



# NFX 500A

High Performance 5-axis Vertical Machining Center

#### **Ultra Rigid Body Structure Design**

- Extra wide column and base design to ensure best support and cutting rigidity.
- High quality and rugged MEEHANITE® casting maintains optimum accuracy.
- Wide base structure with 10 leveling pads.

# **Accurate and Smoot Axial Movement**

- Roller type linear guideways applied on the three axes for ultimate axial movements.
- Pretension ballscrews applied on the three axes increase axial rigidity providing less thermal deformation.
- 6 slide blocks on X-axis supporting 500 kg maximum load on table.
- 4 linear guideways on Y-axis providing best dynamic balance.

#### A/C-axis Rotary Table

- New Line.
- A/C-axis rotary encoder is standard
- ø500 mm (ø19.69") table size

#### **Tool Magazine**

- Absolute encoder ATC system provides stability and speed.
- The ATC Unit is controlled by an Inverter which prevents tool change speed from varying under different power supply frequency's.
- Tool change speed is programmable for heavy tools and probe.

### **Automatic Tool Magazine Door Design**

- Driven by pneumatic cylinder.
- Prevent coolant and chips from entering tool magazine.

#### YCM In-House Design IDD PLUS Spindle

- Tool unclamping cushion extends spindle bearing life by protecting spindle bearing from tool unclamping force.
- Spindle cooling system (opt.) removes heat efficiently and minimizes thermal deformation.
- Ceramic bearings features low inertia mass, low centrifugal force, high rigidity and low coefficient of thermal deformation.
- High precision helical springs features dynamic balance and low vibration.





**Cutting Demo** 

	NFX 500A
SPINDLE	
Spindle Speed (opt.)	12,000 rpm (15,000 / 15,000 rpm)
Spindle Power (opt.)	22 kW (22 / 30 kW) 30 HP (30/40 HP)
Spindle Taper	BBT40
TRAVEL	
X-axis Travel	850 mm 33.5"
Y-axis Travel	762 mm 30"
Z-axis Travel	600 mm 23.6"
Distance Between Spindle Nose & Table Top	20~620 mm 0.79"~24.4"
TABLE	
Table Size/T-Slots	ø500 mm / 14 mm ø19.7" / 0.55"
Max. Load on Table (Vertical/)	500kg 1,102lb
Max. Load on Table (Horizontal)	500kg 1,102lb
A/C AXIS	
A-axis	150° (+30°/ -120°)
C-axis	360°
A -Axis Feedrate	25 rpm
C-Axis Feedrate	33.3 rpm
A/C Axis Positioning Accuracy	10 sec.
A/C Axis Repeatability Accuracy	4 sec.
FEEDRATE	
Rapid Feedrate (X/Y/Z)	30 / 30 / 24 m/min. 1,181 / 1,181 / 945 ipm
Cutting Feedrate	1~20,000 mm/min. 0.04~787 ipm
ATC	
Tool Magazine Capacity (opt.)	48T (60T)
Max. Tool Weight (per piece)	6 kg 13.2 lb
Max.Tool Dimensions (w/o adjacent tools)	ø76 x 300 mm (ø125 x 300 mm) ø3" x 11.8" (ø4.92" x 11.8")
GENERAL	
Pneumatic Supplier	5.5k g/cm <sup>2</sup> 78.2 psi
Power Consumption	57 kVA (65 kVA)
Machine Weight	11,000 kg 54,454 lb

Note: The manufacturer reserves the right to modify the design, specifications, mechanisms, etc. to improve the performance of the machine without notice. All the specifications shown above are just for reference.

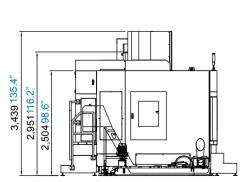
#### STANDARD ACCESSORIES

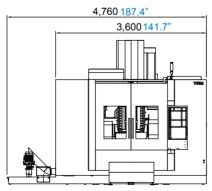
- Tool Kit
- Work Lamp
- Pilot Lamp
- Safety Door
- Spindle Air Blast
- Spindle Air Seal
- Cutting Air Blast
- Spindle Cooling System
- Circular Coolant Nozzle
- Coolant Shower
- Oil Skimmer
- Coolant Gun
- Air Gun
- A/C-axis rotary encoder
- Central Lubrication System
- Penta-Chip Augers
- 45° Outlet Pipe (Penta-Chip Augers)
- Heat Exchanger for Electrical Cabinet
- Leveling Blocks and Bolts
- Complete Chip Enclosure (With Top Cover)
- Mechanical, Maintenance, Electrical and Operating Manuals
- Heavy Duty Coolant Pump
- CNC Control: FANUC 31i-MB5

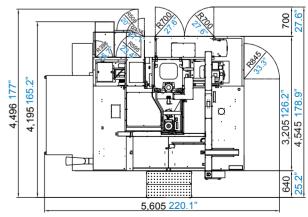
## **OPTIONAL ACCESSORIES**

- CE
- Automatic Door
- Foundation Bolts
- Chip Conveyor
- Quad-Chip Augers (With Left/Right-Hand Side Chip Conveyor)
- Straight Pipe (Penta-Chip Auger with Rear Side Chip Conveyor)
- A/C. Cooler for Electrical Cabinet
- Auto Tool Measurement System
- Oil-mist Coolant System
- Oil-mist Collector
- Automatic Power Off
- CNC Control: FANUC MXP-200FB

#### **DIMENSIONS** Unit: mm inch









#### YEONG CHIN MACHINERY INDUSTRIES CO., LTD.

No. 888, Sec. 1, Homu Road, Shengang District, Taichung 42953, Taiwan



