



TNC-460N/540N/630N

TEACH - IN **CNC** LATHES SERIES

TAKANG LATHES WITH **FAGOR** CONTROLLER

- EASY OPERATION
- ECONOMIC, HIGH EFFICIENCY
- MULTI FUNCTION

CNC-TAKANG

CNC-TAKANG CO., LTD.

MANUFACTURER & EXPORTER

TNC-460N/540N/630N

■ 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.
32 tool magazine
Mini. preparation time.
Part-operation sequence storage
Tool data back-up

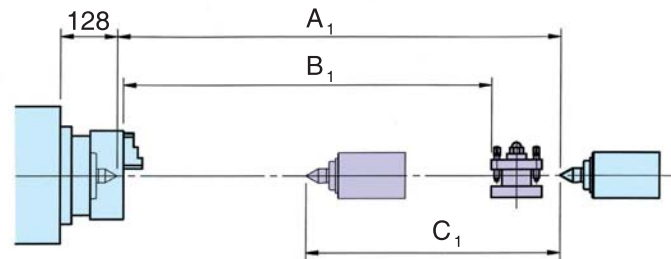
■ HARDWARE & OPERATION FUNCTIONS

9" VGA high resolution monochrome 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

■ WORK RANGE



MODEL	TNC460N / 540N / 630N x 1000	TNC460N / 540N / 630N x 1500	TNC460N / 540N / 630N x 3000
A₁	1000 mm (40")	1500 mm (60")	2000 mm (80")
B₁	804 mm (32")	1304 mm (51")	1804 mm (71")
C₁	500 mm (20")	1000 mm (40")	1500 mm (60")

■ MACHINE CONSTRUCTION BRIEF

HEAD STOCK

3 points bearing supported spindle, ground and hardened gear, well 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

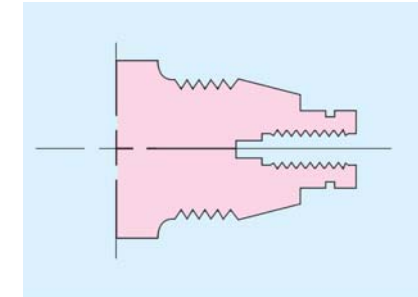
Display
Programming
Tooling compensation



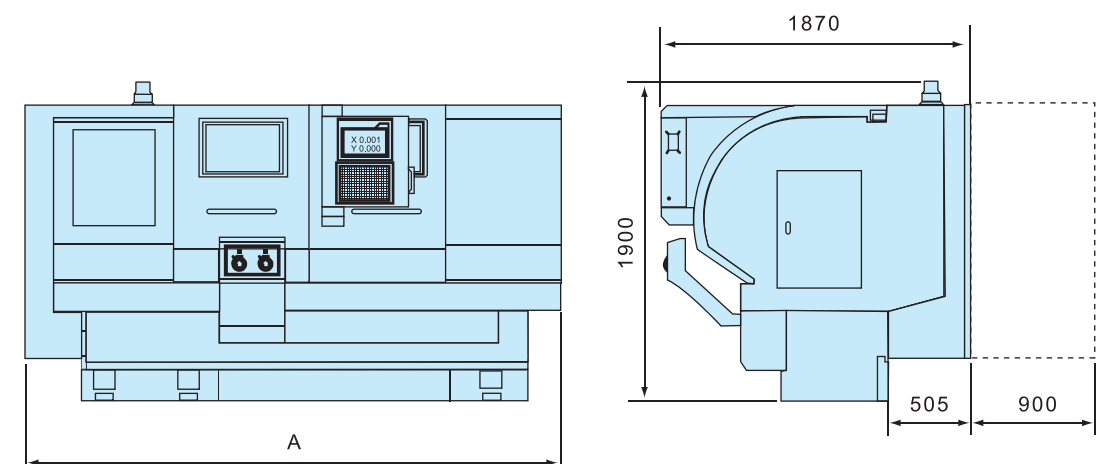
■ AUTOMATIC OPERATIONS

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

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



MODEL	A	B	C
TNC460N / 540N / 630N x 1000	2720 mm (107.1")	1870 mm (73.6")	1900 mm (78.4")
TNC460N / 540N / 630N x 1500	3220 mm (126.8")	1870 mm (73.6")	1900 mm (78.4")
TNC460N / 540N / 630N x 2000	3720 mm (146.5")	1870 mm (73.6")	1900 mm (78.4")

SPECIFICATIONS:

MODEL	TNC-460N	TNC-540N			TNC-630N	
Swing over bed	Ø460mm (18")	Ø540mm (21")			Ø630mm (25")	
Swing over cross slide	Ø230mm (9")	Ø310mm (12")			Ø400mm (15")	
Center height	230mm (9")	270mm (10.6")			315mm (12")	
Distance between centers	1000mm (40") / 1500mm (60") / 2000mm (80")					
Width of bed	350mm (13.8")					
Spindle nose	D1-6	D1-8	A2-11 (OPT)	D1-8	A2-11(OPT)	A2-11(OPT)
Auto change spindle speed (3 steps)	H : 3100-681rpm M : 680-151rpm L : 150-30rpm	H : 2250-491rpm M : 490-125rpm L : 124-27rpm	H : 1500-330rpm M : 330-92rpm L : 92-24rpm	H:2250-491rpm M : 490-125rpm L : 124-27rpm	H: 1500-330rpm M : 330-92rpm L : 92-24rpm	H : 800-176rpm M : 175-53rpm L : 52-10rpm
Spindle bore	Ø 56 mm (2.2")	Ø 85 mm (3.3")	Ø 104 mm (4")	Ø 85 mm(3.3")	Ø 104 mm (4")	Ø 153 mm (6")
Chuck size	8"	10" (12", 15" OPT)				
Longitudinal travel (Z axis)	910 mm (35.8") / 1410 mm (55.5") / 1910 mm (75.2")					
Cross slide travel (X axis)	280 mm	350 mm				
Top slide width	110 mm (4.3")	125 mm (5")				
Size of tool post shank	25 mm x 25 mm (1 x 1")					
Tailstock quill diameter	Ø 75 mm (2.95")					
Tailstock quill travel	180 mm (7.1")					
Tailstock quill taper	MT5					
Spindle motor	7.5 HP (10 HP OPT)	10 HP (15 HP OPT)				
Drives (X, Z)	SERVO					
Rapid traverse X, Z	5000, 7000 mm / min					
Range of feeds in manual mode	0.01 – 500 mm / min					
Coolant pump motor	1/8 HP					
Machine weight	2700 kgs / 3000 kgs / 3300 kgs	3100 kgs / 3400 kgs / 3700 kgs			3300 kgs / 3700 kgs / 4000 kgs	

※THE SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

■ STANDARD ACCESSORIES:

1. Auto lubrication system
2. Coolant system
3. 4 stations manual toolpost
4. Full splash guard
5. RS-232 port
6. Work light
7. Adapter sleeve
8. Two dead centers
9. Leveling bolts & pads
10. Tool box with tools
11. Inspection record
12. Operation & service manual

■ OPTIONS:

1. Larger spindle motor
2. 3-jaw chuck
3. 4-jaw chuck
4. Face plate
5. Steady rest
6. Follow rest
7. Quick change toolpost
8. Rotation center, MT5
9. Hydraulic tailstock
10. 4 stations electric turret
11. 8 stations hydraulic turret with direct type disk
12. Chip conveyor
13. CE mark

CNC-TAKANG CO., LTD.

No. 72, Alley 7, Lane 98, 1st Road, Taichung Industry Park,
Taichung 40767, TAIWAN
FAX: +886-4-2359 6064 E-mail: takang@ms17.hinet.net
TEL: (04)2359 6056 Web site: www.cnctakang.com.tw

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