

# *Best to improve the precision machine!*

The L30 has been designed for manufacturing a large quantity of HDD motor parts and other high precision components.

The machine improves the machining quality and gain your profits, The high precision built-in AC spindle motor ensures every part high standard machining quality.

COMPACT PRECISION  
GANG TYPE CNC LATHE

# L30

NEW



## ■ HEADSTOCK AND HEADSTOCK BASE

- The headstock is a rigid sturdy box-type design. The heat generated from the spindle motor is cancelled by an oil chiller. The headstock is equipped with an air purge cooling system for performing high thermal stability.
- At  $8,000\text{min}^{-1}$ , the maximum rise in temperature on the headstock is controlled within 5 degree Celsius for minimizing dimensional variation through machining operation.
- The headstock has an independent base to be insulated from the vibration by X and Z axis slide's movement.

## ■ X-AXIS • Z-AXIS SLIDEWAY' S

- The X and Z axis slideway's are dovetail structure for the maximum rigidity and superior accuracy.
- X, Z axis slideway's and ball screw nuts are lubricated by a central automatic lubrication unit.
- High grade ball screws are employed and preloaded to maintain the thermal stability from the heat expansion by circulation balls.

**TMW** TAKAHASHI MACHINERY



## ■MACHINE STANDARD SPECIFICATION

Specifications		Unit	L30
Capacity	Max.turnable O.D.	mm (in)	φ120(4.724)
	Max.bar capacity	mm (in)	φ25(0.984)
	Max.turnable length	mm (in)	120(4.724)
	Max.chuck size	in	5
Travel	Z-axis	mm (in)	250(9.842)
	X-axis	mm (in)	250(9.842)
Main Spindle max.speed		min <sup>-1</sup> (rpm)	Max.8,000
Rapid feed rate	X-axis	mm/min (IPM)	12,000 (472.440)
	Z-axis	mm/min (IPM)	16,000 (629.921)
Cutting feed rate		mm/rev (in/rev)	0.0001~40.0 (0.000001~9.999999)
		mm/min (IPM)	1~4,000 (0.01~400.0)
Main Spindle motor		kw (HP)	Built-in spindle motor 3.7/2.2(4.9/2.9) (Option: Ceramic ball bearings with grease lubrication)
Servomotor		kw (HP)	X:1.0/Z1.4 (1.3/1.9)
Machine size	Height	mm (in)	1,510 (59.488)
	Floor space (W×D)	mm (in)	1,470 (57.874) × 1,630 (64.1732)
	Weight	Kg (lb)	1,600 (3.528)

## ■STANDARD ACCESSORIES

- X·Z axis lubrication system 1 set ●Tool holders 4 sets ●Spindle chilling system 1 set ●Splash guard 1 set ●Coolant unit 1 set ●Door lock system 1 set ●Work light 1 set ●Coolant blow system 1 set ●Hand tools 1 set

## ■OPTIONAL ACCESSORIES

- X axis linear scale (resolution 0.05 micron meter) ●Chip conveyor ●Automatic fire extinguisher ●Duct for mist collector ●Oil mist collector ●Coolant temperature controller ●4" precision air chuck and jaws ●4" diaphragm chuck and jaw ●Air blow through spindle ●Air blow system ●Tool counter

## ■CNC UNIT STANDARD SPECIFICATIONS

Specifications	Unit	FANUC Series Oi-T
Controlled axis		3 Axes (X,Z,C) Simultaneously controllable axis: 3 axes (automatic mode)
Least input increment	mm (in)	0.0001 (0.00001)
Max. programmable dimensions	mm (in)	±9999.9999 (±999.99999)
Manual handle feed	mm (in)	0.0001 (0.00002), 0.001 (0.0001), 0.01 (0.001)
Interpolation function		Linear, Taper, Threading, Circular Incremental & Absolute
Part program storage & editing	m (ft)	800 (2,624.8)
Display	in	8.4 inch color LCD
Number of register able programs		400
Input code		ISO/EIA automatic recognition
Tool offset maount memory		±7 digits, 64 pairs
Rapid traverse override		4 steps
Reference position		Manual, Automatic

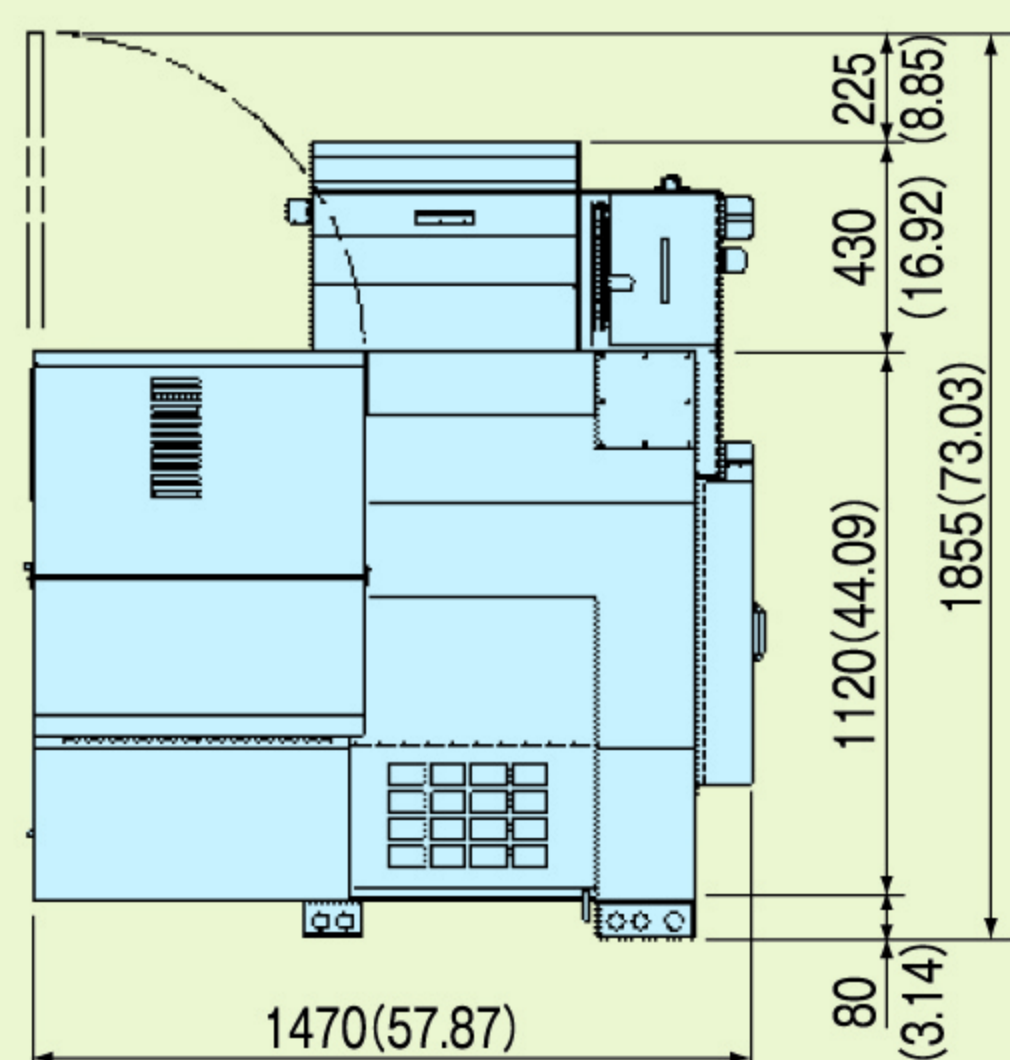
## ■CNC UNIT STANDARD ACCESSORIES

- Tool geometry and wear offset ●Chamfering/corner R ●Manual pulse generator ●Backlash compensation ●Canned cycles ●Multiple repetitive cycles (G70~G76) ●Run hour and parts count display ●Thread cutting retract ●Continuous threading ●Play back ●Radius designation on arc ●X axis diameter/radius programming ●Constant surface speed control ●Tool nose radius compensation ●Inch/metric conversion ●Custom macro ●Extended program editing ●Unexpected disturbance torque detection function ●Rigid tapping

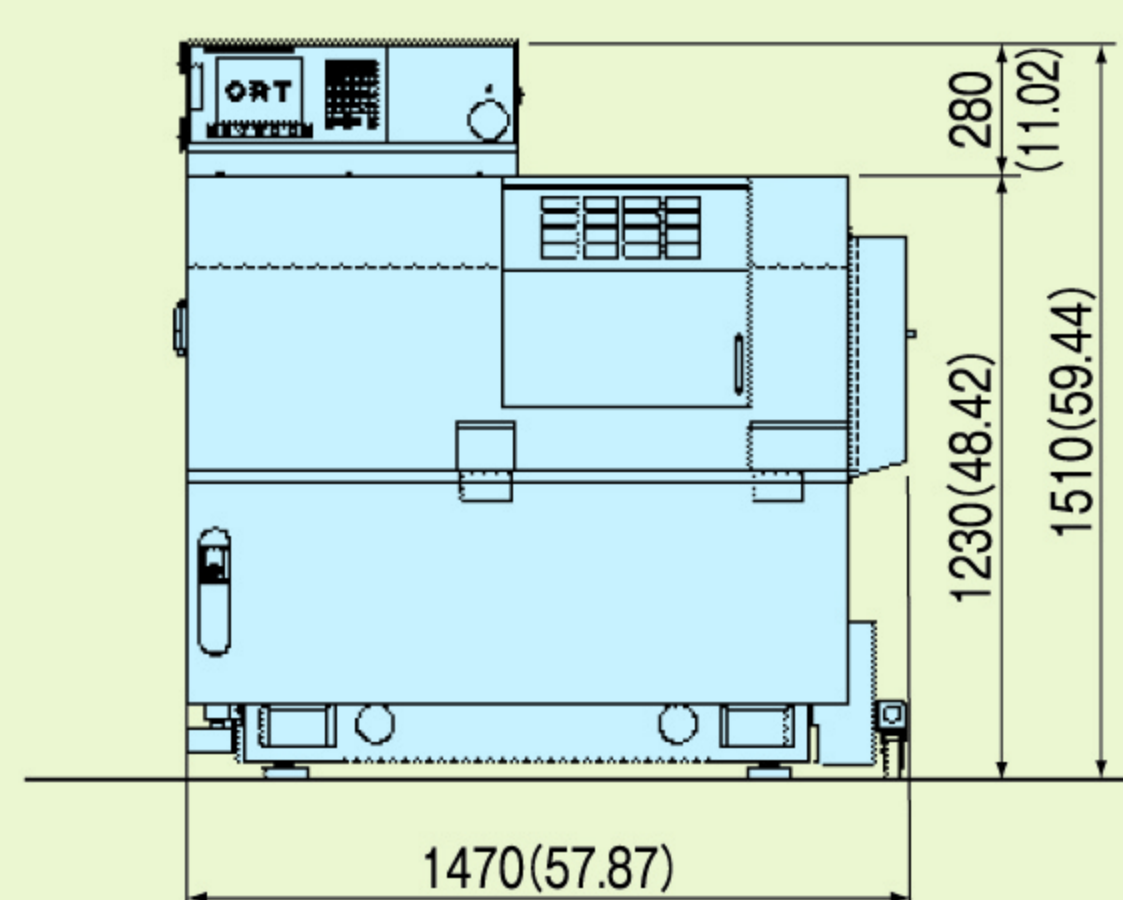
## ■CNC UNIT OPTIONAL ACCESSORIES

- External offset input interface ●Reader/puncher interface ●Automatic tool offset

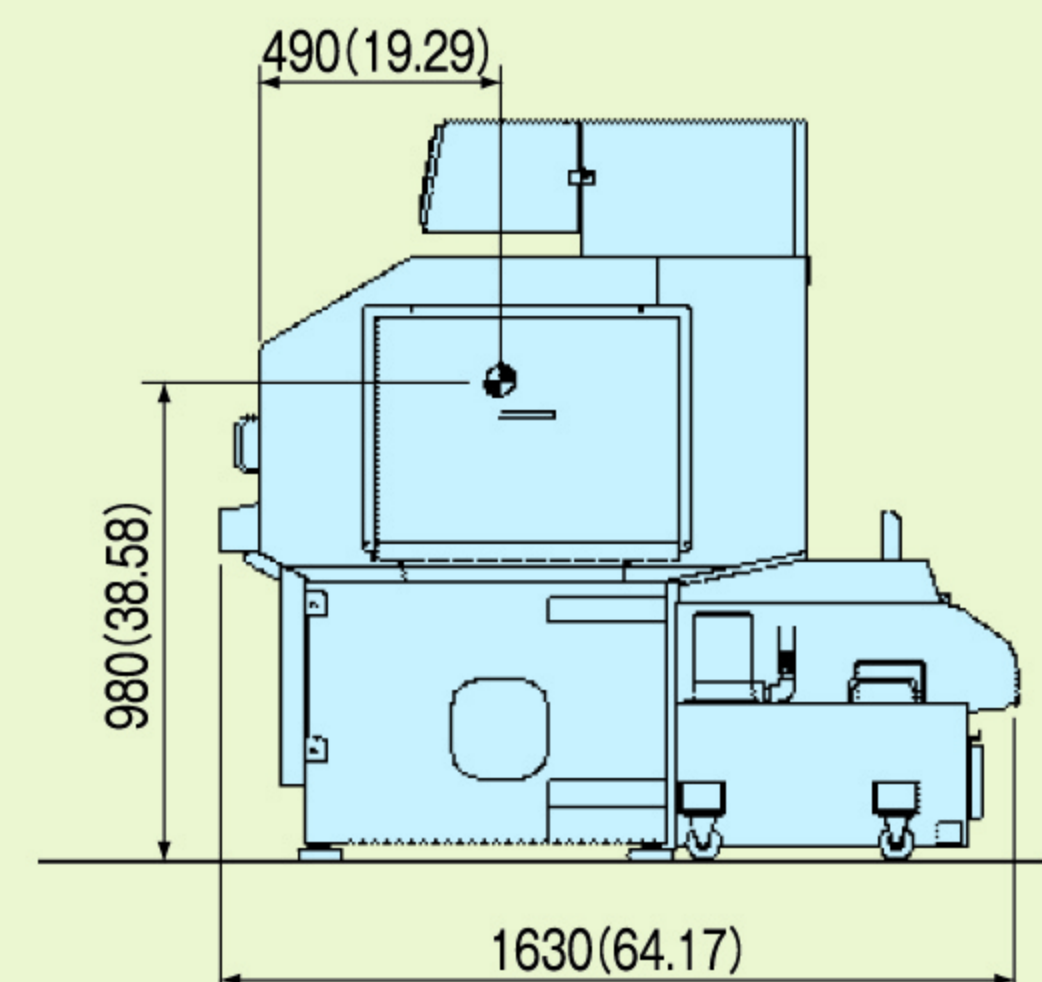
## L30 MACHINE EXTERNAL VIEWS



TOP VIEWS



FRONT VIEWS



RIGHT SIDE VIEWS

TMW

●Due to continual research and improvement, the above specifications are subject to change without notice.

# TAKAHASHI MACHINERY CO., LTD.

<http://www.tmwjp.com>

**Head office:** 4-11, Aza Shinbo, Ohaza Yamaya, Ojiya-City, Niigata Pref., Japan (947-8506)  
TEL (0258) 82-4315, FAX (0258) 83-2202, E-mail: sales@tmwjp.com

**Nagoya branch:** EME Nagoya Bldg., 4F, 4-24-8, Meieki, Nakamura-ku, Nagoya-City,  
Aichi Pref., Japan (450-0002)  
TEL (052) 571-5155, FAX (052) 561-4966, E-mail: sales-nagoya@tmwjp.com

**TAKAHASHI MACHINERY (THAILAND) CO., LTD.:** 57/16-18 Moo 4, Ramintra Rd., Km.2.  
Bangkhen Bangkok 10220 Thailand  
TEL (662) 971-5102, FAX (662) 971-5103, E-mail: tmwth@tmwjp.com