### **Optimized Structure!**

Best Stability and Rigidity! Slideway Accuracy in 5 µm

■ The major structural parts are manufactured from high quality cast iron, tempered for relieving internal stress and ensuring lifetime rigidity and stability.

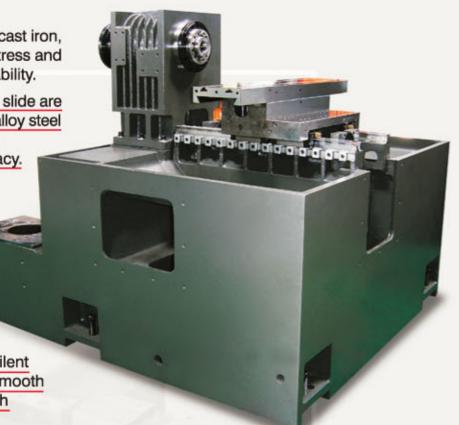
Z-axis slideways (box ways) and slide are manufactured from high quality alloy steel (SK3), featuring maximum wear resistance and long term accuracy.

■ Upon request, linear ways are available.

Extra wide bed slideways greatly upgrades stability of the machine.

 Straightness and flatness accuracy of slideways are controlled in 5 um.

Employs Japan NSK class C1 silent precision ball screws for extra smooth transmission, low noise and high positioning accuracy.





### **Precision Spindle** Accuracy in 2 µm

- 3/5 HP spindle motor.
- 25.4mm diameter bar capacity increases machining
- The spindle inside and outside diameters and end face runout accuracy are controlled in 2 um.
- The spindle runs in class P4 high precision bearings combined with precision assembling and tests to minimize heat generation of the spindle while assuring high machining accuracy and stability.



MODEL	FTC-05
Maximum turning diameter	Ø 90 mm
Maximum turning length	90 mm
Swing over bed	Ø 180 mm
Swing over top slide	Ø 120 mm
X-axis travel	200 mm
Z-axis travel	180 mm
Spindle nose	ISO A2-4
Spindle hole	Ø 35 mm
Through bar capacity	Ø 25.4 mm
Chuck type	5C (F-27C or 5" chuck)
Spindle motor	AC 3/5 HP
Max. spindle speed	Max. 6000 rpm. / Opt. 8000 rpm.
X-axis rapid traverse	12000 mm/min
Z-axis rapid traverse	12000 mm/min
Least input increment	0.001 mm
Square shank tool size	□16 mm
Max. boring tool diameter	Ø 20 mm
Numbers of tool positions	GANG TYPE
Coolant pump motor	1/4 HP
Centralized lubrication system	2L 3-6 c.c. / 15 min
Machine dimensions	1450 x 1350 x 1550 (mm)
Floor space occupied	2 x 2 (m)
Machine weight (net/gross)	1400 / 1600 (kgs)

■ Sizes and specifications shown in this catalogue are subject to change without prior notice.

### **STANDARD**

- Work lamp
- · Leveling bolts and pads

**ACCESSORIES:** 

 Heat exchanger for electrical cabinet

FIRST CHANT

- Coolant system
- Tool holder 4 pcs
- Tool 4 pcs
- Collet chuck (5C) 1pc
- Tool box with tool kits
- Automatic lubrication system and ball screw lubrication system
- Gang-type tooling system (5" hydraulic rotary cylinder and hydraulic power unit)

#### **OPTIONAL ACCESSORIES**

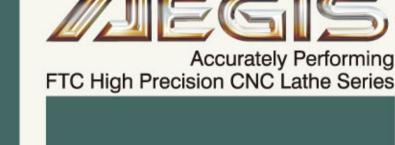
- Milling attachment
- I.D. tool
- I.D. double tool
- 8-position turret
- 5C collet chuck
- I.D. tool sleeve
- 5" hollow hydraulic chuck
- Bar feeder
- Spindle air blast device (front)
- Chip conveyor with bucket
- 4" PML air chuck (in case



- Tool holder
- Auxiliary tool slide

- O.D. tool

- 5" hydraulic chuck
- Hydraulic power tooling system
- Parts catcher (front)
- High speed air power tooling
- pneumatic system is ready)



FTC-05

**High Precision CNC Lathe** 



#### **Taiwan Office:**

No. 3-18, Jtoushe Rd., Houli Township, Taichung County 42148, Taiwan.

FAX: +886-4-2559-0387 TEL: +886-4-2559-0525 http://www.first-chant.com E-mail:fce@first-chant.com





### FTC-05

# **Tooling System**

10-60001

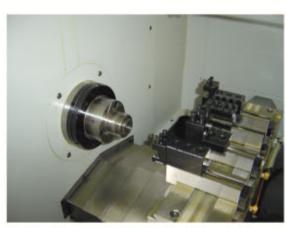
# No.1 Choice in High **Precision Parts Turning** Lathe!

- Suitable for special purpose machining and small lot flexible machining.
- Compact construction with small footprint of 2 x 2 meters only for saving space. Easy to install.
- Available to equip with robot for fully automatic operation.
- Available to equip with bar feeder for bar machining.
- Suitable for operating together with whole plant equipment or a production line.
- Chip conveyer can be mounted at right or back side of the machine to suit the working space as desired.
- Ideal for precision parts machining in various industries such as optical instruments, OA equipment, medical devices, measuring instruments, automotives and motorcycles, aircrafts, aerospace, electronics and parts.





Removable guard provides convenient tool setting.



Spindle NR-302P G

Spindle G

Spindle NR-400

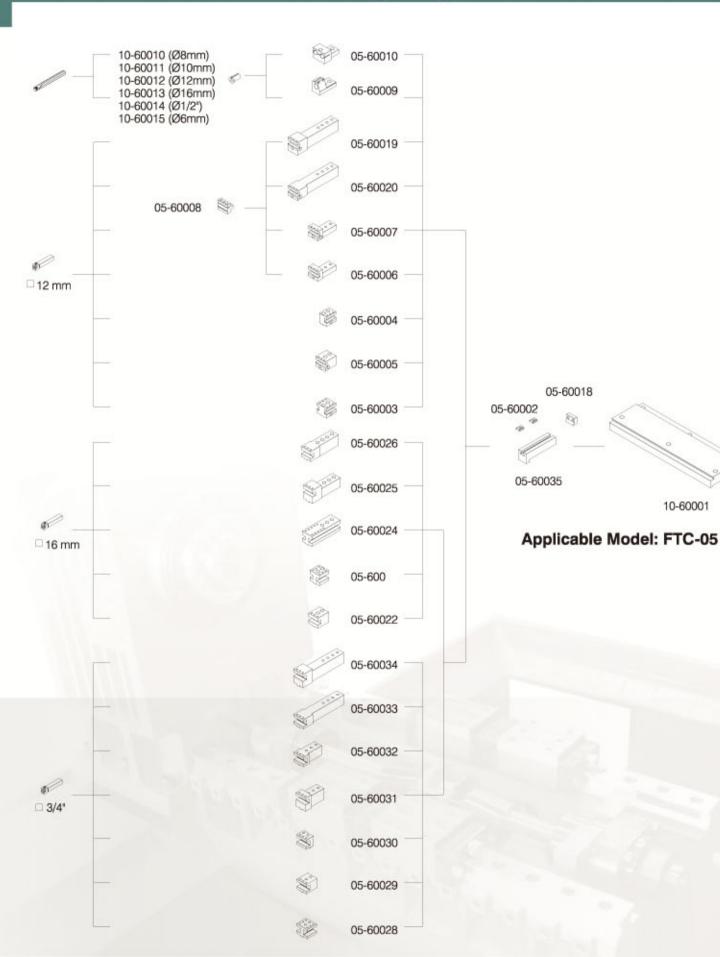
### Gang-type Tooling System

- The machine is equipped with a gangtype tooling system, consisting of 4 tool
- Maximum baring tool diameter is 20 mm.

Air Motor AM-300RA

Air Motor AM-310R

Square shank tool size is 16 mm.





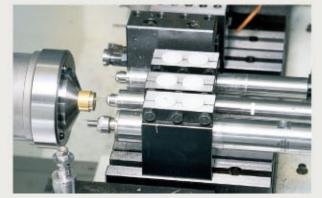
circuit employs German Moller (or equivalent) electronic parts, maximum control and stability under long time operation and ong service life.



The hydraulic system employs Duplomatic (or equivalent) hydraulic solenoid valves for extremely smooth operation of the hydraulic system.



**PML Precision Air** Chuck (optional) Chuck size may be specified by customers.



High speed air powered tooling system (optional)