



CNC LATHES

TNC 460/530

TNC 660A/770A/890A

TEACH-IN CNC LATHES

WITH **FAGOR** CONTROLLER



- EASY OPERATION
- ECONOMIC, HIGH EFFICIENCY
- MULTI FUNCTION

CNC-TAKANG

CNC-TAKANG CO., LTD.

MANUFACTURER & EXPORTER

TEACH-IN

■ CONTROLLER FEATURES

WIDER SELECTIONS

Manual operation with D.R.O. function.
Semi-auto operation with auto feeding.
Fully CNC operated lathes.

EASY OPERATION

Interactive graphic data entry.
Operations defined by symbol keys.
Semi, fully-auto operation modes.

MORE ADVANTAGES

Automatic part repetition for mass production.
Mini. preparation time.
Part-operation sequence storage
Tool data back-up



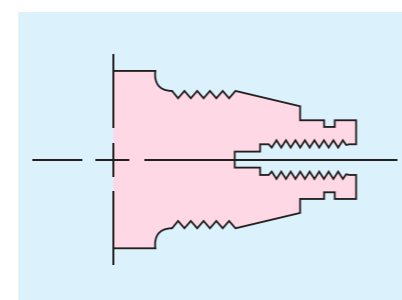
■ HARDWARE & OPERATION FUNCTIONS

Fagor 8055TC control + 11" LCD monitor
Integrated PLC
8 bit bus, 32K RAM
Serial port(RS232 communication)
Teach-in mode
Semi-automatic, automatic (Cycle) and part program modes
Automatic acceleration/deceleration
Rapid traverse
Self diagnostic routines
Constant surface speed (CSS)
Two electronic handwheels
Automatic home searching
Program input via RS-232 or floppy disk (option)

■ CONTROL PANEL FUNCTION KEYS

Auxiliary functions key
Axis selection
Begin/End points entry
Constant surface speed
Coolant on/off key
Cycle start/Cycle stop
Emergency stop
Feed and rapid override
Feedrate entry
Icon keys for operations
Inc/abs coordinate selection
Jog selection

New tool selection
Numeric keyboard
Output active/deactive keys
Parameter keys for operations
Recall function
Reset
Single pass mode
Spindle forward / reverse / off
Spindle override
Spindle speed entry
Spindle speed max. limitation in CSS
Zoom window function



■ AUTOMATIC OPERATIONS

Turning cycle
Facing cycle
Taper turning cycle
Rounding cycle
Threading cycle
Grooving cycle
Straight section profiling cycle:
-Pattern repeating
-Stock removal

■ MACHINE CONSTRUCTION BRIEF

HEAD STOCK

3 positions bearing supported spindle, ground and hardened gear, auto lubricant and gear oil bathing system.

BEDWAY

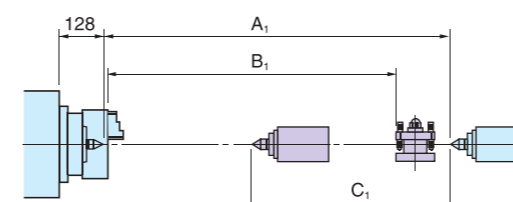
Meehanite FC-30 casting, heat-treat hardened, HS-70° hardness, precision ground, auto-lubricating system, high accurate ballscrews for X & Z axis.

■ MORE STANDARD FUNCTIONS OF THE CONTROLLER

Display
Programming
Tooling compensation

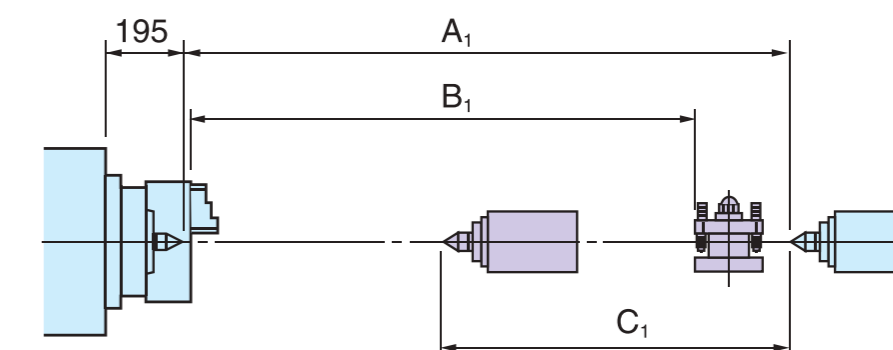
■ WORK RANGE : TNC460 / 530

| MODEL | TNC460 / 530 x 1000 | TNC460 / 530 x 1500 |
|----------------|---------------------|---------------------|
| A ₁ | 1000 mm (40") | 1520 mm (60") |
| B ₁ | 895 mm (35") | 1415 mm (56") |
| C ₁ | 770 mm (30") | 1290 mm (51") |



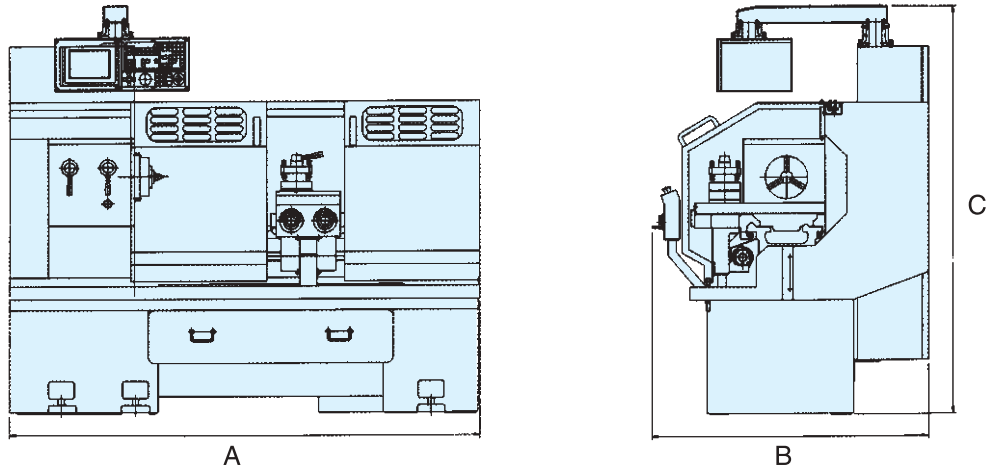
■ WORK RANGE : TNC660A / 770A / 890A

| MODEL | TNC660A / 770A / 890A x 1500 | TNC660A / 770A / 890A x 2000 | TNC660A / 770A / 890A x 3000 | TNC660A / 770A / 890A x 4000 | TNC660A / 770A / 890A x 5000 |
|----------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| A ₁ | 1520 mm (60") | 2030 mm (80") | 3050 mm (120") | 4050 mm (159.5") | 5050 mm (198.8") |
| B ₁ | 1380 mm (54.3") | 1890 mm (74.4") | 2910 mm (114.6") | 3910 mm (154") | 4910 mm (193.3") |
| C ₁ | 1350 mm (53.1") | 1860 mm (73.2") | 2880 mm (113.4") | 3880 mm (152.8") | 4880 mm (192.1") |



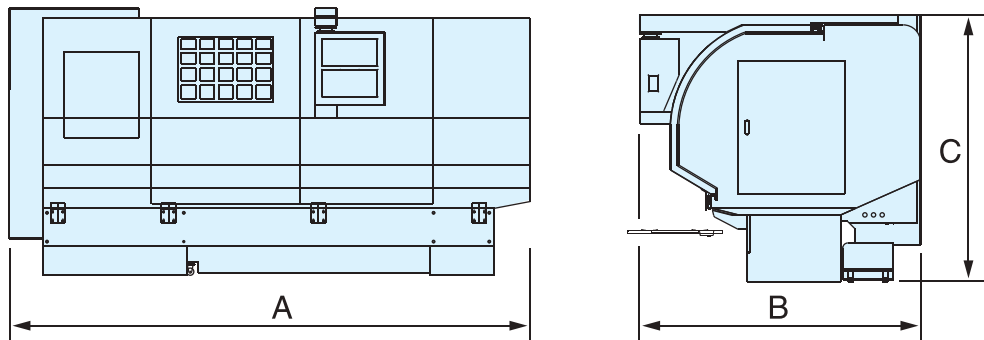
Sample drilling cycle
Tapping cycle
Finishing pass conditions setup:
-Finish stock to be removed
-Finishing feedrate
-Safety distance
Two execution levels:
-Semi-automatic & automatic (cycle)

■ **DIMENSION: TNC460 / 530**



| MODEL | A | B | C |
|---------------|------------------|-----------------|-----------------|
| TNC460 x 1000 | 2190 mm (86.2") | 1280 mm (50.4") | 1900 mm (74.8") |
| TNC460 x 1500 | 2710 mm (106.7") | 1280 mm (50.4") | 1900 mm (74.8") |
| TNC530 x 1000 | 2190 mm (86.2") | 1340 mm (52.7") | 1935 mm (76.2") |
| TNC530 x 1500 | 2710 mm (106.7") | 1340 mm (52.7") | 1935 mm (76.2") |

■ **DIMENSION: TNC660A / 770A / 890A**



| MODEL | A | B | C |
|----------------|------------------|-----------------|-----------------|
| TNC660A x 1500 | 3795 mm (149.4") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC660A x 2000 | 4295 mm (169.1") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC660A x 3000 | 5295 mm (208.5") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC660A x 4000 | 6295 mm (247.8") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC660A x 5000 | 7295 mm (287.2") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC770A x 1500 | 3795 mm (149.4") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC770A x 2000 | 4295 mm (169.1") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC770A x 3000 | 5295 mm (208.5") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC770A x 4000 | 6295 mm (247.8") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC770A x 5000 | 7295 mm (287.2") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC890A x 1500 | 3798 mm (149.4") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC890A x 2000 | 4295 mm (169.1") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC890A x 3000 | 5295 mm (208.5") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC890A x 4000 | 6295 mm (247.8") | 2090 mm (82.3") | 1920 mm (75.6") |
| TNC890A x 5000 | 7295 mm (287.2") | 2090 mm (82.3") | 1920 mm (75.6") |

SPECIFICATIONS:

| MODEL | DESCRIPTION | TNC460 / 460L | TNC530 / TNC530L | TNC600 | TNC660A | TNC770A | TNC890A |
|----------------|-------------------------------|---|--|--|---|---------------------------------------|--|
| Capacity | Swing over bed | 460 mm (18") | 530 mm (20.9") | 600 mm (23.6") | 660 mm (26") | 770 mm(30.3") | 900 mm(35.4") |
| | Swing over cross slide | 240 mm (9.4") | 305 mm (12") | 365mm (14.3") | 360 mm (14.2") | 470 mm(18.5") | 600 mm(23.6") |
| | Center height | 230 mm (9") | 265 mm (10.4") | 300 mm (11.8") | 325 mm (12.8") | 380 mm(15") | 445 mm(17.5") |
| | Distance between center | 1000 mm (40"), 1500 mm (60") | 1100 mm (44"), 1520 mm (60") | 2000 mm (44"), 3000 mm (118") | 1500 mm (60"), 2000 mm (80"), 3000 mm (120"), 4000 mm (157"), 5000 mm (196") | | |
| | Bed Width | 350 mm (13.8") | 350 mm (13.8") | 385 mm (15.2") | 480 mm (18.9") | | |
| Spindle | Spindle nose | A1-6 or D1-6 | A1-8 or D1-8 | A1-8 or D1-8 | A1 - 11 or D1 - 11 | | |
| | Spindle speeds (4 steps) | H1: 900-2500 rpm H2: 320-1000 rpm L1: 110- 400 rpm L2: 45- 150 rpm | H1: 550-1600 rpm H2: 210- 640 rpm L1: 80- 250 rpm L2: 30- 100 rpm | H1: 550-1600 rpm H2: 210- 640 rpm L1: 80- 250 rpm L2: 30- 100 rpm | H1: 541-1200 rpm H2: 166- 540 rpm L1: 76- 165 rpm L2: 25- 75 rpm | | |
| | Spindle bore | 54 mm (2.1") | 80 mm (3.2") | 80 mm (3.2") | 104 mm (4") | 104 mm (4") / 155 mm (6") (OPT) | 104 mm (4") / 155 mm (6") 230 mm (9") (OPT) |
| | Chuck size | 8" | 10" | 10" | 12" / 15" (OPT) | | |
| Turret | Longitudinal travel (Z axis) | 895 mm (35.2"), 1415 mm (55.7") | 895 mm (35.2"), 1415 mm (55.7") | 1900 mm (74.9"), 2900 mm (114.2") | 1305 mm (51.4") 1800 mm (70.8"), 2800 mm (110.2"), 3800 mm (149.6"), 4800 mm (188.98") | | |
| | Cross slide travel (X axis) | 280 mm (11") | 300 mm (11.8") | 335 mm (13.2") | 400 mm (15.7") | | |
| | Top slide width | 115 mm (4.5") | 125 mm (4.9") | 125 mm (4.9") | 280 mm (11") | | |
| | Size of toolpost shank | 25 x 25 mm (1"x1") | 25 x 25 mm (1"x1") | 25 x 25 mm (1"x1") | 32 x 32 mm (1.3" x 1.3") | | |
| | X axis rapid travel | 5M / min. (200 ipm) | 5M / min. (200 ipm) | 5M / min. (200 ipm) | 5M / min. (200 ipm) | | |
| | Z axis rapid travel | 10M / min. (400 ipm) | 10M / min. (400 ipm) | 6M / min. (240 ipm) | 6M / min. (240 ipm) | | |
| Tailstock | Tailstock diameter | 65 mm (2.5") | 65 mm (2.5") | 65 mm (2.5") | 105 mm (4.1") | | |
| | Tailstock travel | 150 mm (6") | 150 mm (6") | 150 mm (6") | 150 mm (6") | | |
| | Tailstock taper | MT5 | MT5 | MT5 | MT6 | | |
| Motor | Spindle motor | 7.5 HP / 10 HP (OPT) | 10 HP / 15 HP (OPT) | 15 HP | 20 HP / 25 HP (OPT) | | |
| | Drives(X,Z) | DC SERVO | DC SERVO | AC SERVO | AC SERVO | | |
| | Range of feeds in manual mode | 0.01-500 m / rev. (0.0004-19.68 in / rev.) | 0.01-500 m / rev. (0.0004-19.68 in / rev.) | 0.01-500 m / rev. (0.0004-19.68 in / rev.) | 0.01-500 mm / rev (0.0004-19.68 in / rev) | | |
| | Coolant pump motor | 1/8 HP | 1/8 HP | 1/8 HP | 1/4 HP | | |
| Machine weight | Machine weight | 2270 kgs (5000 lbs), 2724 kgs (6000 lbs) | 3000 kgs (6600 lbs), 3500 kgs (7700 lbs) | 4000 kgs (5500 lbs), 4500 kgs (6050 lbs) | 5000 kgs (11000 lbs), 5500 kgs (12100 lbs), 6500 kgs (14300 lbs), 7500 kgs (16500 lbs) 8500 kgs (18700 lbs) | | |

※ THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

STANDARD ACCESSORIES:

1. Auto lubrication system
2. Coolant system
3. 4 stations manual toolpost
4. Rear splash guard with two slide front doors
5. RS-232 port
6. Work light
7. Adapter sleeve
8. Two dead center
9. Leveling bolts & pads
10. Tool box with tools
11. Accuracy test record
12. Operation & service manual

OPTIONS:

1. Larger spindle motor
2. Bigger spindle bore
3. 3-jaw chuck (OD)
4. 4-jaw chuck (OD)
5. Hydraulic chuck (OD, Through hole)
6. Face plate
7. Steady rest
8. Follow rest
9. Quick change tool post
10. 4 stations electric turret
11. 8 stations hydraulic turret with direct type disk
12. Rotation center
13. Hydraulic tailstock
14. Chip conveyor
15. CE mark
16. Transformer (power supply expect 220V)

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