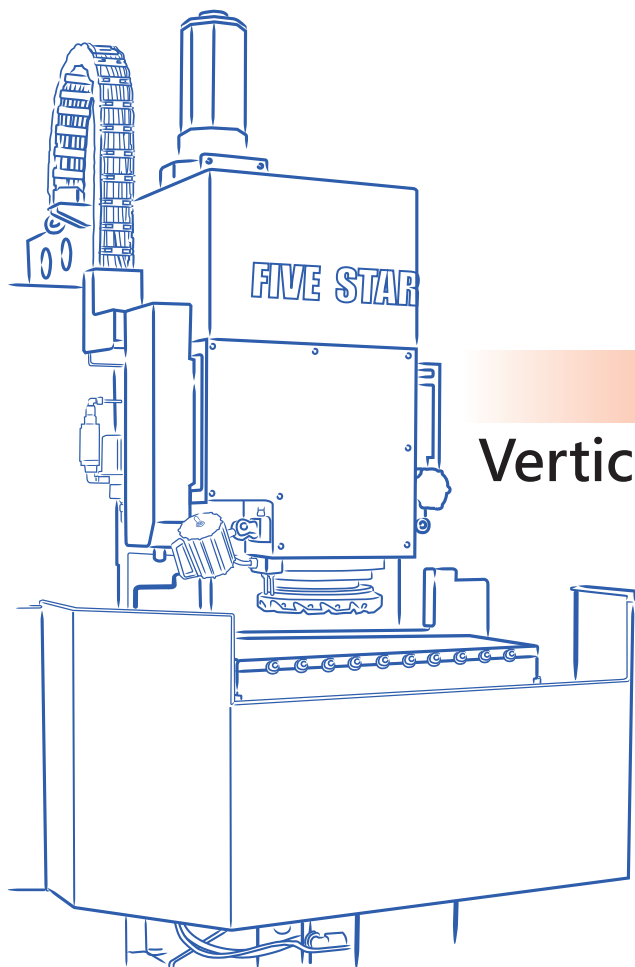
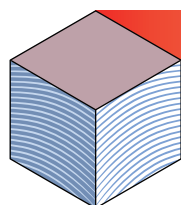
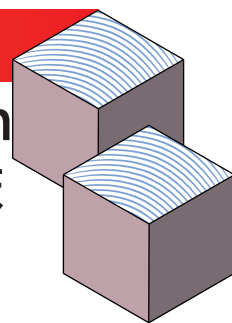


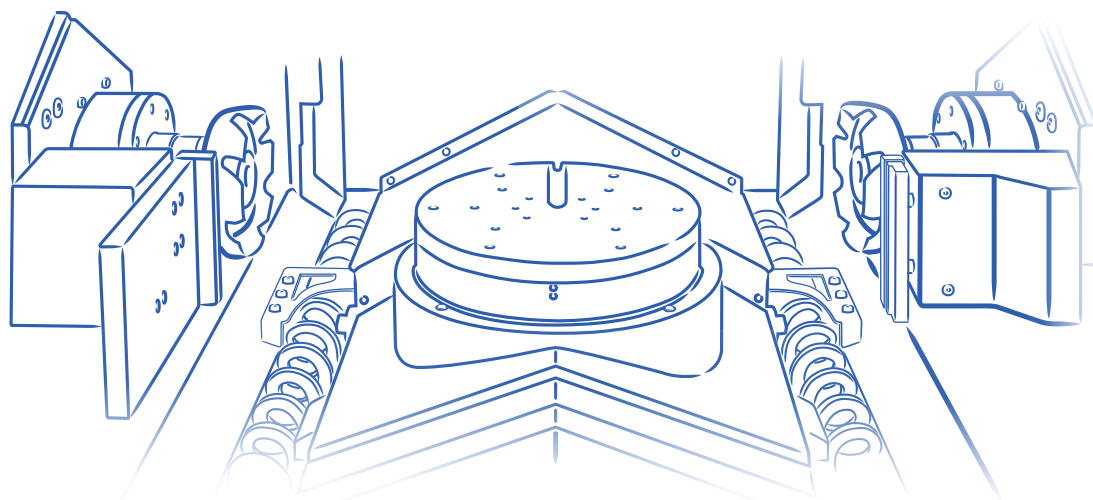
# FIVE STAR PLATE SOLUTION SYSTEM



Vertical Plate Milling Machine  
平面銑床

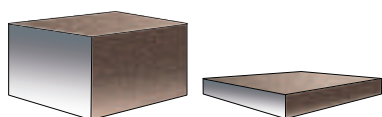
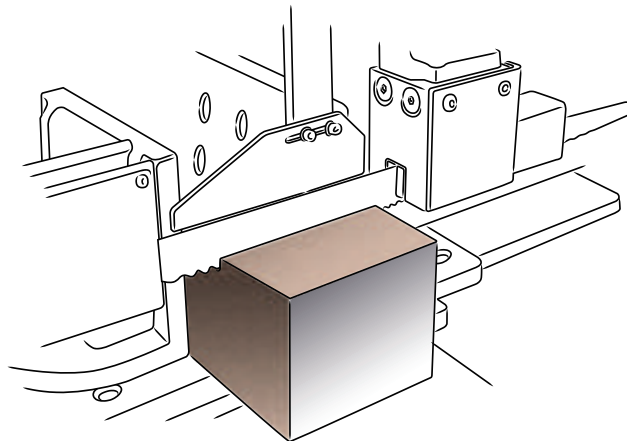


Duplex Milling Machine  
CNC雙側銑床

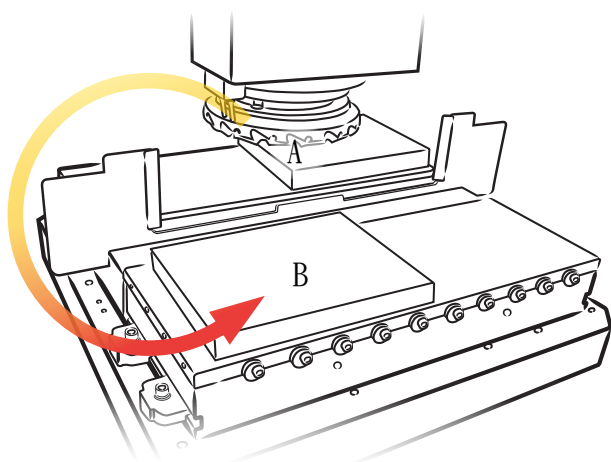


FIVE STAR SEIKI CO., LTD  
五星精機股份有限公司

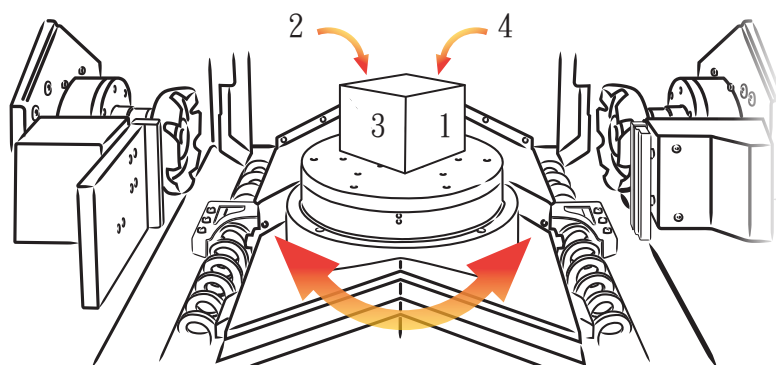




# Vertical Plate Milling Machine TVM series → Duplex Milling Machine THM series

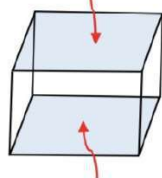
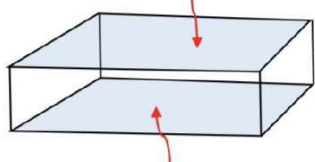


Up & bottom surface machining  
change via magnetic turntable



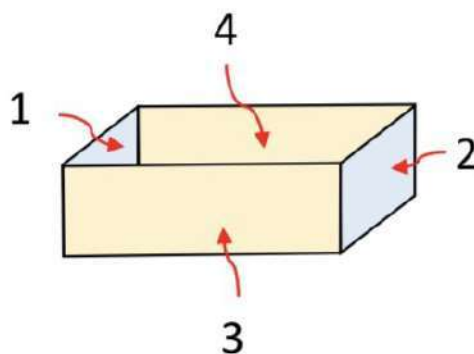
One set up for four sides machining

Side A (Up) A 面 (上) Side A (Up)



Side B (Bottom) B 面 (底)

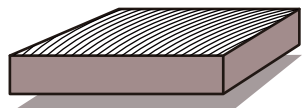
B 面 (底) Side B (Bottom)



## Applicable Parts Machining

- Precise mold bases
- Manifold blocks
- Precise block shaped parts (square and rectangular shape)



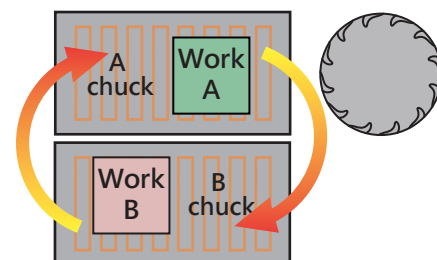


# Vertical Plate Mill **TVM** series

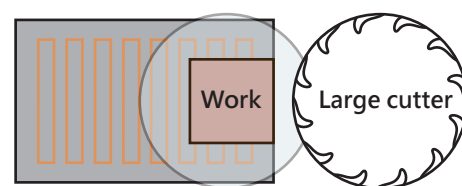
## Turntable Type NC Milling Machine



Set up of next workpiece(A/B)  
can be done while milling  
a workpiece at the spindle side



Electromagnetic chuck



Cutters with  $\varnothing 250$ ,  $\varnothing 315$ ,  $\varnothing 425$   
diameter enables one pass  
machining

銑刀直徑

Cutter dia

主軸轉數

Spindle speed

主軸馬達

Spindle motor

最大加工範圍

Max machining size

**TVM-2360**

$\varnothing 250$

60~350rpm

AC15/11KW

235X600X180mm

**TVM3060**

$\varnothing 315$

60~300rpm

AC18/15KW

300X600X180mm

**TVM3080**

$\varnothing 315$

60~300rpm

AC18/15KW

300X800X250mm

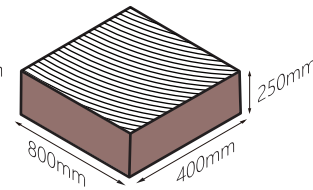
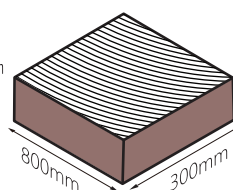
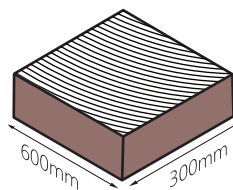
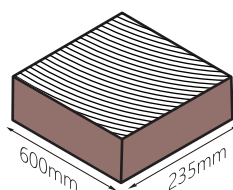
**TVM4080**

$\varnothing 425$

60~240rpm

AC22/18KW

400X800X250mm



機床佔地面積

Installation space

機械重量

Machine Weight

2700X2600X2500mm

2700X2600X2500mm

3500X2800X2660mm

3500X2800X2660mm

7200kg

7800kg

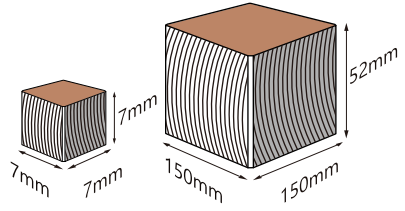
10000kg

10200kg



### THM-150

4 surfaces milling  
4 surfaces chamfering

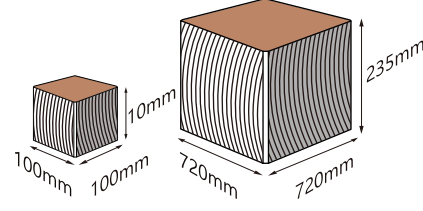


Cutter dia Ø63mm  
Spindle speed 100~2000rpm  
Spindle motor 5.5kw  
Max machining size 150X150X52mm  
Min machining size 7x7x7mm  
Installation space 1850X1650X2500mm  
Machine Weight 2800kg



### THM-720

4 surfaces milling  
4 surfaces chamfering

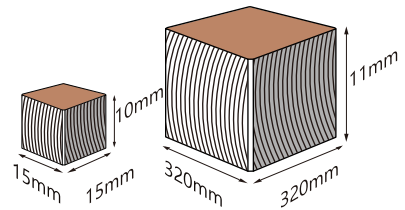


Cutter dia Ø250mm  
Spindle speed 10~350rpm  
Spindle motor 22.5kw  
Max machining size 720X720X235mm  
Min machining size 100x100x10mm  
Installation space 4200X3900X2600mm  
Machine Weight 12700kg



### THM-320

4 surfaces milling  
4 surfaces chamfering

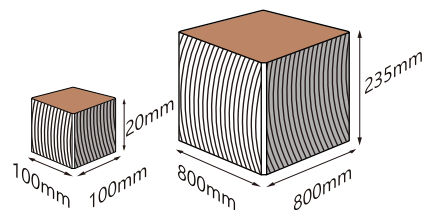


Cutter dia Ø125mm  
Spindle speed 100~1000rpm  
Spindle motor 7.5kw  
Max machining size 320X320X115mm  
Min machining size 15x15x10mm  
Installation space 2700X2100X1950mm  
Machine Weight 5800kg



### THM-800

4 surfaces milling  
4 surfaces chamfering

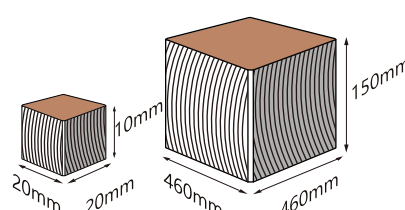


Cutter dia Ø250mm  
Spindle speed 10~350rpm  
Spindle motor 22.5kw  
Max machining size 800X800X235mm  
Min machining size 100x100x20mm  
Installation space 4500X4024X2600mm  
Machine Weight 16000kg



### THM-460

4 surfaces milling  
4 surfaces chamfering

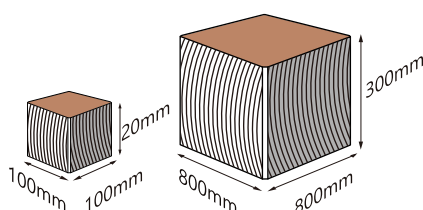


Cutter dia Ø160mm  
Spindle speed 100~1000rpm  
Spindle motor 11kw  
Max machining size 460X460X150mm  
Min machining size 20x20x10mm  
Installation space 3410X2800X2200mm  
Machine Weight 7500kg



### THM-800G

4 surfaces milling  
4 surfaces chamfering

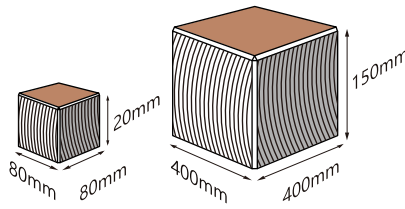


Cutter dia Ø315mm  
Spindle speed 10~350rpm  
Spindle motor 22.5kw  
Max machining size 800X800X300mm  
Min machining size 100x100x20mm  
Installation space 4500X4024X2600mm  
Machine Weight 18800kg



### THM-460C

4 surfaces milling  
12 surfaces chamfering

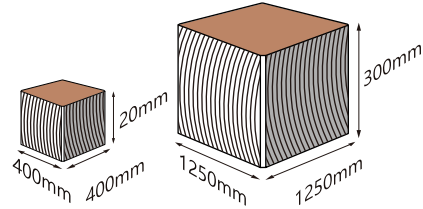


Cutter dia Ø160mm  
Spindle speed 100~1000rpm  
Spindle motor 11kw  
Max machining size 460X460X150mm  
Min machining size 20x20x10mm  
Chamfering capacity (LXWXH) Min100X100mm  
Max400X400X150mm  
Installation space 3500X3330X2370mm  
Machine Weight 13000kg



### THM-1200

4 surfaces milling  
4 surfaces chamfering



Cutter dia Ø315mm  
Spindle speed 10~300rpm  
Spindle motor 30kw  
Max machining size 1250X1250X300mm  
Min machining size 400x400x20mm  
Installation space 5800X6500x3200mm  
Machine Weight 26500kg

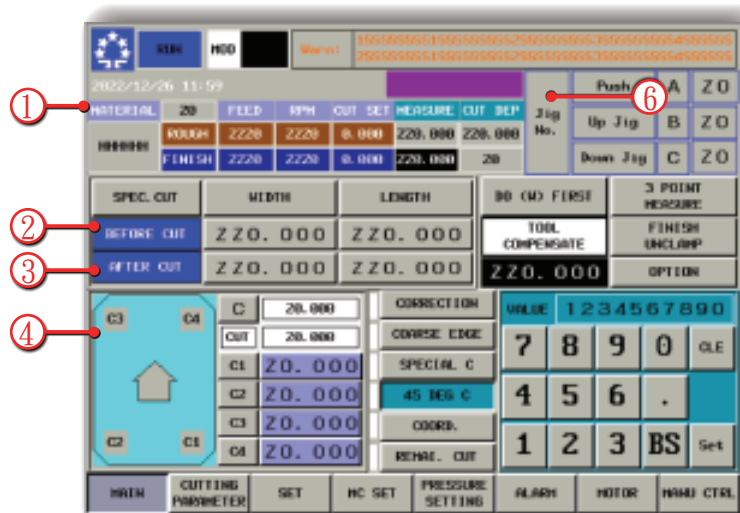


# THM Series THM系列

## Easy Dialogue Operation System

採用FANUC觸碰螢幕，簡易對話數據輸入模式，依材料種類建立切削條件模組，輸入材料尺寸、完成尺寸，即可進行高精度的四面加工。

Using FANUC touch screen, simple dialogue data input mode establishing cutting module, input material size and complete the size to perform high-precision 4 side machining



例:操作順序(四面加工)

- 1.材料種類輸入
- 2.材料尺寸輸入
- 3.完成尺寸輸入
- 4.倒角選擇
- 5.循環啟動
- 6.放置治具工件鎖緊
- 7.再次循環啟動
- 8.自動切削進行
- 9.切削完了

Example:Operation sequence side

(4 sides machining)

- 1.Material code input
- 2.Material size input (Before cutting)
- 3.Complete size input (After cutting)
- 4.Chamfer Selection
- 5.Cycle start
- 6.Place the fixture and clamp the workpiece
- 7.Cycle start again
- 8.Auto cutting process
- 9.Finished cutting



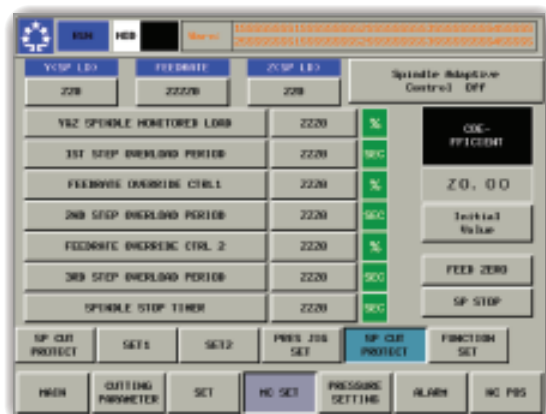
切削參數1-32組

CUTTING PARAMETER 1~32Sets



FANUC NC 操作面盤

FANUC NC operation panel



主軸切削負載設定畫面

Spindle cutting load setting screen



多邊角切削畫面(特別附屬品)

Polygon cutting screen(option accessory)

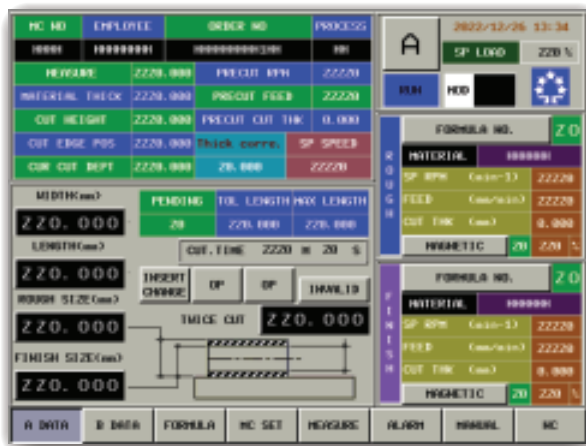


# TVM Series TVM系列

## Easy Dialogue Operating System

採用FANUC觸碰螢幕，簡易對話數據輸入模式：

Using FANUC touch screen, simple dialogue data input



A盤画面 Disk A screen

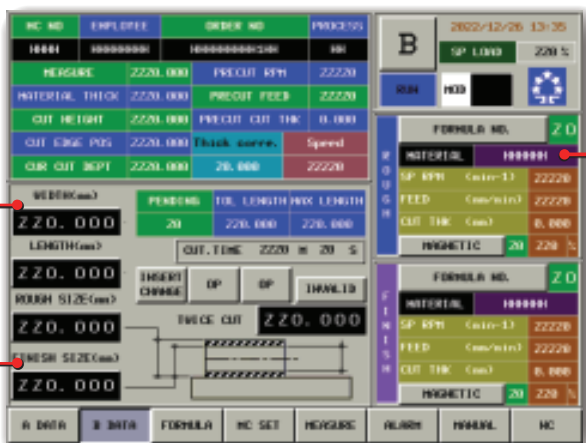
依材料種類建立切削條件模組，輸入材料尺寸，完成尺寸即可進行高精度的平面加工。

二組電磁盤(A/B),A盤加工進行中，B盤可替換工件B、切削數據輸入。

Establishing cutting module according to material code input material size(Before & After cutting site) and complete the size to perform high-precision surface machining.

Two sets of electric disks(A/B). Disk A is being processed.

Disk B can replace workpiece B. Cutting data input.



B盤画面 Disk Bscreen

例:操作順序(平面加工)

- 1.材料種類輸入
- 2.加工材料寬度、長度、厚度尺寸輸入
- 3.放置工件電磁ON
- 4.循環啟動ON
- 5.切削完了

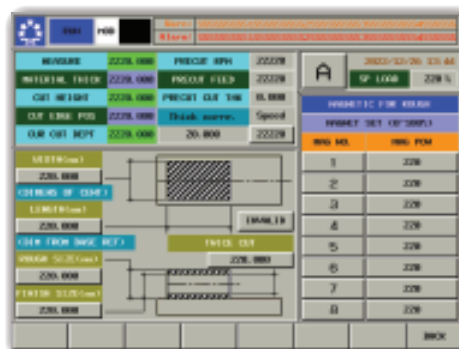
Example:Operation sequence(surface machining)

- 1.Material code input
- 2.Material width,length,thickness (Before & After)input
- 3.Place workpiece magnetic ON
- 4.Cycle start
- 5.Finished



切削條件設定畫面

Cutting setting screen



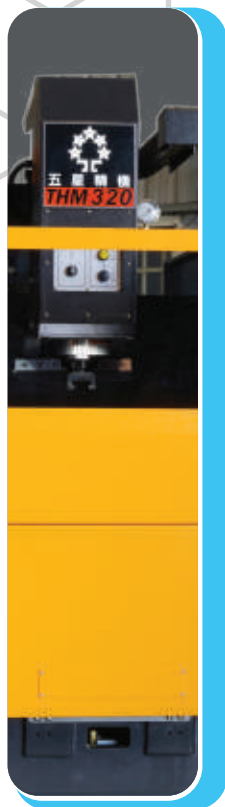
磁力強度設定畫面

Magnetic strength setting screen



刀具TOOL LIFE画面設定

TOOL LIFE screen setting



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