

DAHLER®

The Latest and Best Quality Machinery

New Generation Of Machines
From Taiwans Premier Machine
Tool Builder



VERTICAL MACHINING CENTER MCV-1200



TRLEMC

ISO 9001
BSMI
REGISTERED

CE

A ONE STOP MANUFACTURING SOLUTION

High Performance Compact Vertical Machining Center

- Strong compact machine ensures Dah Lih tradition for long life / reliability / rigidity
- Short, strong machine spindle driven by Direct Mount Spindle motor ensuring a perfect result in both rigidity and responsiveness of the spindle
- 10,000 RPM standard with options of 12,000 & 15,000 RPM
- Compact design with all external equipment such as spindle oil cooler, transformer... etc are all within the machine foot print
- Linear guideway for all 3 axes
- Full 360° coolant flow together with programmable air pipe allows for maximum cutting condition for all material types
- Designed for minimum maintenance

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**Maximum Cutting Capability,
High Rigidity and Accuracy Combined With
Low Noise and Ease of Maintenance**

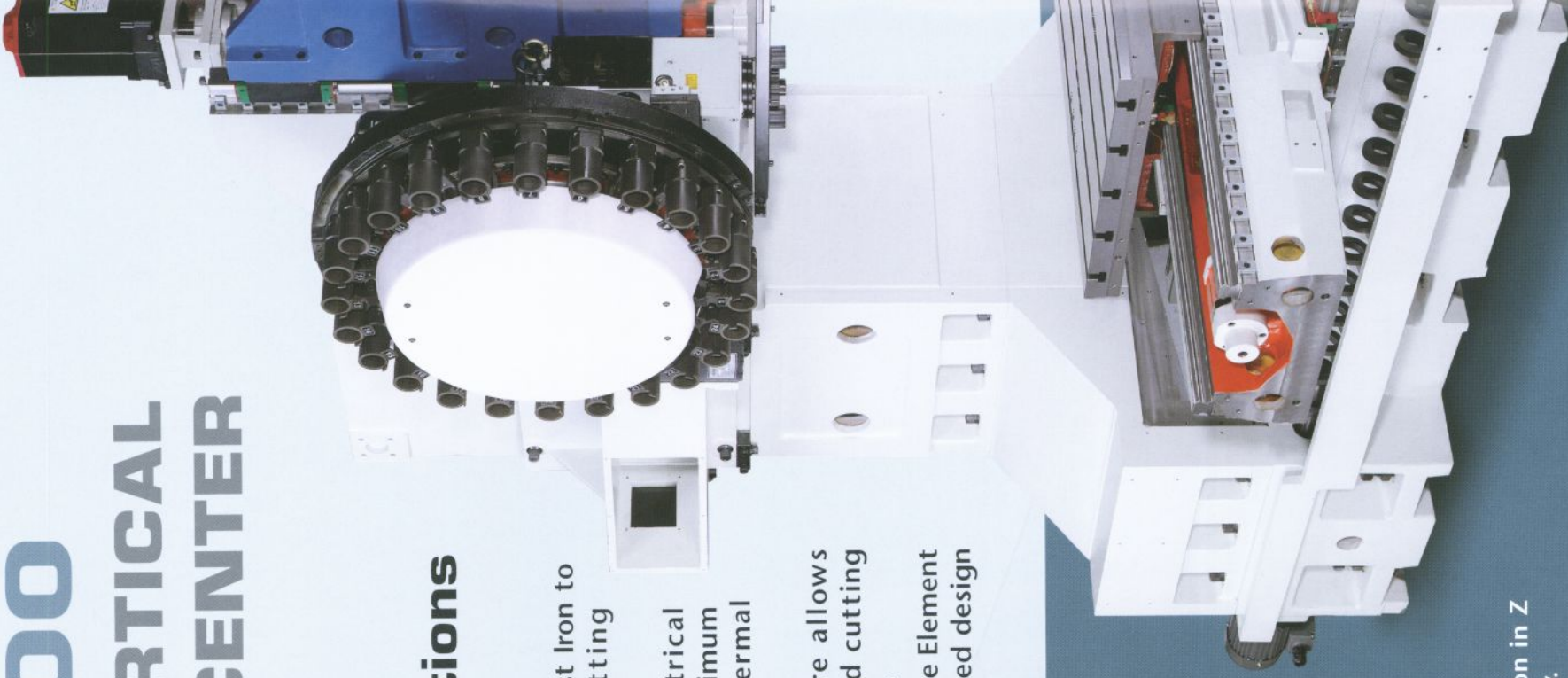


MCV-1200 COMPACT VERTICAL MACHINING CENTER

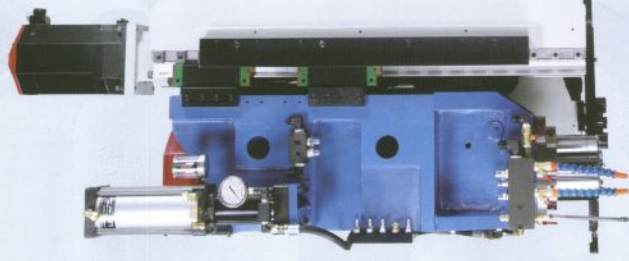
Provide the Perfect Solution for All Sections of Industries

- All castings are made with Meehanite Cast Iron to provide Maximum stability and cutting performance.
- New column design featuring symmetrical reinforced cross ribs that provide optimum structural rigidity and minimizes thermal deformation.
- Extra wide column to base structure allows additional benefits to create improved cutting conditions together with high accuracy.
- All major castings are designed by " Finite Element Analysis" in house by Dah Lih experienced design team.

- Two piece column design allows for variation in Z height without compromise to machine rigidity.



- Short, strong spindle design eliminates problem created by heat, drive belt slipping and provides perfect response and rigidity.
- Direct mount spindle motor available in 10,000, 12,000 & 15,000 RPM.



- One piece angled Y axis slide cover design retracts into the inner column casting to eliminate coolant leaking and provides a good solution to the management of the cutting chip.
- New clamping methods ensure maximum rigidity and location. A second benefit is that the new design allows for much easier field service for either replacement or adjustment.

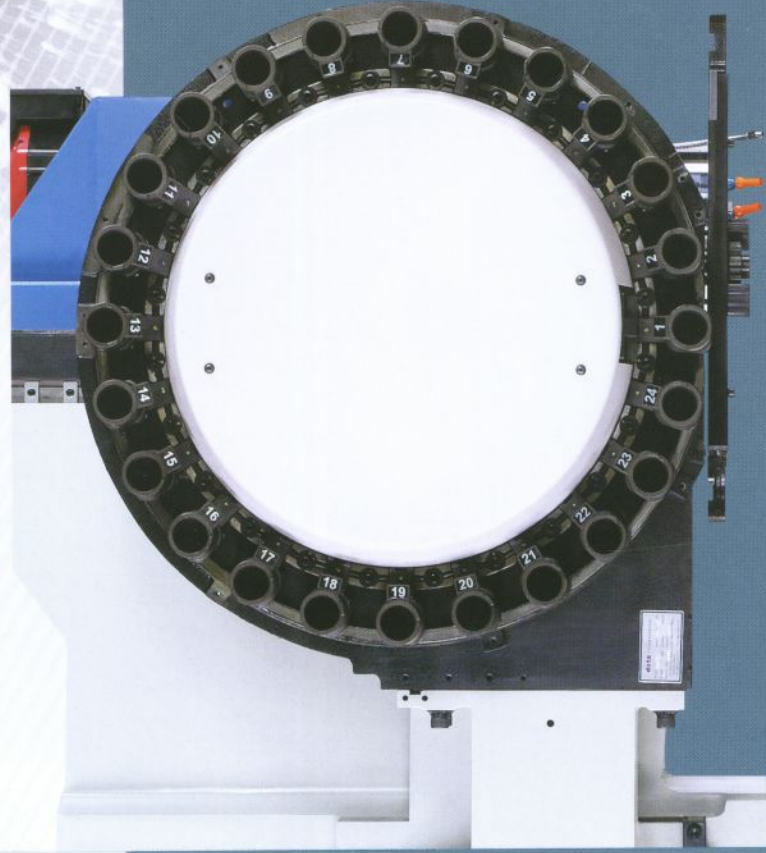


- Extra wide column to base structure provides enhanced stability during all cutting condition and reduce X axis overhang.
- Twin Chip auger screw running parallel to the Y axis moves all cutting chips efficiently to the front side conveyor.

SUITABLE FOR A WIDE RANGE OF INDUSTRIES

- AUTOMOTIVE, ■ OIL INDUSTRY, ■ MOULD & DIE,
- AEROSPACE

- All axes are fitted with minimum length ballscrew
- All ballscrew are reduced in length to provide optimum performance and minimal inertia
- Coolant through ballscrew is available as an option, this greatly reduces heat expansion and provides a enhanced machining accuracy



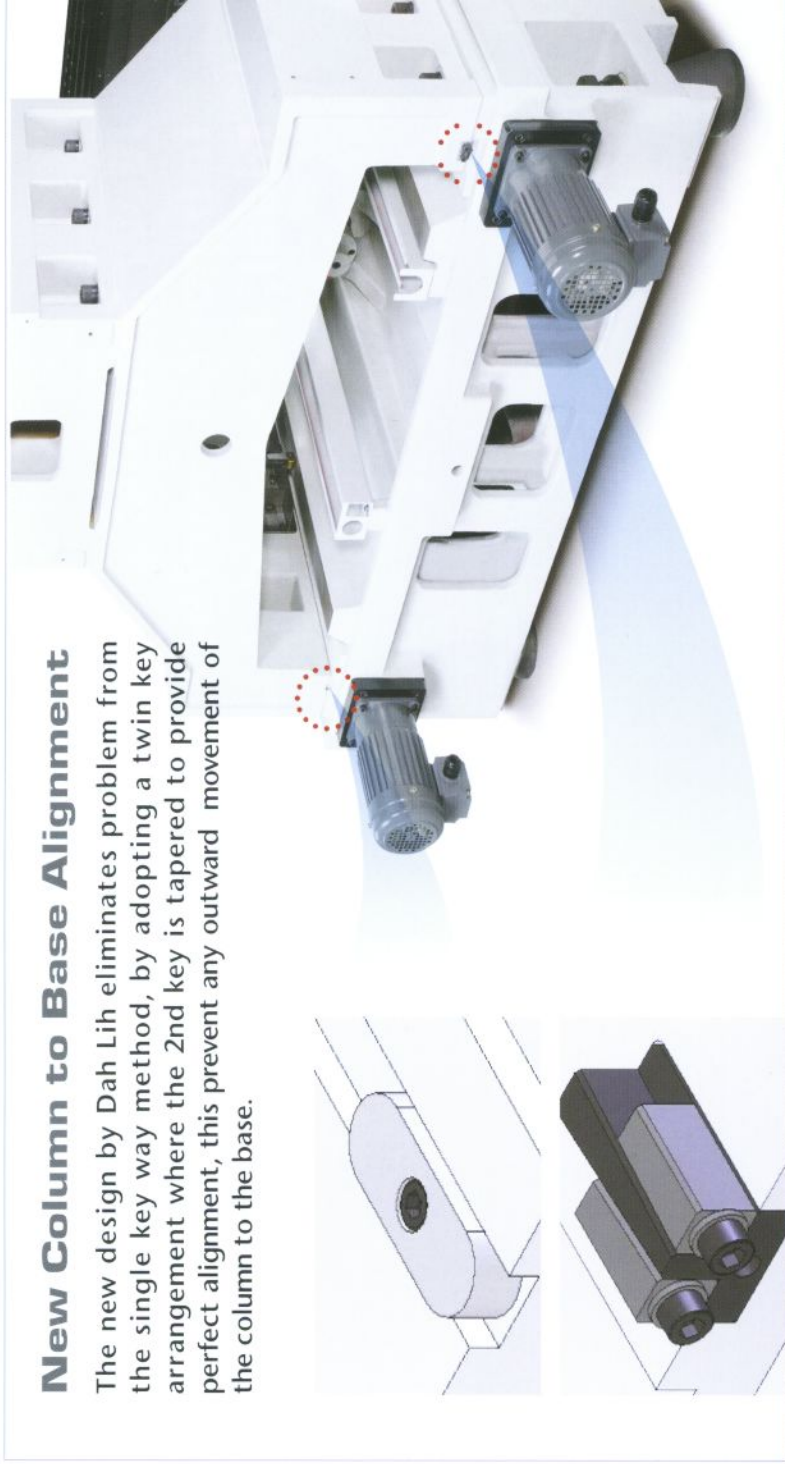
- Fast, efficient CAM type 24 tools ATC
- Pre-selection in cycle
- Spindle tool / working tool shown by operator display
- Option of 30/32 tools available



Linear Guideway

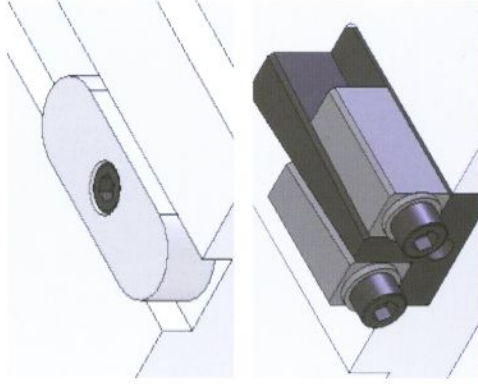
Dah Lih have developed a new linear guideway clamping method, this provides for better clamping force, rigidity and location.

This new design allows for much easier field services for either replacement or adjustment.



New Column to Base Alignment

The new design by Dah Lih eliminates problem from the single key way method, by adopting a twin key arrangement where the 2nd key is tapered to provide perfect alignment, this prevent any outward movement of the column to the base.

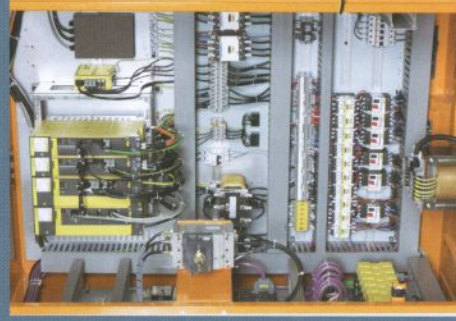


New Improved machine design

A single location at the rear side of the machine contains all pneumatic services such as regulator valves, lubrication oil tank, all for easy maintenance.

Electrical cabinet

Single machine electrical cabinet equipped with heat exchanger as standard.



STRONG COMPACT SPINDLE WITH DIRECT MOTOR MOUNT

**New Spindle Design Allows for
Improved Surface Finish in Cutting
Ideal, In Mould / Die Application**





No drive belt

Low noise

Low Vibration

Simple design

Easy to service

High rigidity

High accuracy

Advantages of Direct Mount Spindle

No drive belt

Low noise and vibration due to the strong/short length and direct mount to the spindle servo motor.

Low noise & Low Vibration

Total responsiveness between spindle and servo motor .

Simple design & Easy to service

Ease of maintenance due to no spindle belt.

High rigidity

High cutting forces due to the large 70mm inner bearing diameter.

High accuracy

High accuracy due to minimum effect of both heat and deflection.

SPECIFICATIONS

MODEL	UNIT	MCV-1200
TABLE		
Working Surface	mm(inch)	1300x640 (51.18x25.19)
T-Slots(Size x Number)	kg(lbs)	18x5 (0.71x5)
Max. Table Load		1000 (2200)
TRAVEL		
Longitudinal Travel (X)	mm(inch)	1200 (47.24)
Cross Travel (Y)	mm(inch)	600 (23.62)
Headstock Travel (Z)	mm(inch)	500 (19.68)
Distances Between Spindle End and Table Top	mm(inch)	100-600 (3.93-23.62)
Distance Between Spindle Center and Column Surface	mm(inch)	805 (31.69)
SPINDLE		
Spindle Nose		N.T.40
Spindle Speeds	R.P.M	10000
Spindle Speed Range		infinite variable
FEED		
Cutting Feed	mm/min(inch/min)	10000 (393.7)
Rapid traverse	m/min(inch/min)	30/30/20 (1181/1181/787)
Minimum Input Increment	mm(inch)	0.001 (0.0001)
ATC (Automatic Tool Changer)		
Tool Holder		BT40
Tool Storage Capacity	Tools	24
Max. Tool Dia. X Length	Ø x mm(inch)	95x300 (3.74x11.81)
Max. Tool Weight	kg(lbs)	7 (15)
Tool Selection		Random
MOTORS		
Spindle Drive	Kw(HP)	7.5 (10)
Continuous Rating	Kw(HP)	5.5 (7.4)
Motor	Kw(HP)	3.0 (4), 3.0 (4), 3.0(4)
Drive Motors		
MACHINE WEIGHT SPACE AND PACKING		
Floor Space	mm(inch)	3150x4060 (124.02x159.84)
Net Wight	kg(lbs)	7500 (16500)

Specifications are subject to change without prior notice

Standard Accessories

- Swivel type operator Panel
- Heat Exchanger
- Removable Manual Pulse Generator
- Coolant Around Spindle
- Spiral Type Chip Conveyor
- Full Guard
- RS232 Interface
- Automatic Power Off
- Call Light
- Automatic Lubrication Equipment
- Work Light
- Tool Kit
- Spare Fuse
- Spindle Oil Cooler
- Transformer
- Rigid Tapping

Special Accessories

- Flat type chip conveyor
- Rotary table with 4th axis interface
- 4th axis interface only
- Coolant Through Spindle, A type
- Bed wash
- Automatic Tool Length Measuring Device
- Automatic Centering Device
- Linear Scale
- CAM ATC 30 /32 Tools

Max. Tool Doa. x Length	Ø x mm Ø x inch	76 x 300 2.99 x 11.81
Max. Tool Weight	Kgs lbs	7 15
Max. Tool Dia. of adjacent pots are empty	Ø mm	127

- Direct Drive Spindle 12,000 RPM 15,000 RPM
- Built-in Spindle, 15,000 RPM

MACHINE DIMENSIONS

Model MCV-1200

unit	mm	inch
A	3150	124.02
B	2040	80.31
C	2178	85.75
D	2852	112.28
E	100-600	3.93-23.62
F	795	31.3
G	2232	87.87
H	2496	98.27
I	1800	70.87
J	863	33.98
K	505-1105	
L	575	22.64
M	2075	81.69
N	350	13.78
O	1510	59.45
P	665	26.18
Q	2307	90.83
R	412	16.22
S	2440	96.06
T	725	28.54
U	1575	62.01
V	385	15.16
W	1930	75.98
X	1050	41.34
Y	695	27.36
Z	4060	159.84
AA	1760	69.29
AB	495	19.49
AC	475	18.7
AD	2200	86.61
AE	900	35.43

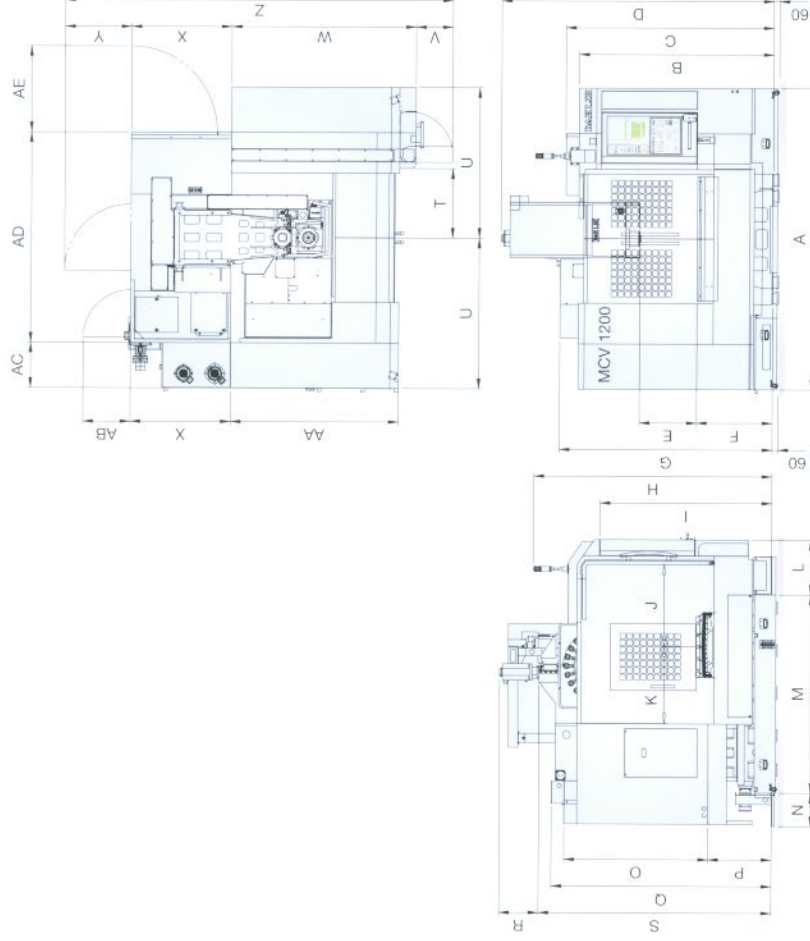
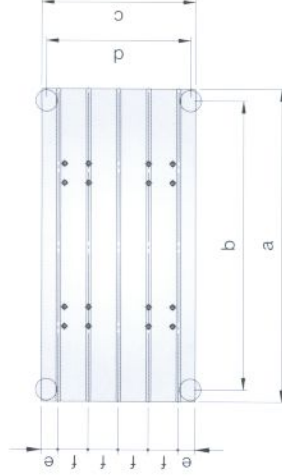
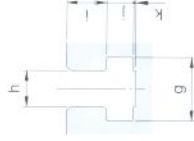


TABLE & T-SLOT

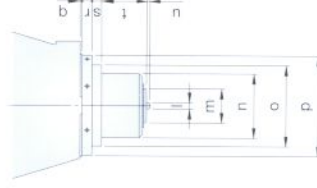
TABLE



T-SLOT



SPINDLE



Model MCV-1200

unit	mm	inch
a	1300	51.18
b	1200	47.24
c	640	25.2
d	600	23.62
e	70	2.76
f	125	4.92
g	31.5	1.24
h	18	0.71
i	20	0.87
j	13.5	0.69
k	1	0.04
l	14	0.55
m	85	3.35
n	160	6.3
o	202	7.95
p	250	9.84
q	5	0.2
r	25	0.98
s	24	0.94
t	113	4.45
u	8	0.31