

**L&W MACHINE TOOLS, INC.**

# **CiNCh<sup>®</sup>-Mill**

## **TOOLROOM BED MILLS**



pictured with **CiNCh-Mill 30**

## Oversized box ways

Why choose **CiNCh-Mill**? Get out your tape measure and check the distance between levelling bolts, the width of the column and the depth of the saddle. Now look inside the casting for heavy-duty, anti-flex and vibration absorbing ribs that we added. Then, go measure the competition and you'll find that they don't measure up to a **CiNCh-Mill**

## **CiNCh-Mill** uses the best design & components.....

Top quality Meehanite beds, column, table & saddle; premium grade spindles, ballscrew and bearings. CiNCh-Mill hardened, solid box guideways handle the toughest cutting conditions with ease. They are precision ground and Turcite coated, too.

## Massive Cast-iron design

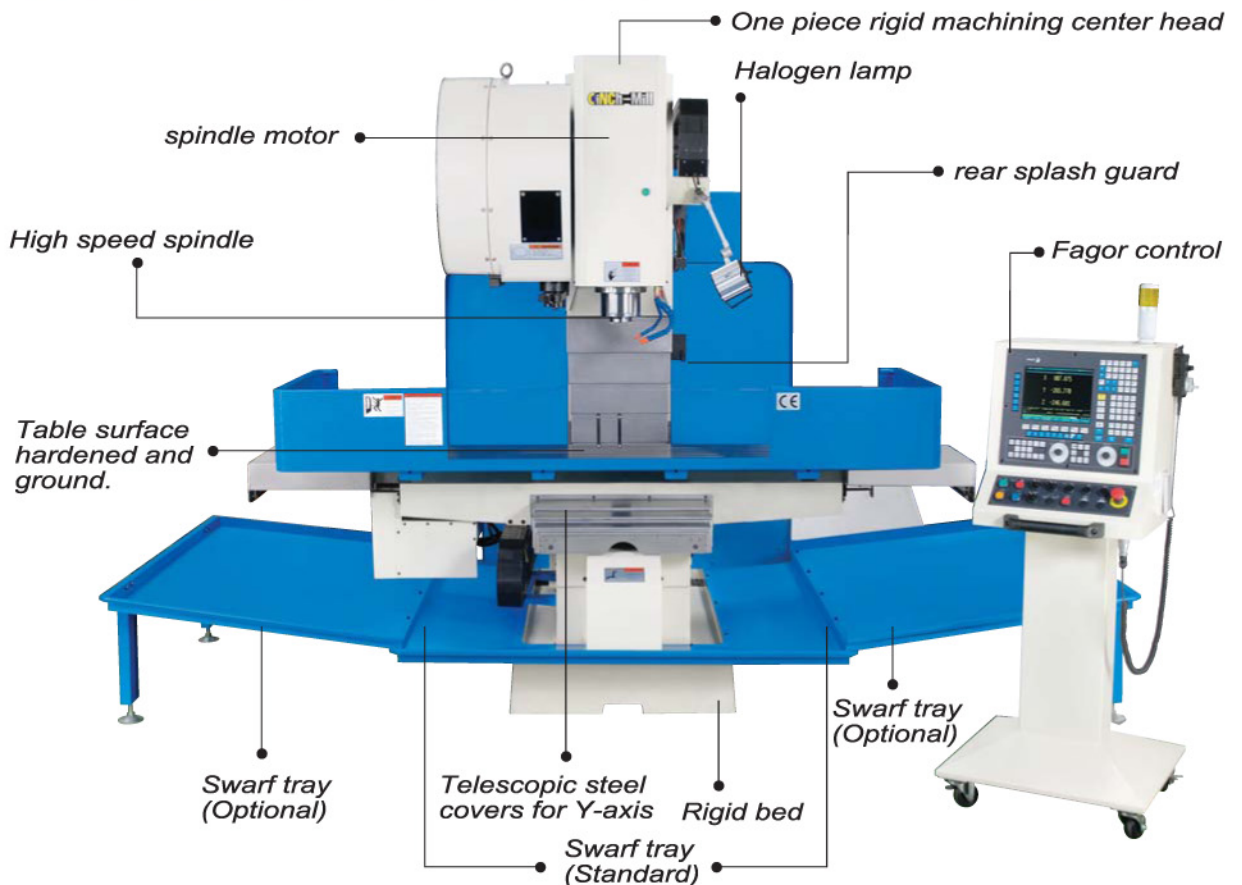
1. Solid column construction eliminates head stock deflection.
2. Hardened solid box guideways for peak accuracy and long machine life.
3. Fully supported table eliminates overhang.

## Solid cast-iron construction

Our casting are analyzed for flaws and internally reinforced with numerous heavy ribs to deliver the ultimate in rigidity and damping while allowing higher horsepower cuts.



## MACHINES DESIGNED & ENGINEERED FOR GREAT MILLING PERFORMANCE





***New Innovated Full Boxways*** (CINCH-MILL 30SB / CINCH-MILL 80)

***Direct Mounted axial servo motor on all axes*** (CINCH-MILL 30SB)

**CINCH-MILL 30SB**  
(Box Way)



CINCH-MILL

**CINCH-Mill 50**

( Custom-made color is available )



One Piece 6-Boxway in Y-axis ( **CINCH-Mill 80** )



One Piece 4-Boxway in Y-axis ( **CINCH-Mill 50/60** )

## Advanced inspection instrument and technology

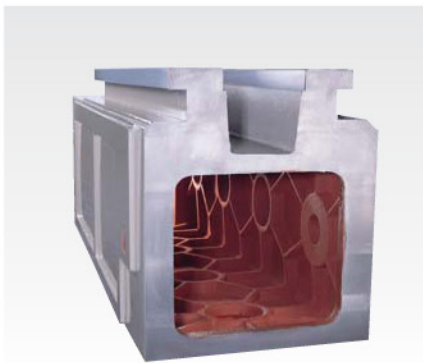


Laser inspection



Ball bar inspection

## Machine Feature :



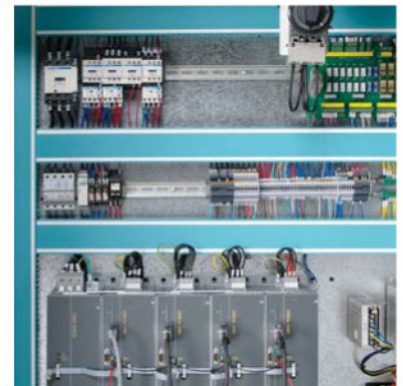
•Machine frame design is various depends on machine model.

Get your tape measure and check the distance between leveling bolts and the width of the column and the depth of the saddle. Now, look inside the casting for the heavy-duty, anti-vibration absorbing ribs that CiNCh -Mill adds. Now, go measure the competition and you'll find the difference.



### Precision ball screw

Three axes are transmitted by high precision ball screws, preloaded, hardened and ground, assuring dependable feed accuracy.



### Safety and energy saving electrical cabinet and wiring

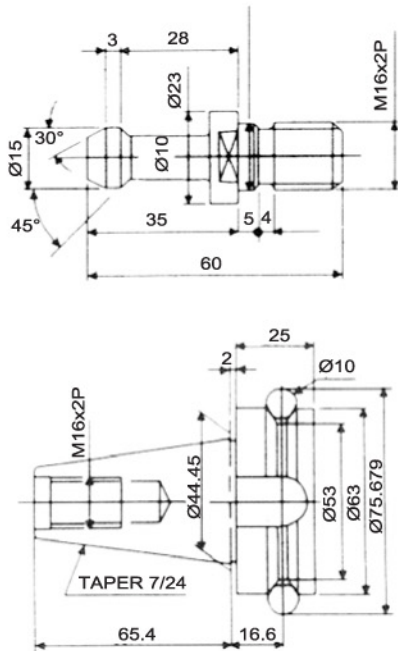
Neat and easily assessible wiring ensure a safe maintenance area and provides longer life of key electrical components.

### High precision, high rigidity spindle

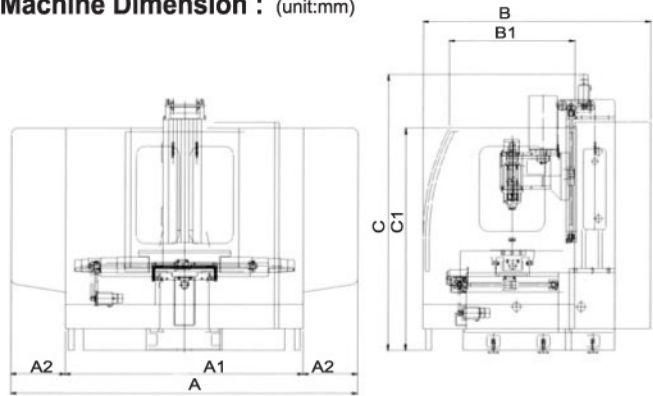
The advanced spindle provides high axial thrust capability, yet generates minimal heat.



## Tool Shank & Pull Stud : (unit:mm)



## Machine Dimension : (unit:mm)



MODEL \ SIZE	A	A1	A2	B	B1	C	C1
Cinch-Mill 18	2,810	2,210	300	2,010	1,100	2,250	1,750
Cinch-Mill 20	3,170	2,210	485	2,110	1,370	2,500	1,750
Cinch-Mill 25	4,150	2,210	960	2,400	1,470	2,500	1,900
Cinch-Mill 30	4,430	2,210	1,100	2,400	1,470	2,540	1,900
Cinch-Mill 30S	4,630	2,210	1,200	2,400	1,470	2,540	1,900
Cinch-Mill 40	5,300	2,210	1,540	2,800	1,780	2,800	2,100
Cinch-Mill 50	5,600	2,210	1,695	2,800	1,780	2,800	2,100
Cinch-Mill 60	7,600	3,340	2,130	2,865	2,010	2,840	1,925
Cinch-Mill 80	7,550	5,900	825	2,825	1,965	2,840	1,970

## Standard Accessories

- Table splash guard
- Splash guard next to column
- Chip pan
- Cable chains
- Coolant Unit
- Auto Lube System
- Heat Exchanger
- Alarm Light
- Work Lamp
- Tool Box

## Optional Accessories

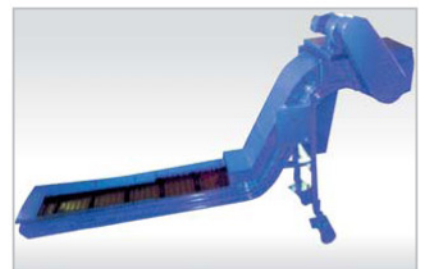
- Full enclosure splash guard.
- Spindle Oil Cooler.
- Power Source Transformer.
- Armless type ATC (16T, 20T)
- Arm type ATC (24T)
- Coolant Through Spindle.(CTS)
- 8000/10000/12000RPM spindle (BT-40)
- ZF Gear spindle.
- Screw type chip conveyor.
- Belt type chip conveyor.
- CE Norms



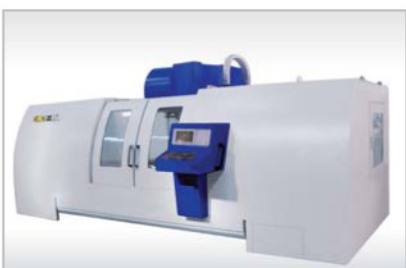
Full Enclosure splash guard (Cinch Mill 30)



Screw type chip conveyor



Belt type chip conveyor



Full Enclosure splash guard (Cinch Mill 50)



24 T arm type ATC



Armless type ATC

## Machine Specification

ITEMS	CINCh-Mill 18	CINCh-Mill 20	CINCh-Mill 25	CINCh-Mill 30	CINCh-Mill 30S
<b>TABLE</b>					
Worktable	355x1270mm 14"x50"	406x1372mm 16"x54"	420x1600mm 16.5"x63"	450x1800mm 17"x70"	610 x 1854 mm 24"x73"
T-slot	16x3x64mm	16x3x64mm	16x5x60mm	16x5x60mm	18x5x70mm
Table load capacity	500 kgs	600 kgs	800 kgs	1000 kgs	1500 kgs
<b>3 AXES</b>					
X axis travel	800 mm	1000 mm	1300 mm	1500 mm	1500 mm
Y axis travel	400 mm	500 mm	635 mm	650 mm	850 mm
Z axis Travel	450 mm	520 mm	620 mm	620 mm	710 mm
Feed Rate	0-5 M/min	0-5 M/min	0-5 M/min	0-5 M/min	0-5 M/min
Rapid travel	0-10 M/min	0-10 M/min (0-20 M/min opt.)	0-10 M/min (0-20 M/min opt.)	0-10 M/min (0-20 M/min opt.)	0-10 M/min (0-20 M/min opt.)
Ballscrew diameter	Ø32 mm	Ø32 mm	Ø40 mm	Ø40 mm	Ø40 mm
Guideway	X: Dove tail, Y/Z: box way				
Transmission	belt drive	belt drive	belt drive	belt drive	belt drive
<b>SPINDLE</b>					
Spindle taper	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)
Spindle speed	6000 r.p.m.	6000 r.p.m.	6000 r.p.m.	6000 r.p.m.	6000 r.p.m.
Spindle motor	7.5 HP	10 HP	10 HP	10 HP	15 HP
<b>GENERAL</b>					
N.W.	2500 kgs	3100 kgs	3800 kgs	4000 kgs	5600 kgs
G.W.	3000 kgs	3500 kgs	4200 kgs	4400 kgs	6100 kgs
Packing measurement (LxWxH) (cm)	210x228x225 (Half-Splash Guard)	290x228x255 (Half-Splash Guard)	330x228x255 (Half-Splash Guard)	330x228x255 (Half-Splash Guard)	354x228x255 (Half-Splash Guard)

ITEMS	CINCh-Mill 30SB (BOX WAY)	CINCh-Mill 40	CINCh-Mill 50	CINCh-Mill 60	CINCh-Mill 80
<b>TABLE</b>					
Worktable	610 x 1854mm 24"x73"	762x1830mm 30"x72"	813x2185mm 32"x86"	813x2750mm 32"x108"	813x3200mm 32"x126"
T-slot	18x5x100mm	18x5x100mm	18x5x100mm	18x5x125mm	18x7x100mm
Table load capacity	1000 kgs	1500 kgs	1800 kgs	2000 kgs	2200 kgs
<b>3 AXES</b>					
X axis travel	1500 mm	1700 mm	2000 mm	2500 mm	3000 mm
Y axis travel	800 mm	850 mm	850 mm	850 mm	900 mm
Z axis Travel	700 mm	710 mm	710 mm	710 mm	750 mm
Feed Rate	0-5 M/min	0-5 M/min	0-5 M/min	0-5 M/min	0-5 M/min
Rapid travel	0-10 M/min (0-20 M/min opt.)	0-10 M/min (0-20 M/min opt.)	0-10 M/min (0-20 M/min opt.)	0-10 M/min (0-20 M/min opt.)	0-10 M/min (0-20 M/min opt.)
Ballscrew diameter	Ø40 mm	Ø40mm (Ø50mm opt.)	Ø40mm (Ø50mm opt.)	Ø50mm	X/Y: Ø80mm Z: Ø63mm
Guideway	X/Y/Z: box way	X: Dove tail, Y/Z: box way			X/Y/Z : Box Way
Transmission	direct mounted	belt drive	belt drive	belt drive	belt drive
<b>SPINDLE</b>					
Spindle taper	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-40 (CAT-40)	BT-50 (CAT-50)
Spindle speed	8000 r.p.m.	6000 r.p.m.	6000 r.p.m.	6000 r.p.m.	4500 r.p.m.
Spindle motor	15 HP	15 HP	15 HP	20 HP	20 HP
<b>GENERAL</b>					
N.W.	4800 kgs	6500 kgs	6600 kgs	9500 kgs	15000 kgs
G.W.	5400 kgs	7000 kgs	7100 kgs	10000 kgs	17000 kgs
Packing measurement (LxWxH) (cm)	350x228x256 (Half-Splash Guard)	370x228x254 (Half-Splash Guard)	370x228x254 (Half-Splash Guard)	323x228x254 270x228x100 (Half-Splash Guard)	610x228x254 240x226x150 320x226x100 (Half-Splash Guard)

• L&W Machine Tools, Inc. reserves the right to alter any mechanical specification without prior notice in the interest of product development.

• CINCh-Mill 30SB is special-designed of box way on all axes.

## L&W MACHINE TOOLS, INC.

Factory: No. 53, Ho Tso St., Feng Yuan, Taichung Hsien, Taiwan Export Office: 9F-8, No.62, Ta Ya Road, Taichung, Taiwan

Tel : +886-4-2201-4701 Fax: +886-4-2203-6013, 2207-0371  
<http://www.lw-machinetools.com> • E-mail: [lwmachin@ms31.hinet.net](mailto:lwmachin@ms31.hinet.net)