

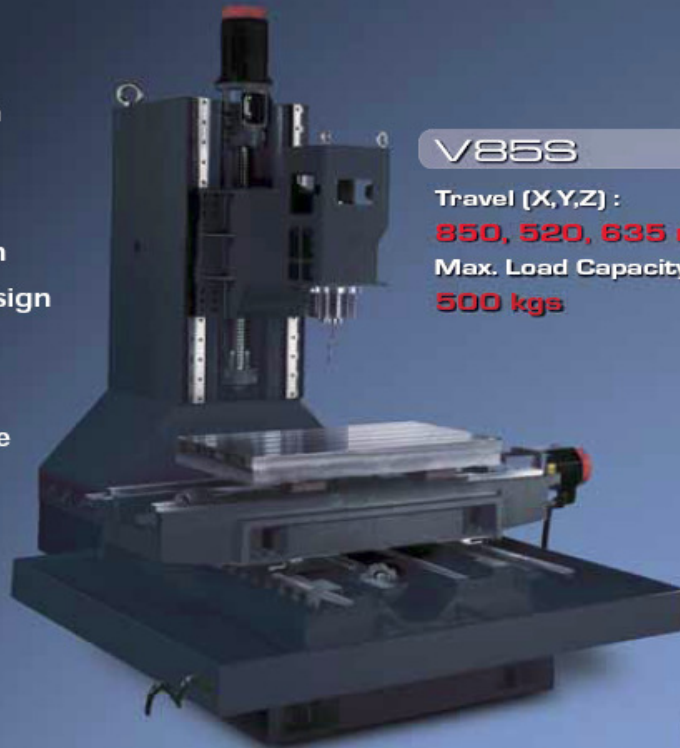
VMC SERIES
VERTICAL MACHINING CENTER



VMC SERIES
VERTICAL MACHINING CENTER

SUPERIOR STRUCTURE DESIGN

1. Ultra-wide A-Shaped Column Design
2. Full Support Base Design
3. Ultra-wide Y-axis Design
4. Best Supporting BESSEL Point Design
5. One-Piece Coolant Collect Frame Design
6. 3 axis Direct Coupled Servo Motors
7. 3 axis Pretensioned Ball Screws
8. Large Size Heavy Duty Working Table
9. Robust Cast Iron Headstock
10. Built-in Screw Type Chip Conveyor



V85S

Travel (X,Y,Z) :
850, 520, 635 mm
Max. Load Capacity :
500 kgs



VMC-106

Travel (X,Y,Z) :
1020, 600, 635 mm
Max. Load Capacity :
1000 kgs



VMC SERIES
VERTICAL MACHINING CENTER



VMC-168

Travel (X,Y,Z) :
1600, 820, 700 mm
Max. Load Capacity :
2500 kgs



VMC-137

Travel (X,Y,Z) :
1300, 700, 700 mm
Max. Load Capacity :
1200 kgs

VMC-21100

Travel (X,Y,Z) :
2150, 1000, 790 mm
Max. Load Capacity :
3000 kgs



VMC SERIES
VERTICAL MACHINING CENTER

MAIN SPINDLE

Powerful, High Speed and Precision



Max. Spindle Speed :

BT-40

8,000 rpm [Gear Head Spindle]

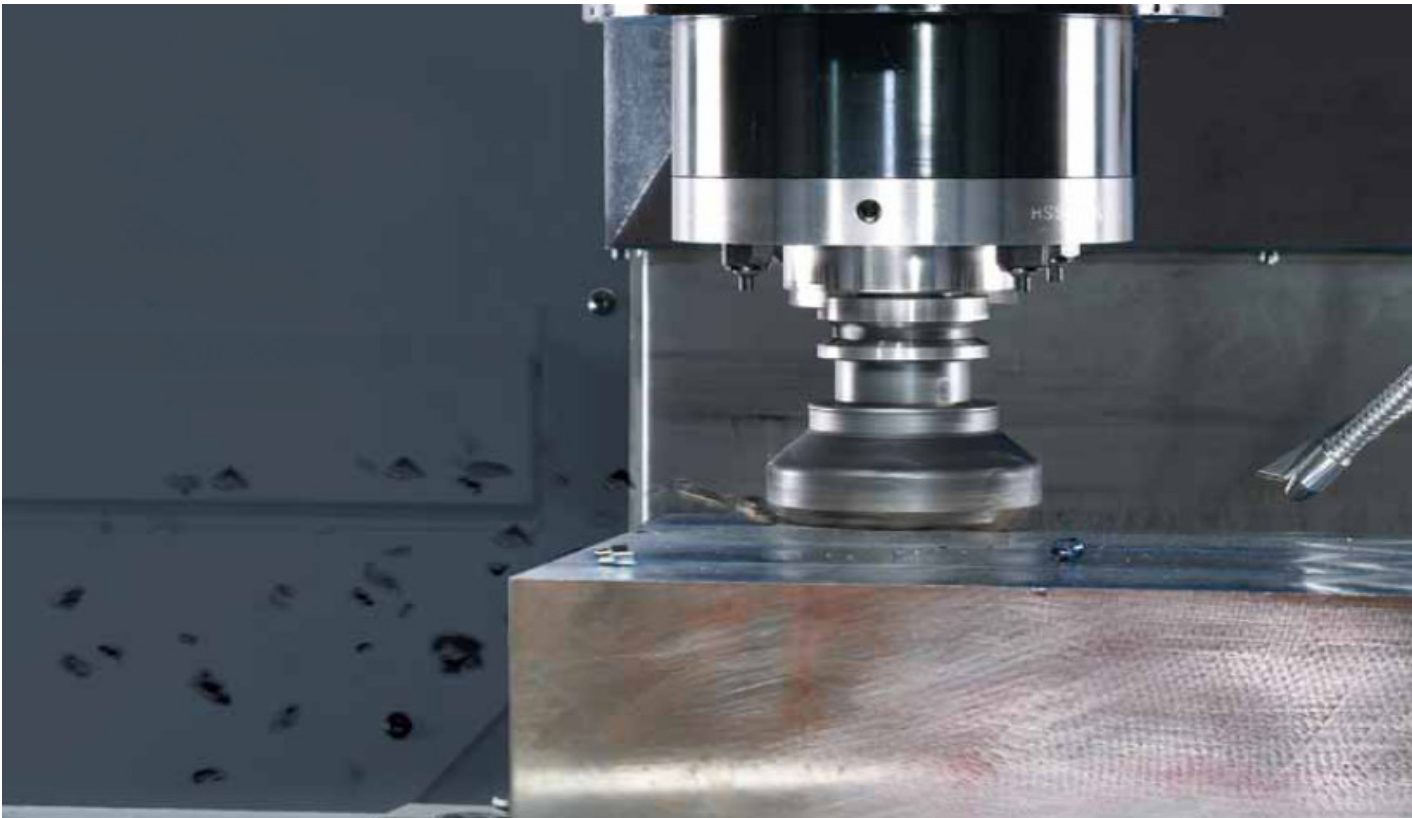
12,000 rpm [Direct Coupling Spindle]

BT-50

7,000 rpm [Gear Head Spindle]

10,000 rpm [Direct Coupling Spindle]





Spindle Power - Torque Diagram

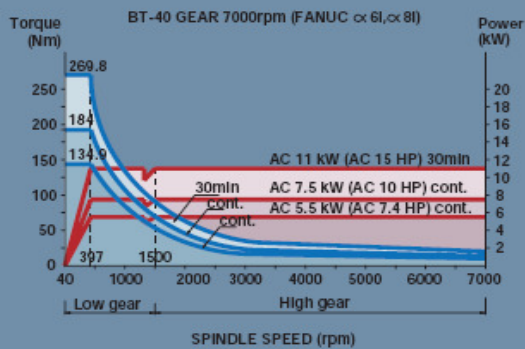
VMC-BT40 Spindle Power-Torque Diagram

- (1) GEAR VMC-106
- (2) COUPLING V85S

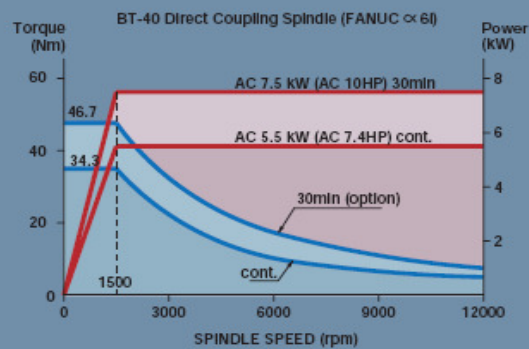
VMC-BT50 Spindle Power-Torque Diagram

- (1) GEAR VMC-137 / 168 / 21100
- (2) COUPLING VMC-137 / 168

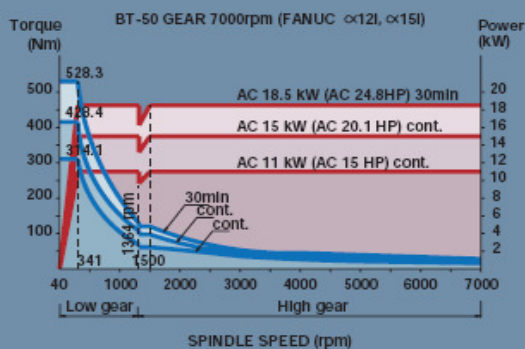
GEAR VMC-106



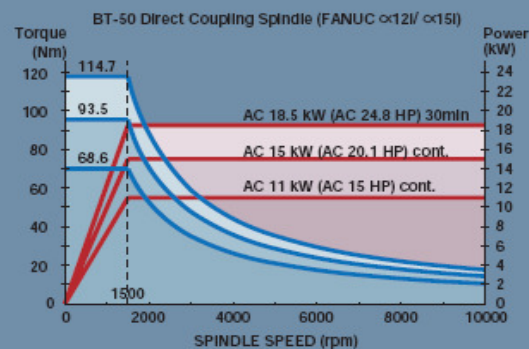
COUPLING V85S



GEAR VMC-137/168/21100



COUPLING VMC-137/168



TOOL MAGAZINE

Fast and Reliable ATC Unit

Auto Tool Changer:

Tool Change Time:

2.8 sec. (T-T)

Tool Capacity:

Standard: **24**

(Op. : **16, 30, 32, 40**)



CUTTING PERFORMANCE



FACE MILLING

Workpiece material : S45C (SAE 1045)
Tool used : Ø80 mm face mill
Spindle speed : 700 rpm
Feedrate : 2,000 mm/min
Depth/Width of cut : 4 mm / 70 mm
Metal removal rate : 560 cm³/min



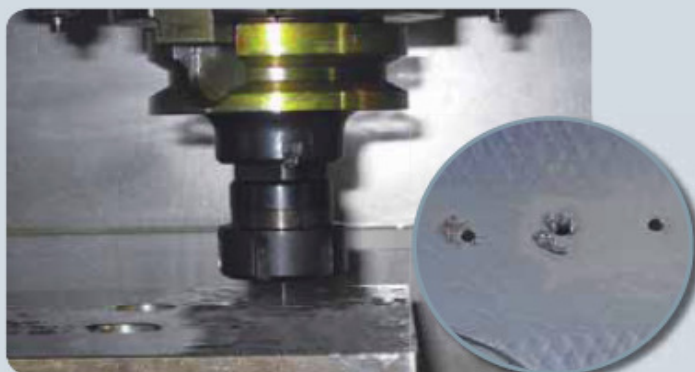
DRILLING

Workpiece material : S45C (SAE 1045)
Tool used : Ø50 mm insert drill
Spindle speed : 1,500 rpm
Feedrate : 180 mm/min
Metal removal rate : 353 cm³/min



TAPPING

Workpiece material : S45C (SAE 1045)
Tool used : M42 X 4.5P tap
Spindle speed : 200 rpm
Feedrate : 900 mm/min



TAPPING

Workpiece material : S45C (SAE 1045)
Tool used : M2 X 0.4P tap
Spindle speed : 1,200 rpm
Feedrate : 480 mm/min

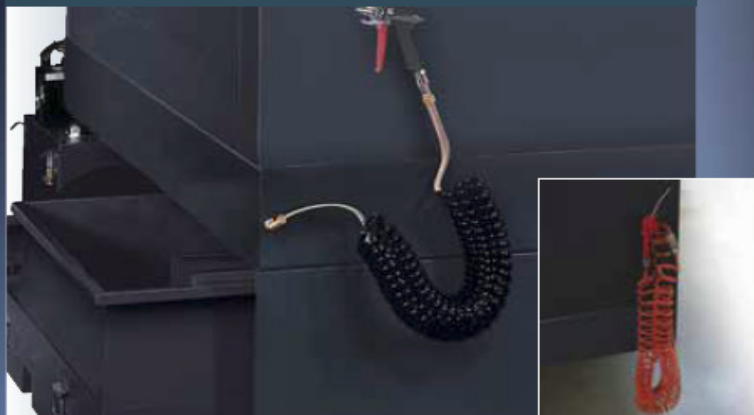
* Specified machining conditions are for reference only.

ERGONOMIC AND FRIENDLY DESIGN

Swivel Panel Design — Easy for Operation and Adjustment



Easy Accessible Water gun & Air gun





Convenient Box Cabinet Design



Portable MPG Handwheel



FULL STRICT TEST FOR QUALITY ASSURANCE



3D Probe System Quality Assurance (CMM)



Copper Cutting Test - 3D Circular Ball Milling



Laser Inspection



Ball Bar Inspection



Light Cutting Test - 2D Circular Milling



Heavy Cutting Test - Face Milling