Appearance and features high precision turning!

The L30-NCL 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 machine equipped with the built-in AC spindle motor and CNC controlled gantry loader enables non-stop high standard machining operation.

COMPACTP PRECISION GANG TYPE CNC LATHE
WTH 3-AXIS CNC CONTROLLED GATRY LOADER

L30-NCL

NEW

TMW TAKAHASHI
L30-NCL

■ 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 8,000min^{-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 slidesway'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-NCL
Capacity	Max.turnable O.D.	mm(in)	φ80(3.149)
	Max.bar capacity	mm(in)	φ25(0.984)
	Max.turnadle length	mm(in)	80(3.149)
	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⁻¹(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)	1,900(74.803)
	Floor space(W×D)	mm(in)	2,455(96,653)×1,550(61.023)
	Weight	Kg(lb)	1,900(4,189)

■STANDARD ACCESSORIES

- 3 axis CNC controlled gantry loader 1 set ●2" air chucks and jaws for load/unload 1 set ●Tool holders 4 sets ●Spindle chilling system 1 set ●X・Z axis lubrication system 1 set ●Door lock system 1 set ●Splash guard (with automatic open/close window for loader) 1 set ●Coolant unit 1 set ●Work counter 1 set ●Signal tower 1 set ●Automatic circuit breakert 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) ●Work supply/discharge conveyor ●24 station indexing stacker ●Pallet changer ●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 SPECIFICA TIONS

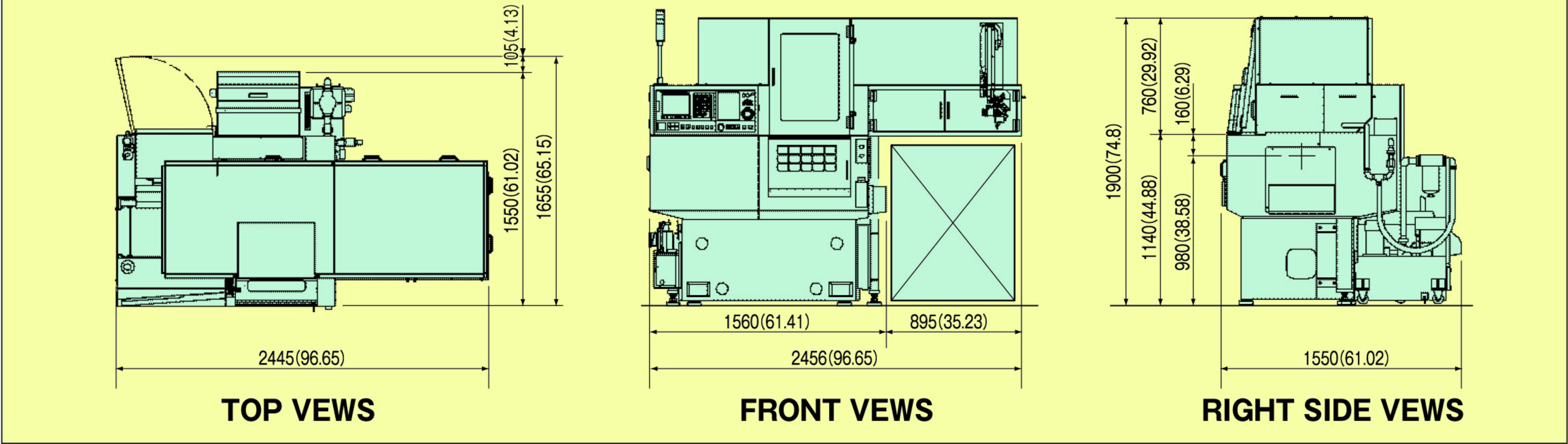| Specifications	Unit	FANUC Series Oi-T
Controlled axis		6 Axes(X.Z.C.XL.ZL.YL) Simultaneously controlladle axis: 6 axes(automatic mode)
Least input increment	mm(in)	0.0001(0.00001)
Max.programmable dimensions	mm(in)	±9999.9999(±999.99999)
Manual handle feed	mm(in)	0.0001(0.00002),0.001(0.0001),0.01(0.001)
Interpolation function		Linear,Taper,Threading,Circular
		Incremental & Absolute
Part program storage & editing	m(ft)	2,560(8,399.36)
Display	in	8.4 inch color LCD
Number of register able programs		800
Input code		ISO/EIA automatic recognition
Tool offset maount memory		±7digits,128 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

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

L30-NCL MACHINE EXTERNAL VEWS

TOP VEWS — 105(4.13), 1550(61.02), 1655(65.15), 2445(96.65)

FRONT VEWS — 1560(61.41), 895(35.23), 2456(96.65)

RIGHT SIDE VEWS — 760(29.92), 160(6.29), 1900(74.8), 1140(44.88), 980(38.58), 1550(61.02)

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

TMW

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