

# CLEVELAND

## ***CNC Machining Center: AL42***



***Proven High Quality  
Machines and Promoting  
Centroid Control since 1989***



### Specification

TABLE	47.2" x 23.6" (1200mm x 600mm)
X TRAVEL	41.3" (1050mm)
Y TRAVEL	23.6" (600mm)
Z TRAVEL	24" (610mm)
SPINDLE NOSE TO TABLETOP	4.7" to 28.7" (120- 730mm)
SPINDLE CENTER TO COLUMN	27.5" (700mm)
TABLE LOAD CAPACITY	1320 LBS (600KGS)
T-SLOT (5)	0.7" x 3.9"
SPINDLE TAPER	CAT40/BT40
PROGRAMABLE SPINDLE SPEED	8000rpm/10000rpm/12000rpm
TRANSMISSION SPINDLE-MOTOR	Belt / Direct drive (OPT)
RAPID FEED RATE X/Y/Z	1000/1000/1000 ipm
CUTTING FEED RATE	1 to 393 ipm
SPINDLE MOTOR/MAX POWER	<b>15HP</b>
SERVO MOTORS ON XYZ	1.8 kW / 1.8 kW / 3 kW
COOLANT PUMP	2 HP
TOOL MAGAZINE CAPACITY	Armless 16 tools
MAX. TOOL DIA	Ø 3.1"
ADJ. POCKET EMPTY	Ø 3.54"
MAX. TOOL LENGTH	11.8" (300mm)
MAX. TOOL WEIGHT	15.4lbs Total:176lbs
LUBRICATION PUMP	Auto lubrication
NET WEIGHT	14,322 LBS. (6510KGS)
POWER REQUIREMENT	17 KVA 3 phase 208V-230V
AIR REQUIREMENT	70-100 psi (5~8 kg/cm <sup>2</sup> )
OIL WAY RECOMMENDED	Mobil Vectra #2
OPTIONAL CHILLER OIL	Shell Tellus 32
COOLANT CAPACITY	75.2 Gallons

#### Featuring:

**Centroid's Easy Conversational Programing OAK PRO License**

*Huge 15" Color Touch Screen*

*60GB Reliable SSD, RS232 and 2USB ports for easy data X-fer.*

*High precision liner Guide Way on three axes.*

**C2** *Class Ball Screw is pre-loaded to reduce the effects of heat deformation.*

*FC30 Meehanite casting with annealed & stress relieved for long term reliability*

*100% Laser tested and calibrated positioning accuracy and repeatability.*

*High speed Delta AC motors and Drivers and Spindle inverter.*

## Machine Standard

Auto lube system	Coolant system	<b>Shop floor programming/Conversational</b>
<b>Full enclosure</b>	<b>Flood wash system</b>	<b>16 Tools umbrella type ATC</b>
15" color LCD	60 GB solid state hard drive	<b>2 x LED work light</b>
<b>Screw type Chip Auger</b>	<b>100 Step MPG</b>	Telescoping way cover
USB 2.0 port	RS-232 interface	Leveling bolts & plate
Tools & box	Parts manual machine	Electronic Operation Manual Centroid
<b>Air Blow</b>		

## Machine Options

\*Are Recommended items

<b>*AL-A24ATC</b>	<b>Upgrade to Arm type 24 tools ATC.</b>
AL-A30ATC	Upgrade to Arm type 30 tools ATC.
8928	Upgrade to Wireless MPG
AL-SPCR	Spindle chiller
AL-SP15HP10K	Upgrade to 15HP Spindle motor with Spindle Oil Chiller (10,000rpm)
AL-SP15HP12K	Upgrade to 15HP Spindle motor with Spindle Oil Chiller (12,000rpm)
AL-CTS20	20 bar CTS system (For belt driver system/TPRK3T33-33)
AL-CTS20R	CTS Ready (For belt driver system/TPRK3T33-33)
AL-4AXISR	4th axis Ready
	Upgrade to Chain type Chip Conveyor (AL32/AL42)
AL-OS	Oil Skimmer
AL-RL	Upgrade linear guide way to Roller type for X/Y/Z axes
AL-EC	Electric Cabinet conditioner
AL-CG	Coolant gun
AL-IDS	Interlock door switch
AL-RS8	8" Riser block set for AL42.
CP-MIST	Mist Coolant System
C40RK-45	Retention Knob Cat40, 45degree 16pcs
CK-105	52pcs Clamping Kit



**Spindle Chiller**



**24/30 Tools Arm type ATC**



**Coolant Through Spindle**

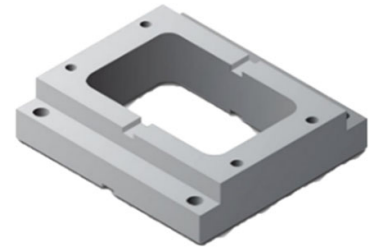


**Chain Type Chip Conveyor**

## Tools Options

<b>CAT40 KIT RECOMMEND</b>	
CK-105	52pcs Clamping Kit
CAT40- TOOL16	CAT40 EM Tool Holder + Keyless Chuck + Retention knob (*16 pcs.) EM 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 1"+C40RK-45(x8) +INT-13-CAT40 (x1)
HAV-6	6" Angle Vise W/ Swivel Base (Made in Taiwan)
<b>Total Special kit price</b>	

## Optional Rotary Table



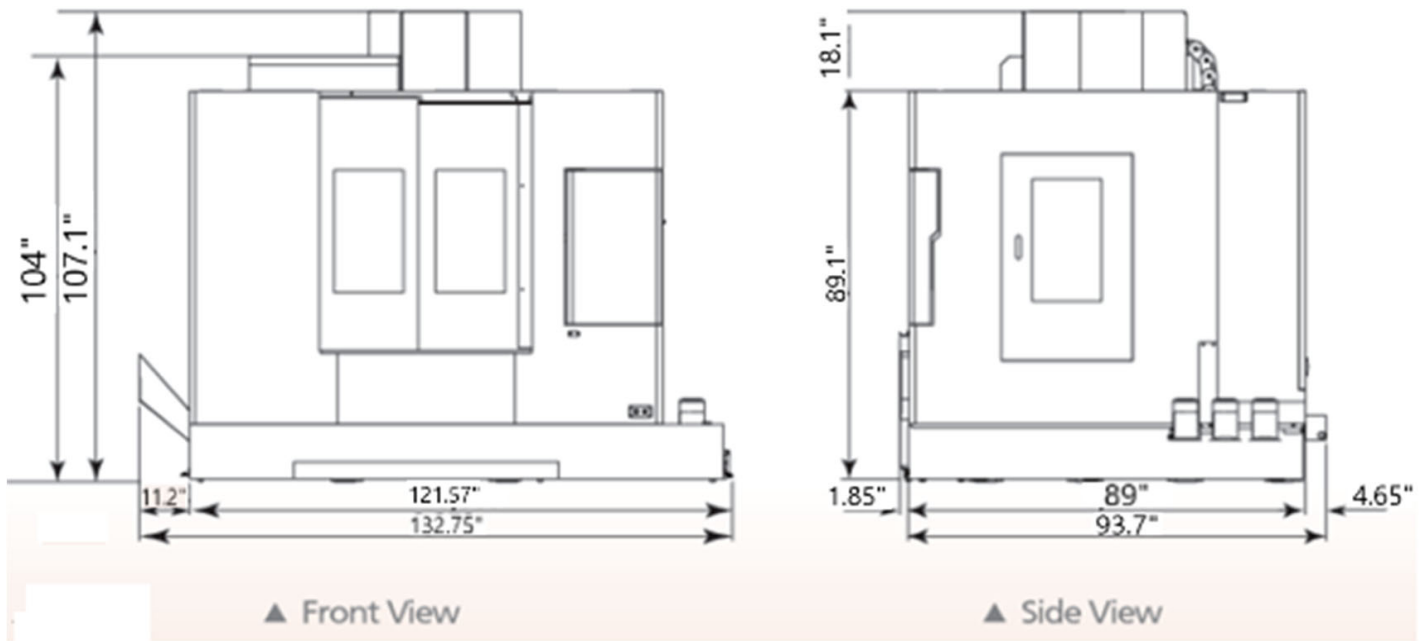
MNC-130R	CNC rotary table w/-Delta motor and driver 1KW. (Table size: 5.1")
DTS-130	Manual tailstock for MNC-130R
SK6 + AP1	3-Jaw manual scroll chuck w/-backplate
<b>MNC-130RP</b>	<b>MNC130R 4th axis Rotary Table Package -MNC-130R+DTS-130+SK6+AP1</b>
MNC-172R	CNC rotary table w/-Delta motor and driver 1KW. (Table size: 6.69")
DTS-171	Manual tailstock for MNC-171R
SK6 + AP1	3-Jaw manual scroll chuck w/-backplate
<b>MNC-172RP</b>	<b>MNC170R 4th axis Rotary Table Package -MNC-172R+DTS-171+SK6+AP1</b>
MNC-200R	CNC rotary table w/-Delta motor and driver 1KW. (Table size: 7.87")
DTS-200	Manual tailstock for MNC-200R
SK7 + AP1	3-Jaw manual scroll chuck w/-backplate
<b>MNC-200RP</b>	<b>MNC200R 4th axis Rotary Table Package -MNC-200R+DTS-200+SK7+AP1</b>
MNC-251R	CNC rotary table w/-Delta motor and driver 1KW. (Table size: 9.84")
DTS-251	Manual tailstock for MNC-251R
SK8 + AP2	3-Jaw manual scroll chuck w/-backplate
<b>MNC-251RP</b>	<b>MNC251R 4th axis Rotary Table Package -MNC-251R+DTS-251+SK8+AP1</b>

\*A Riser Block is available for all rotary tables and tail stock packages.

## CENTROID Software Options

10249	Printed Manual Centroid control	
10630	Unlimited part program size	Included
10730	Intercon off-line conversational program (for your desktop PC)	
10850	Coordinate system rotation (CSR)	Included
10625	Scaling and mirroring [G50 & G51]	Included
10810	Rigid tapping [G74 & G 84] (includes 10620)	Included
10740	Engraving software	
15010	Upgrade to CNC Unlimited License instead of PRO license	
<b>DIGITIZING &amp; PROBING</b>		
10405	DP-4 probing package w/ CSR (10850)	
12486	DP-7 probing package w/ CSR (10850)	
10770	2D & 3D digitizing software (requires 10405)	
10220	TT-1; Tool touch off kit	
12468	TT-2; Tool touch off kit	
10772	Tool room package (10405 & 10220 & 10600 work coordinate)	

## Floor Plan



\*\* WE RESERVE THE RIGHT TO CHANGE DESIGN, COLOR, SPECIFICATIONS, OR PRICE WITHOUT NOTICE \*\*

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