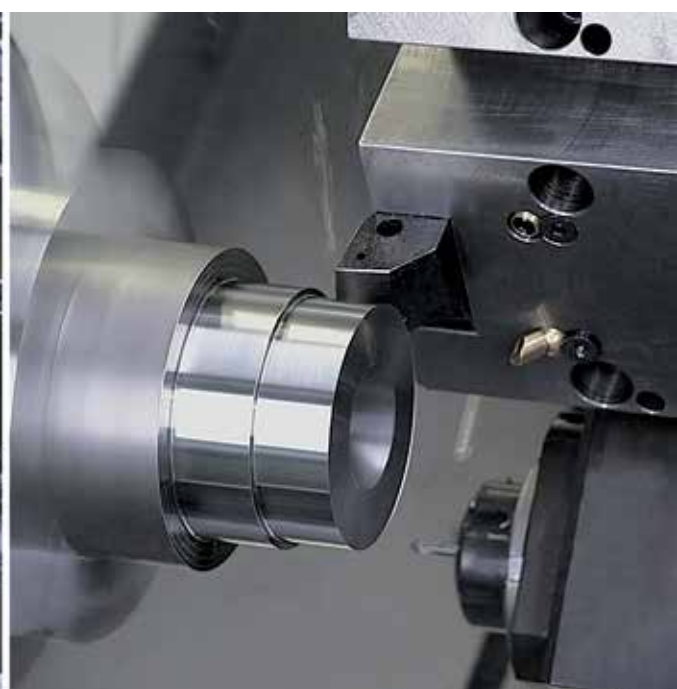
The robot system is driven with ball type linear guide ways to makes the movement fast and accurate.

## Quick Workpiece Swap

It takes 5 seconds only to swap raw workpiece and finished workpiece and makes the production efficiency much higher.



# Linear way / Box way series CNC lathes



# Specifications

MODEL	FCL-130A	FCL-130A	FCL-140A	FCL-140	FCL-200
Swing over bed	443 mm (17.4")		470 mm (18.5")		
Max. cutting diameter	-	236 mm (9.3")	260 mm (10.2")	280 mm (11")	292 mm (11.5")
Max. cutting length	250 (9.8")	233 mm (9.2")	290 mm (11.4")		500 mm (19.7")
Spindle nose	A2-5		A2-6		
Chuck size	6"				8"
Max. spindle speed	6,000 rpm				4,500 rpm
Spindle motor	5.5/7.5 kW		7.5/11 kW		
Bar capacity	45 mm (1.77")		45 mm (1.77") / 52 mm (2")		

MODEL	FCL-200HT	FCL-200MC	FCL-300	FCL-300P	FCL-300MC
Swing over bed	470 mm (18.5")		600 mm (23.6")		
Max. cutting diameter	300 mm (11.8")	172 mm (6.8")	450 mm (17.7")		330 mm (13")
Max. cutting length	479 mm (18.9")	444 mm (17.5")	700 mm (27.6")		669 mm (26.3")
Spindle nose	A2-6		A2-8		
Chuck size	8"		10"		
Max. spindle speed	4,500 rpm		3,000 rpm		
Spindle motor	11/15 kW		15/18.5 kW		
Bar capacity	52 mm (2") / 65 mm (2.55")		77 mm (3")		

MODEL	FBL-230	FBL-230MC	FBL-200L	FBL-300	FBL-300MC
Swing over bed	550 mm (21.6")		470 mm (18.5")	654 mm (25.7")	654 mm (25.7")
Max. cutting diameter	311 mm (12.2")	270 mm (10.6")	280 mm (11")	510 mm (20")	418 mm (16.4")
Max. cutting length	443 mm (17.4")	362 mm (14.2")	610 mm (24")	594 mm (23.4")	554 mm (21.8")
Spindle nose	A2-6		A2-8		
Chuck size	8"		10" (12")		
Max. spindle speed	3,500 rpm		2,500 rpm		
Spindle motor	11/15 kW		15/18.5 kW		
Bar capacity	52 mm (2") / 65 mm (2.55")		77 mm (3")		

MODEL	FBL-300L	FBL-360	FBL-360MC	FBL-460	FBL-460MC
Swing over bed	654 mm (25.7")	770 mm (30.3")	770 mm (30.3")	840 mm (33")	840 mm (33")
Max. cutting diameter	510 mm (20")	570 mm (22.4")	452 mm (17.7")	650 mm (25.5")	530 mm (20.9")
Max. cutting length	1,554 mm (61.2")	762 mm (30")	739 mm (29.")	750 mm (29.5")	665 mm (26.2")
Spindle nose	A2-8	A2-8 (A2-11)	A2-8 (A2-11)	A2-15	
Chuck size	10" (12")	12 (15")		15"	
Max. spindle speed	2,500 rpm	2,500 (1,500) rpm		1,400 rpm	
Spindle motor	15/18.5	22/26 (30/37) kW	18.5/22 (22/26) kW	22/26 (30/37) kW	
Bar capacity	77 mm (3")	91 mm (3.5") / 115 mm (4.5") opt.		140 mm (5.5")	

■ Specifications are subject to change without notice.

# Multifunctional turning and milling excellence

**FNL-220LS/LSMC/Y/LY/LSY linear way series**

**FBL-250Y/SY & FBL-320Y/SY box way series**

**CNC turning-milling machines**





# Specifications

MODEL		FNL-220LS	FNL-220LSMC	FNL-220Y	FNL-220LY	FNL-220LSY	FBL-250Y	FBL-250SY	FBL-320Y	FBL-320SY
Chuck size		6" (8")				8" (10")		10" (12")		
Swing over bed		620 mm (24.4")				600 mm (23.6")				
Max. cutting diameter		330 mm (13")		270 mm (10.6")			460 mm (18")			
Max. bar material diameter		510 mm (20.1")				558 mm (22")		548 mm (21.6")		
Max. cutting length		52 mm (2") / 65 mm (2.5")				65 mm (2.6")		77 mm (3")		
Main Spindle	Max. spindle speed	4,500 rpm				4,500 rpm		3,500 rpm		
	Spindle nose	A2-6				A2-6		A2-8		
	Spindle hole dia.	62 mm (2.4") / 77 mm (3")				77 mm (3")		88 mm (3.5")		
Sub-Spindle	Chuck size	6		-		6		-		6
	Max. spindle speed	6,000 rpm		-		6,000 rpm		-		6,000 rpm
	Spindle nose	A2-5		-		A2-5		-		A2-5
	Bar capacity	45 mm (1.8")		-		45 mm (1.8")		52 mm (2")		52 mm (2")
Turret		Servo - BMT45	Power - BMT45				BMT60 (55)			
Number of turret		12 tools (16 tools)				12 tools (16 tools)				
Spindle motors	Main spindle	11/15 kW				11/15 kW				
	Sub spindle	7.5/11 kW		-		7.5/11 kW		5.5/7.5 kW		5.5/7.5 kW

■ Specifications are subject to change without notice.

**QuickFlex®**



### Radial Power Tool Holder

ER40 QF / ER 32QF  
6,000 rpm max turning speed



### Axial Power Tool Holder

ER40 QF / ER 32QF  
6,000 rpm max turning speed



### Radial Face Milling Tool Holder

6,000 rpm max turning speed



# Heavy duty CNC lathe

FBL-510/520/530/540 MC series

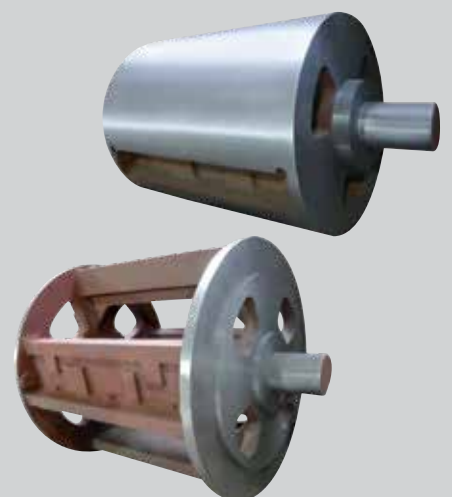


## Application

Pipe  $\text{\O}6'' \sim \text{\O}12.5''$



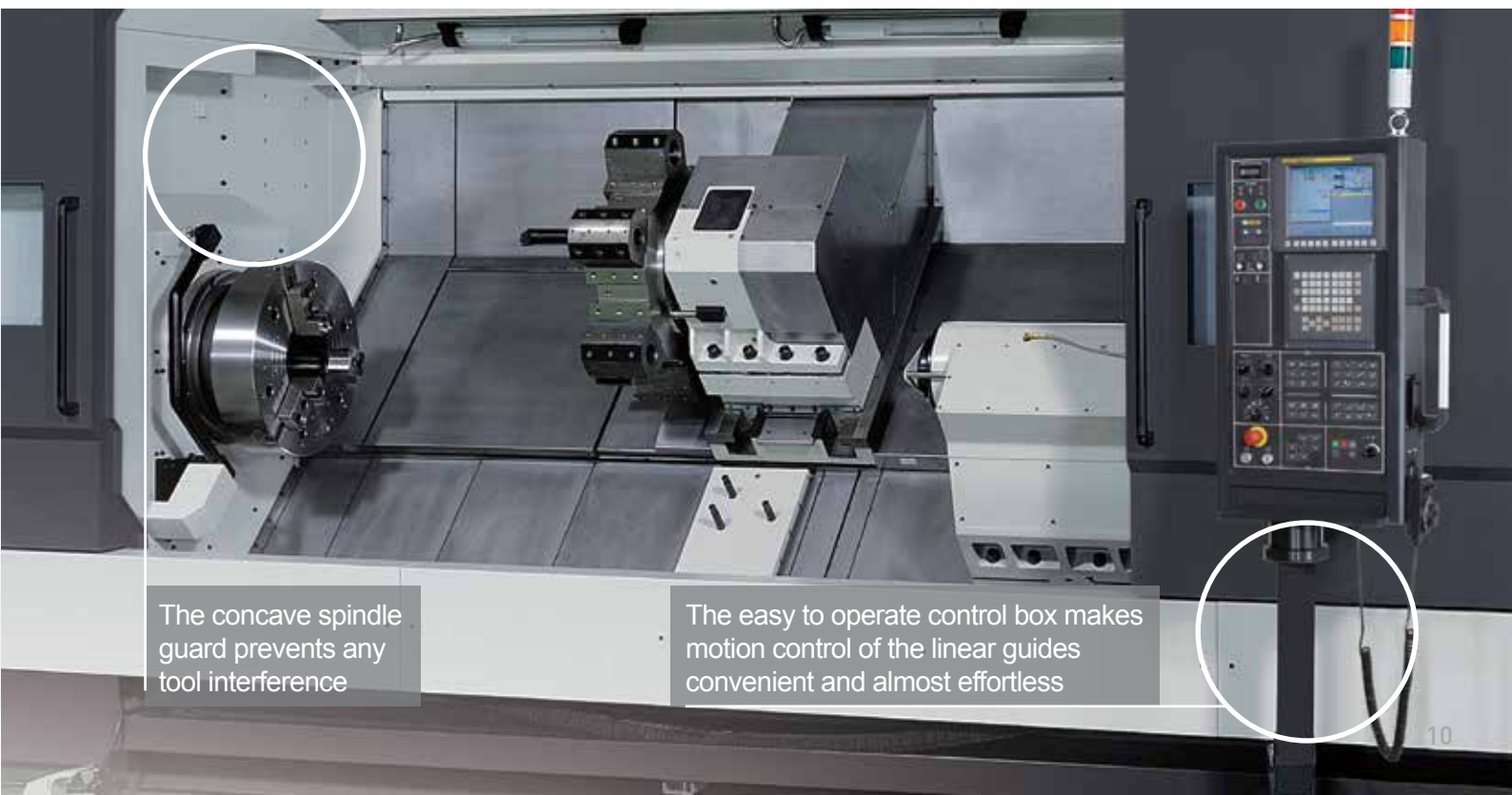
Print Roller



# Specifications

MODEL	FBL-510	FBL-520	FBL-530	FBL-540	FBL-510MC	FBL-520MC	FBL-530MC	FBL-540MC
Swing over bed	Ø1,136 mm (44.7)	Ø1,000 mm (39.4")			Ø1,136 mm (44.7)	Ø1,000 mm (39.4")		
Max. cutting diameter	Ø940 mm (37")				Ø880 mm (34.6")			
Max. cutting length	1,050 mm (41.3")	2,000 mm (78.7")	3,000 mm (118.1")	4,000 mm (157.5")	1,050 mm (41.3")	2,000 mm (78.7")	3,000 mm (118.1")	4,000 mm (157.5")
Spindle nose	A2-15 (Ø196 mm) / A2-20 (Ø320 mm / Ø380 mm opt.)							
Chuck size	18"~24"							
Through spindle hole diameter	Ø196 mm (7.5") / Ø320 mm (12.5") / Ø380 mm (15") opt.							
Spindle speed	4 steps (Ø196 mm) / 3 steps (Ø320 mm) / 2 steps / (Ø380 mm)							
Max spindle speed	Ø196 mm, 1,000 rpm / Ø320 mm, 500 rpm / Ø380 mm, 500 rpm							
Spindle motor	37 / 45 kW (α40/6000)							
Turret tool station	12 tools							
X axis travel	490 mm							
Y axis travel	1,050 mm (41.3")	2,000 mm (78.7")	3,000 mm (118.1")	4,000 mm (157.5")	1,050 mm (41.3")	2,000 mm (78.7")	3,000 mm (118.1")	4,000 mm (157.5")
Quill taper	MT#6 rotary quill							
Maximum CF axis speed	N/A				0.001°			
Shank height of square bar	32 x 32 mm (1 1/4" x 1 1/4")							
Shank diameter of boring bar	Ø60 mm (2.5") / Ø80 mm (3") opt.							

■ Specifications are subject to change without notice.



The concave spindle guard prevents any tool interference

The easy to operate control box makes motion control of the linear guides convenient and almost effortless



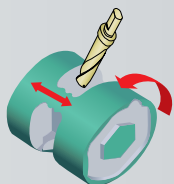
## FOCUS CNC CO., LTD.

[www.focus-cnc.com](http://www.focus-cnc.com)

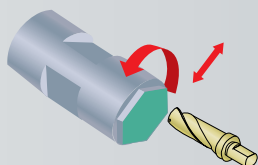
No. 20-1, Alley 65, Lane 140, Dalin Road, Daya Dist., Taichung City 428, Taiwan  
TEL: 886-4-2560-6067 FAX: 886-4-2567-7938 E-mail: focus@focuscnc.com.tw

# Control

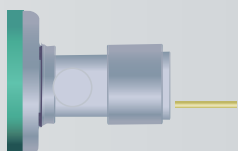
## FANUC



Cylindrical Interpolation



Polar Coordinate Interpolation



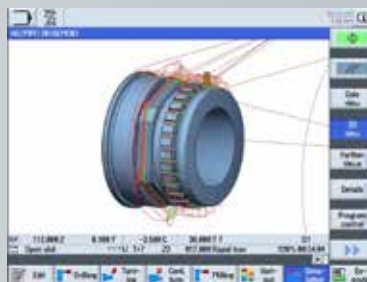
### Manual Guide i

Conversational editing with 3D simulation available.

## SIEMENS



Uses a 10.4" screen for easy operation. Optional Shop Turn function with integrated operating system. Finish programming without having to use G code.



- 2 window view dynamic simulation
- 3D finished part simulation
- 3D section view

