

EXCELLENT TECHNOLOGY  
OUTSTANDING PRODUCTS  
SURELY, THE BEST  
MACHINE FROM TAIWAN

# MCV-1250

VERTICAL MACHINING CENTER



PROFESSION

**DAHLH**®

Pursuing scientific technology and perfection,  
40 years of experiences and specialities,  
Dah-Lih Machinery is ultimately  
superior to all the others.



Enclosed Splash Guard is Optional.

# FEATURES OF MCV-1250

## 1 HIGH TORQUE & HIGH PERFORMANCE SPINDLE

- The spindle transmission is driven by two steps high - low gear that provide high torque and performance. It provides full output and high torque at lower speed and high machining performance at higher speed.

## 2 EXCELLENT CUTTING PERFORMANCE HEADSTOCK

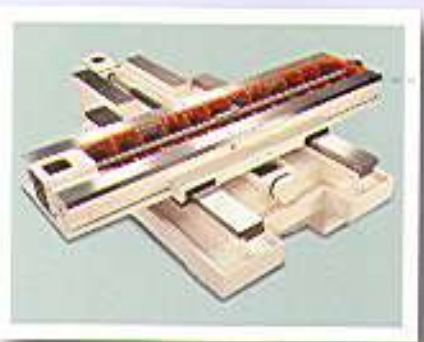
- The headstock is a box type constructed that provides superior rigidity.
- The spindle is designed with wide speed range, heavy duty machining can be performed at all speeds.
- Long -nose spindle system design ensures excellent performance in reaching workpiece, this feature allows the use of relative shorter tools to carry out powerful machining. It shows remarkable advantage especially in machining stair-shape workpiece.
- Coolant through spindle device can be fitted for deep hole drilling, easy chip removal makes good finishing of surface.
- Tool unclamp unit is a floating designed that makes the life of spindle bearing.

## 3 RELIABLE ATC MECHANISM

- ATC is twin-arm system designed that provides reliable tool change operation.
- A CAM twin-arm system is also available as an option that provides quick tool change to increase working efficiency.
- The ATC magazine is located at the side of column to prevent from interfering with workpiece and to allows convenient operation.

## 4 HIGH RIGIDITY STRUCTURE

- The structure of machine bed is designed by using the Finite Element Method (FEM), an element analysis technique, a well designed bed for high rigidity, high speed.
- Ballscrews are preloaded to reduce thermal expansion.
- The bed and saddle are hill-type rib structure that features good rigidity and prevent from deformation.



# MACHINE SPECIFICATIONS AND DIMENSIONS

## ■ SPECIFICATIONS

MODEL	UNIT	MCV-1250
<b>TABLE</b>		
Working Surface	mm	1400 x 820
	inch	55x 32.3
T-slot(Spacing Number)	mm	22 x 5
	inch	0.86 x 0.6
Max. Table Load	kg	1500
	lbs.	3300
<b>TRAVEL</b>		
Longitudinal Travel(X)	mm	1250
	inch	49.2
Cross Travel(Y)	mm	850
	inch	33.5
Leadfoot Travel(Z)	mm	730
	inch	28.6
Distance Between Spindle End On Table Top	mm	350 - 900
	inch	13.8 - 35.4
Distance Between Spindle Reference Distance Surface	mm	710
	inch	28

<b>SPINDLE</b>		
Spindle Motor		A - 00
Spindle Speed	r.p.m	45 - 4500
Spindle Speed Range		TWO GEAR SPEEDS

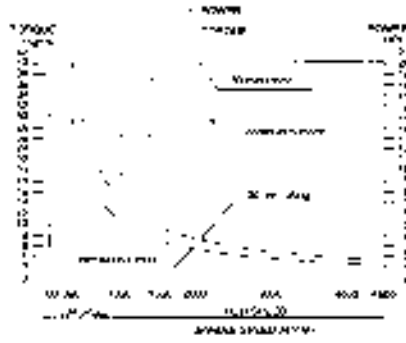
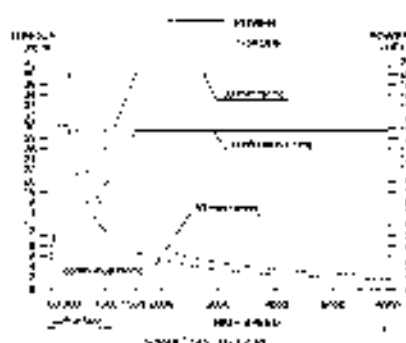
<b>FEED</b>		
Cutting Feed	mm/min	10000
	inch/min	393.7
Rapid Traverse	mm/min	7000*2
	inch/min	275.59*2
Minimum Input Increment	mm	0.001
	inch	0.0001

<b>ATC(Automatic Tool Changer)</b>		
Tool Hold		D.T - 50
Tool Storage Capacity	Tools	24
Max. Tool Dia. Length	Ø x mm	110x150
	Ø x inch	4.3x5.9
Max. Tool Weight	Kg	15
	lbs	33
Max. Tool Length (Spindle to Tool Center)	mm	150
Tool Diameter		Variable

<b>MOTORS</b>			
Spindle Drive Motor	Continuous Power	Kw	11
	Peak Power	hp	15
	Rated Speed	Kw	15
X & Y Motor	Power	Kw	70
	Speed	rpm	3000
Drive Motors	X Axis	Kw	3.8 (5HP)
	Y Axis	Kw	3.9 (5HP)
	Z Axis	Kw	3 (4HP)

<b>MACHINE WEIGHT SPACE AND PACKING</b>		
Floor Space	mm	5300 x 4200
	inch	207.09 x 167.56
Net Weight	Kg	13500
	lbs	29700

## ■ SPINDLE POWER & TORQUE



1. Gear ratio: High Gear: 1.357142857  
Low Gear: 0.234533469
2. Spindle motor (ANUC) = 12,600RPM

## ■ TABLE & T-SLOT

Model	MCV-1250	
Unit	mm	inch
a	1400	55
b	1250	49.2
c	820	32.28
d	850	25.6
e	180	6.29
f	125	4.92
g	160	6.29
h	58.5	1.52
i	22	0.87
j	17.5	0.69
k	24	0.94

## ■ SPINDLE DIMENSIONS

Model	MCV-1250	
Unit	mm	inch
l	210	8.27
m	178.6	6.99
n	89.85	2.75
o	25.4	1
p	9	0.35
q	20	0.79
r	23	0.91

## ■ TABLE



## ■ T-SLOT

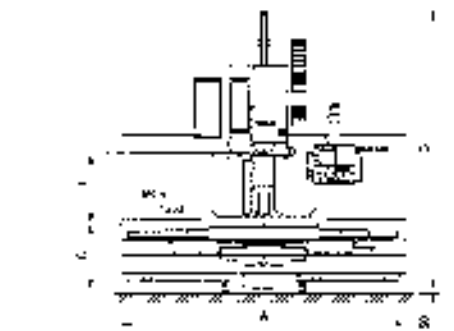


## ■ SPINDLE



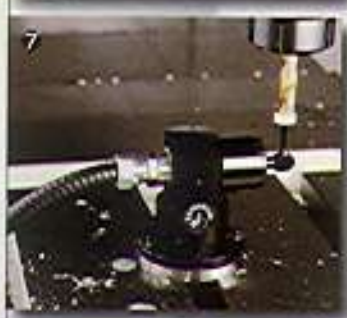
## ■ EXTERNAL DIMENSIONS

Model	MCV-1250	
Unit	mm	inch
A	3600	141.73
B	3523	138.70
C	835	32.87
D	200-900	7.9-35.4
E	2905	94.29
F	1070	66.74
G	1120	44.09
H	710-1035	27.95-40.74
I	75	2.95
J	2535	80.11
K	615	24.21
L	3780	148.82
M	2065	81.30
N	2033	111.53
O	703	27.66
P	1800	70.88
Q	1800	70.88
R	703	27.66
S	476	18.74
T	2410	94.88
U	770	30.31
V	600	23.62
W	4256	167.56



# STANDARD ACCESSORIES

- ① Heat Exchanger
- ② Removable Manual Pulse Generator
- ③ Coolant Around Spindle
- ④ Spiral Type Chip Conveyor
- ⑤ Semi-Enclosed Splash Guard
- ⑥ RS-232 Interface
- ⑦ Automatic Power Off
- ⑧ Call Light
- ⑨ Automatic Lubrication Equipment
- ⑩ Work Light
- ⑪ Tool Kit
- ⑫ Spare Fuses
- ⑬ Pendant Type Operator Panel
- ⑭ Spindle Cooler
- ⑮ Rigid Tapping



# SPECIAL ACCESSORIES

- ① Enclosed Splash Guard
- ② Flat Type Chip Conveyor
- ③ Chip Wagon
- ④ Rotary Table With 4th Axis Control
- ⑤ 4th Axis Connector
- ⑥ Coolant Through Tool
- ⑦ Automatic Tool Length Measuring Device (Renishaw Ts27)
- ⑧ Coolant Through Spindle with Filter
- ⑨ Coolant Wash
- ⑩ Automatic Centering Device
- ⑪ Cam Mechanism ATC (30/40 Tools)

Max. Tool Dia. x Length	25 x 300	100 x 400
	25 x 300	100 x 400
Max. Tool Weight	150	110
	150	110
Max. Tool Dia. of sub-tool from ATC	25 x 100	100

⑫ 6000rpm Spindle Speed

The above pictures are for reference only, Dah Lih Machinery reserves the right to modify product design without notice.

Established in 1960 after  
40 years of vigorous growth.  
Dah Lih's brilliant accomplishments and  
experiences have accompanied our esteemed customers  
to stand up against the test of time.  
We will utilize our refined technology to continuously  
expand our vision.

MCV-720 VERTICAL MACHINING CENTER



MCH-630 HORIZONTAL MACHINING CENTER



DL-GH950 VERTICAL-HORIZONTAL  
TURRET MILLING MACHINE



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