

ACCESSORIES

●: Standard ○: Optional -: None

	600 A	560 A- APC	1020 A	1020 AM	1380 A	1680 A	1680 B
Tool Kit	●	●	●	●	●	●	●
Work Lamp, Pilot Lamp	●	●	●	●	●	●	●
Oil Skimmer	●	●	●	●	●	●	●
Coolant Equipment System	●	●	●	●	●	●	●
Full Chip Enclosure	●	●	●	●	●	●	●
Coolant Gun	●	●	●	●	●	●	●
Spindle Air Blast	●	●	●	●	●	●	●
Cutting Air Blast	●	●	●	●	●	●	●
Spindle Air Seal	●	●	●	●	●	●	● (10,000rpm) - (6,000rpm)
Central Lubrication System	●	●	●	●	●	●	●
Guideway Cover (X/Y/Z)	●	●	●	●	●	●	●
Leveling Blocks and Bolts	●	●	●	●	●	●	●
Mechanical, Electrical and Operating Manuals	●	●	●	●	●	●	●
Heat Exchanger for Electrical Cabinet	●	●	●	●	●	●	●
Triple-Chip Augers	-	-	●	●	-	-	-
Dual-Chip Augers (With Chip Conveyor)	-	-	○	○	-	-	-
Penta-Chip Augers	-	-	-	-	●	●	-
Quad-Chip Augers	-	-	-	-	○	○	●
45° Outlet Pipe (Triple-Chip Augers)	-	-	●	●	-	-	-
Straight Pipe (Triple-Chip Auger with Rear Side Chip Conveyor)	-	-	○	○	-	-	-
45° Outlet Pipe (Penta-Chip Augers)	-	-	-	-	●	●	-
Straight Pipe (Penta-Chip Auger with Rear Side Chip Conveyor)	-	-	-	-	○	○	-
Safety Door	●	●	●	●	●	●	●
Air Gun	●	●	●	●	●	●	●
Circular Coolant Nozzle	●	●	●	●	●	●	●
CE	○	○	○	○	○	○	○
Automatic Door	○	-	○	○	○	○	○
Optical Scale	○	○	○	○	○	○	○
Foundation Bolts	○	○	○	○	○	○	●
Coolant Shower	●	●	●	●	●	●	●
Spindle Cooling System	○	○	○	●	○	○	●
Oil-mist Coolant System	○	○	○	○	○	○	○
Oil Hole Holder Function	○	○	○	○	○	○	○
Coolant Through Spindle System (Form A/20/30/70bar)	○	○	○	○	○	○	○
Chip Conveyor	○	○	○	○	○	○	○
4th Axis Rotary Table	○	○	○	○	○	○	○
A/C. Cooler for Electrical Cabinet	○	○	○	○	○	○	○
Automatic Power Off	●	●	●	●	●	●	●
Auto Tool Length Measurement System (METROL_T24E-04-47)	○	○	○	○	○	○	○
Workpiece Measurement System (RENISHAW_OMP60)	○	○	○	○	○	○	○
Oil-mist Collector	○	-	○	○	○	○	○
Heavy Duty Coolant Pump	●	●	●	●	●	●	●
Extended 250mm Column	-	-	○	○	○	○	○
CNC Control: FANUC MXP-200FA	●	●	●	●	●	●	●
CNC Control: FANUC MXP-200FB	-	-	-	-	-	-	○
CNC Control: FANUC MXP-200FC	-	-	-	-	-	-	○
CNC Control: HEIDENHAIN TNC620	○	-	○	○	○	○	-
CNC Control: HEIDENHAIN TNC640	○	-	○	○	○	○	-
CNC Control: SIEMENS 828D(PPU280)	○	-	○	○	○	○	-

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.

NXV Series

High Performance Vertical Machining Center



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20191-E07-3000



NXV Series

NEW
High Speed, High Accuracy, High Performance

The NXV series is integrated with brand new exterior designs, demonstrating highest stability along with great configuration. The YCM NXV series offers high performance, high precision and high speed at an economical price.

✓ Rapid Feedrate

NXV600A → 48/48/48 m/min.
NXV1020A → 48/48/32 m/min.

✓ Auto Tool Change Time

NXV → 1.8 Sec.

✓ Max. Spindle Power

NXV1380A / NXV1680A → 30 kW

✓ Acceleration Enhancement

NXV600A → 1g/1g/0.8g
NXV1020A → 1g/0.8g/1g

✓ Tool Magazine Capacity

NXV1020A/AM → Max. 40T



■ YCM In-house IDD 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 high dynamic balance and low vibration.
- Grease lubrication for 12,000 rpm spindle ; Oil-air lubrication for 15,000 rpm spindle.



■ IDD PLUS Spindle 12,000rpm(15,000 rpm opt.)
< NXV1020A/AM · NXV1380A · NXV1680A >

■ High Rigidity Design

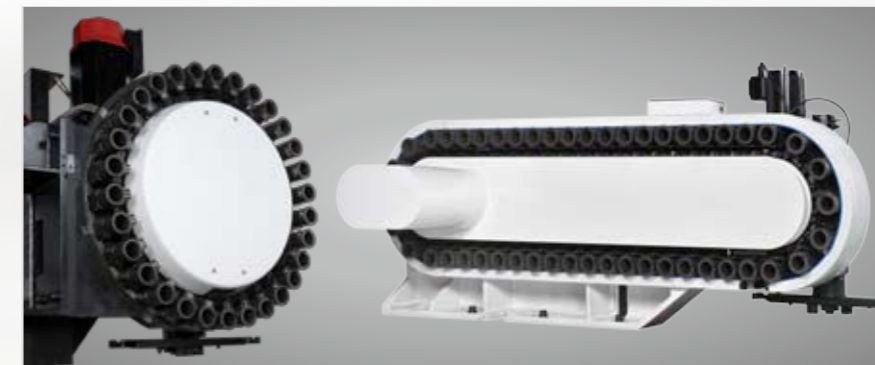
- The rigid body construction makes for uncompromising precision and rigidity.
- FEM analysis is adopted to ensure the best mass arrangement and rib construction of the machine for constant stability under the intensive load of heavy-duty cutting.



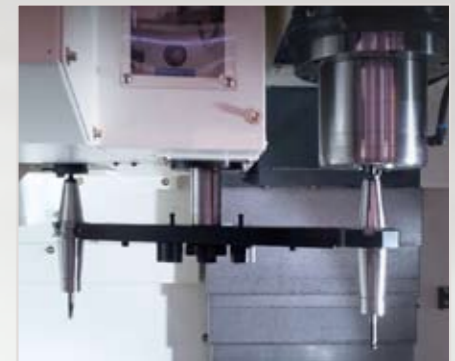
■ Absolute Encoder ATC System
< NXV1680B is exclusive >

■ 3 Axes Direct Drive Design

- Direct drive provides backlash free, best accuracy, reliability and stability.
- All axial AC servo motors equipped with Absolute Positioning Encoders, no zero return needed.



■ 24T(30T) (opt.) < NXV1020A/AM > ■ (40T) (opt.) < NXV1020A/AM >
■ 24T(30T/48T/60T) (opt.) < NXV1380A/1680A > ■ 32T(40T) (opt.) < NXV1680B >



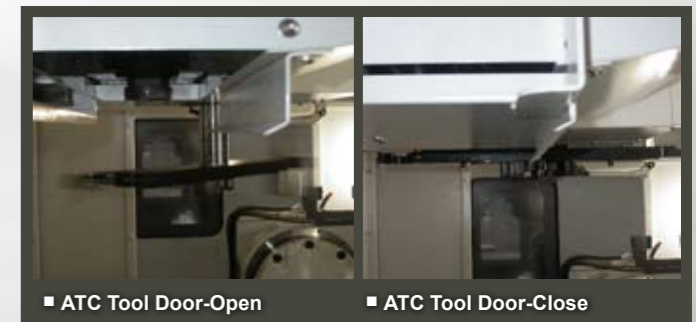
■ Auto Tool Change (T-T) 1.8 sec.
■ Auto Tool Change (T-T) 4.2 sec. < NXV1680B >

■ High Stability Tool Magazine

- Absolute encoder ATC system provides high stability and speed.
- Inverter controlled, prevents tool change speed from changing under different power supply frequency.
- Tool change speed is programmable for heavy tools, prob.

■ Automatic Tool Magazine Door Design

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



■ ATC Tool Door-Open ■ ATC Tool Door-Close

■ Brand New Exterior Design

- Full enclosure exterior (including top cover).
- Convertible side window for convenient chip removal.
- Aesthetic rear cover design.
- Smooth chip removal.



■ Coolant Shower for Efficient Chip Removal < NXV Series std. >

POWER CHART

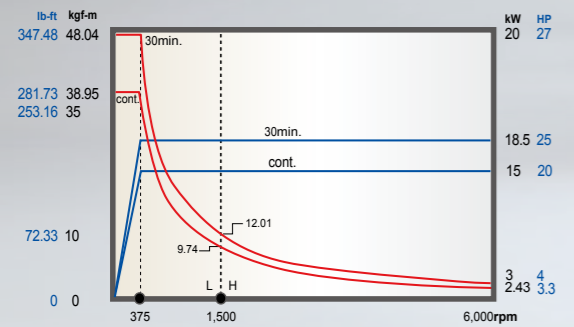
POWER

TORQUE

FANUC System 6,000rpm

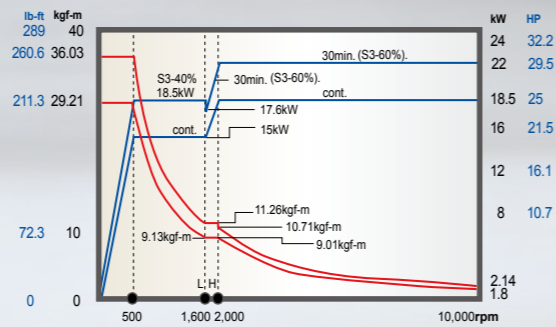
STANDARD

NXV1680B



OPTIONAL

NXV1680B



POWER CHART

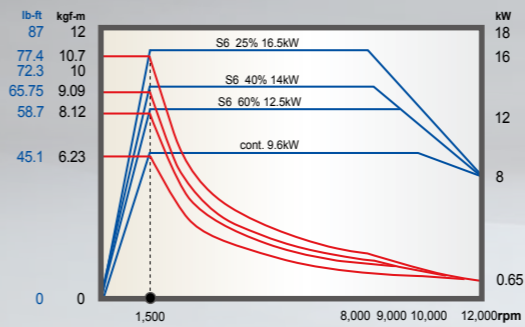
POWER

TORQUE

HEIDENHAIN System 12,000rpm

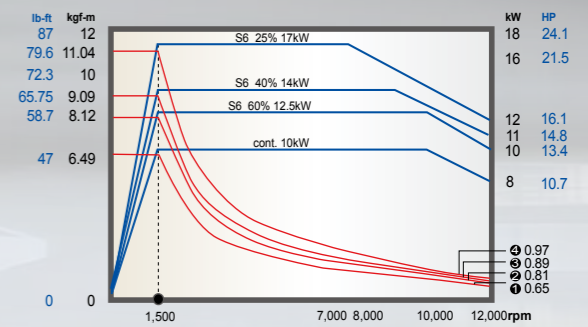
STANDARD

NXV600A



STANDARD

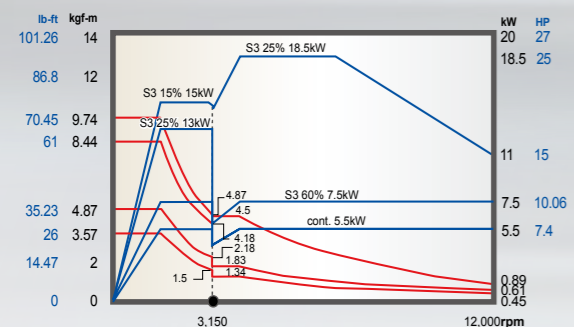
NXV1020A/AM · NXV1380A/1680A



FANUC System 12,000rpm

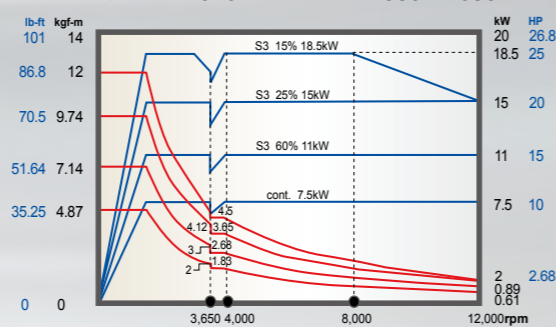
STANDARD

NXV600A



STANDARD

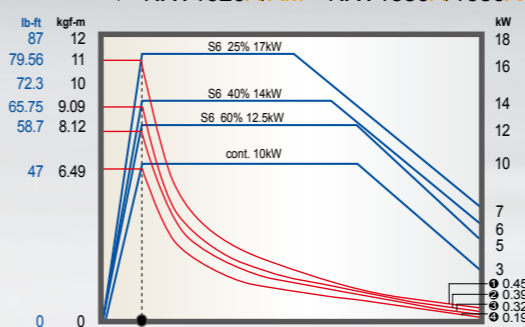
NXV1020A/AM · NXV1380A/1680A



HEIDENHAIN System 15,000rpm

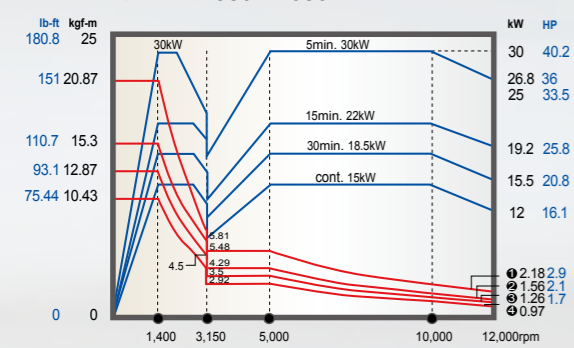
OPTIONAL

NXV1020A/AM · NXV1380A/1680A



OPTIONAL 30kW

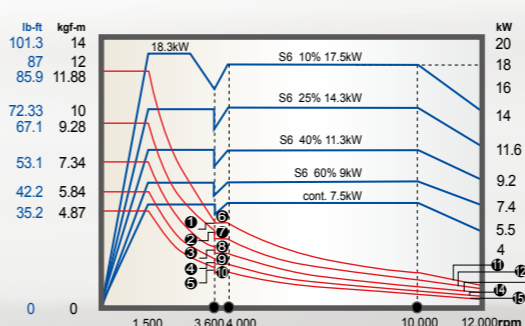
NXV1380A/1680A



SIEMENS System 12,000/15,000rpm

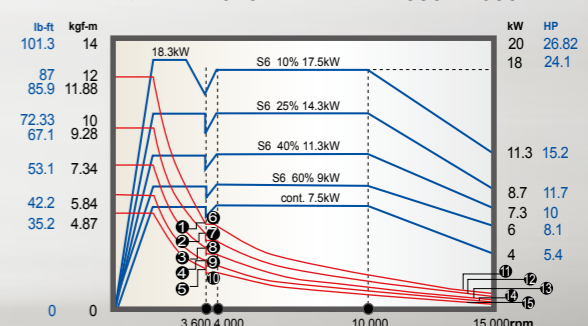
STANDARD

NXV1020A/AM · NXV1380A/1680A



OPTIONAL

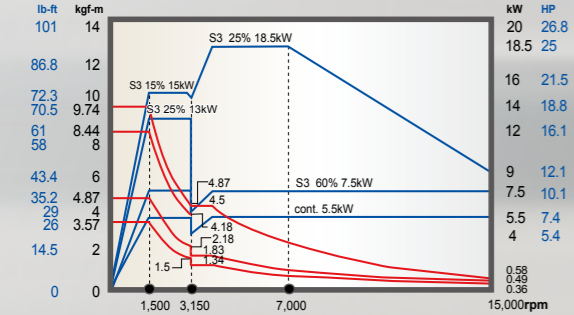
NXV1020A/AM · NXV1380A/1680A



FANUC System 15,000rpm

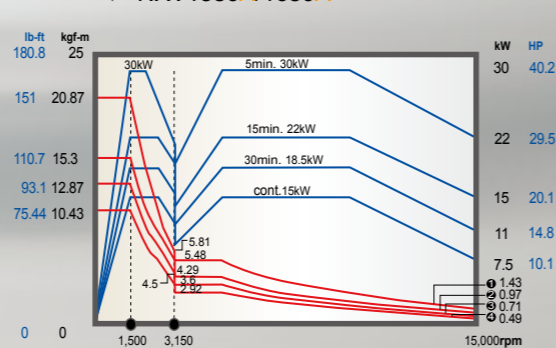
OPTIONAL

NXV600A · NXV1020A/AM
NXV1380A/1680A



OPTIONAL 30kW

NXV1380A/1680A

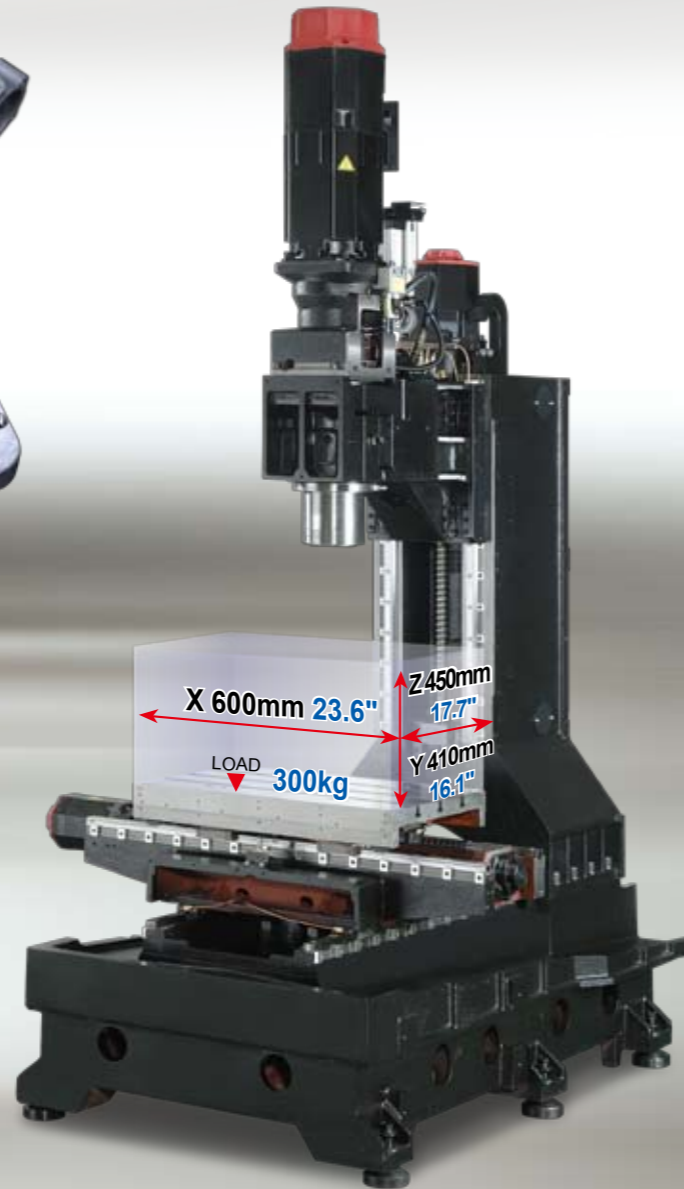


- 1 4.34
- 2 3.88
- 3 3.07
- 4 2.44
- 5 2.03
- 6 4.26
- 7 3.48
- 8 2.75
- 9 2.19
- 10 1.83
- 11 1.15
- 12 0.94
- 13 0.75
- 14 0.6
- 15 0.45

- 1 4.34
- 2 3.88
- 3 3.07
- 4 2.44
- 5 2.03
- 6 4.26
- 7 3.48
- 8 2.75
- 9 2.19
- 10 1.83
- 11 0.73
- 12 0.56
- 13 0.47
- 14 0.39
- 15 0.26

NXV 600A / 560A - APC

The NXV 560A high speed high power vertical machining center is specially designed for precision manufacturing and high productivity machining industries such as auto parts, high precision aerospace and electronic industries.



NXV 600A / NXV 560A - APC

Rapid Feedrate

X	48 m/min	1,890 ipm
Y	48 m/min	1,890 ipm
Z	48 m/min	1,890 ipm

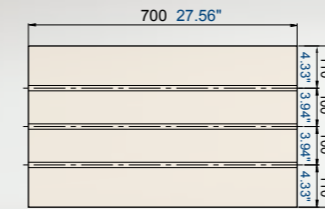


■ DIMENSIONS

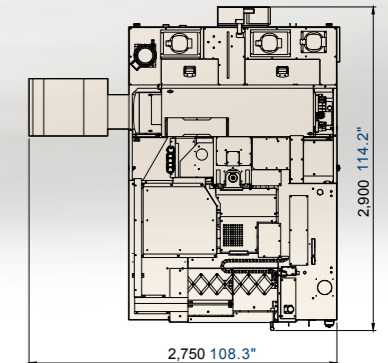
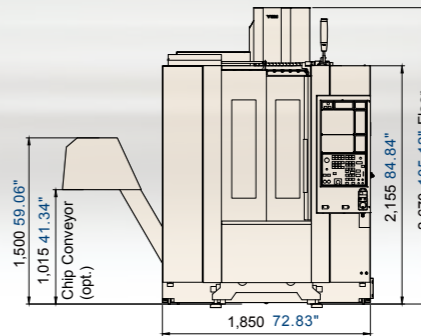
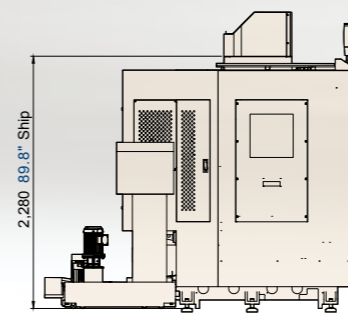
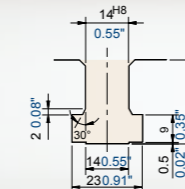
Unit: mm inch

NXV 600A

■ TABLE SIZE

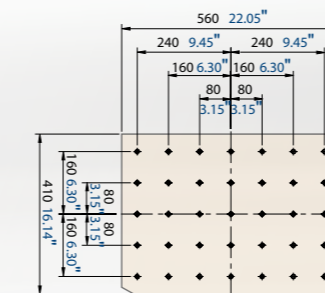


■ T-SLOTS

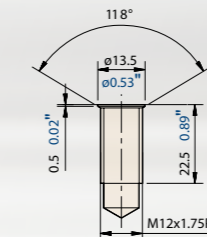


NXV 560A - APC

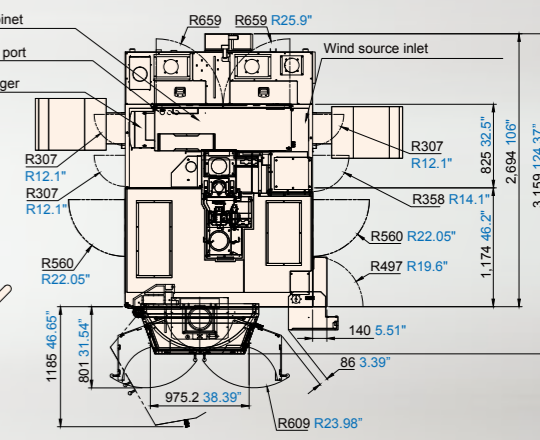
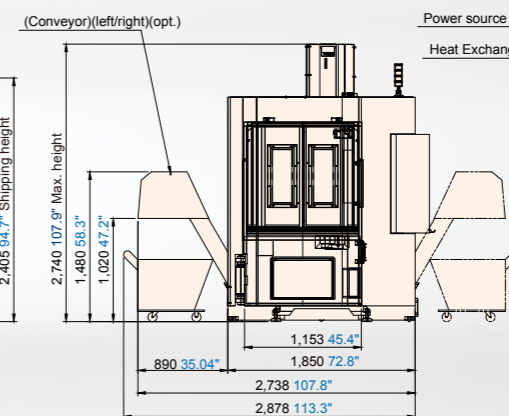
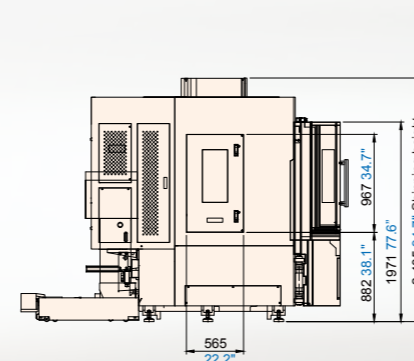
■ APC TABLE SIZE



■ SCREW HOLE DIMENSIONS



Model	NXV 560A - APC
Pallet Size	560 x 410 mm 22.05" x 16.14"
Table Load Capacity	120 kg 265 lb
Distance Between Spindle Nose and Table Top	25 ~ 475 mm 0.98"~18.7"
Hole Pattern	M12 x 80 mm M12 x 3.15" x 3.15"
Power Consumption (Transformer)	32 kVA (40 kVA)
Machine Weight	3,850 kg 8,488 lb



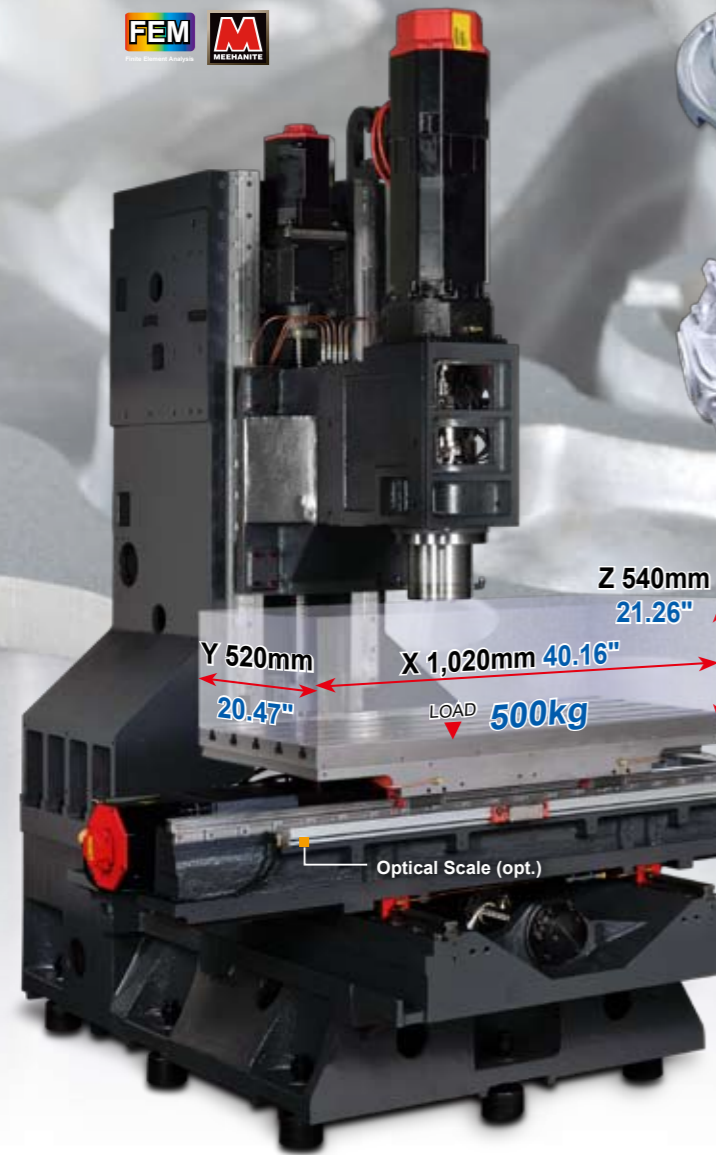
MODEL	NXV600A / NXV560A - APC	
ACCURACY	ISO 10791-4	YCM*
Axial Travel	Full Length	
Positioning (X/Y/Z) A	0.025/0.022/0.022 mm 0.00098"/0.0009"/0.0009"	0.01/0.01/0.01 mm 0.0004"/0.0004"/0.0004"
Repeatability (X/Y/Z) R	0.015/0.012/0.012 0.00059"/0.0005"/0.0005"	0.007/0.007/0.007 0.0003"/0.0003"/0.0003"

*All values shown above are measured for the machine in good air-conditioned environments.

NXV 1020A/AM

High Performance Vertical Machining Center

The brand new NXV series offers excellent cost performance with high precision and economical price. NXV1020A incorporates the features of high speed and high rigidity Satisfying diverse machining requirements of automotive job shops and electronics industries. The high precision NXV1020AM meets your demands for die & mold machining of automotive, mechanic and electronic industries.



NXV 1020A Rapid Feedrate		
X	48 m/min	1,890 ipm
Y	48 m/min	1,890 ipm
Z	32 m/min	1,260 ipm

NXV 1020AM Rapid Feedrate		
X	24 m/min	945 ipm
Y	24 m/min	945 ipm
Z	16 m/min	630 ipm

NXV 1020A/AM		
ACCURACY	ISO 10791-4	YCM*
Axial Travel	Full Length	
Positioning (X/Y/Z) A	0.032/0.025/0.025 mm 0.00126"/0.001"/0.001"	0.01/0.01/0.01 mm 0.0004"/0.0004"/0.0004"
Repeatability (X/Y/Z) R	0.018/0.015/0.015 mm 0.0007"/0.0006"/0.0006"	0.007/0.007/0.007 mm 0.0003"/0.0003"/0.0003"

*All values shown above are measured for the machine in good air-conditioned environments.

CUTTING CAPACITY NXV 1020A/AM BBT40 12,000rpm Fanuc System

FACE MILL S45C Steel

Depth of Cut

6.5 mm

Tool ø80mm x 5T
Spindle Speed 600rpm
Feedrate 450mm/min.
Width of Cut 60mm

FACE MILL S45C Steel

Material Removal Rate

648 cc/min.

Tool ø63mm x 6T
Spindle Speed 1,500rpm
Feedrate 2,700mm/min.
Width of Cut 60mm
Depth of Cut 4mm

U-DRILL S45C Steel

Cutter Diameter

ø44 mm

Tool ø44mm x 1T
Spindle Speed 1,500rpm
Feedrate 150mm/min.
Depth of Cut 44mm

TAP S45C Steel

Tapping

M24

Tool M24 x 3P
Spindle Speed 80rpm
Feedrate 240mm/min.
Depth of Cut 24mm

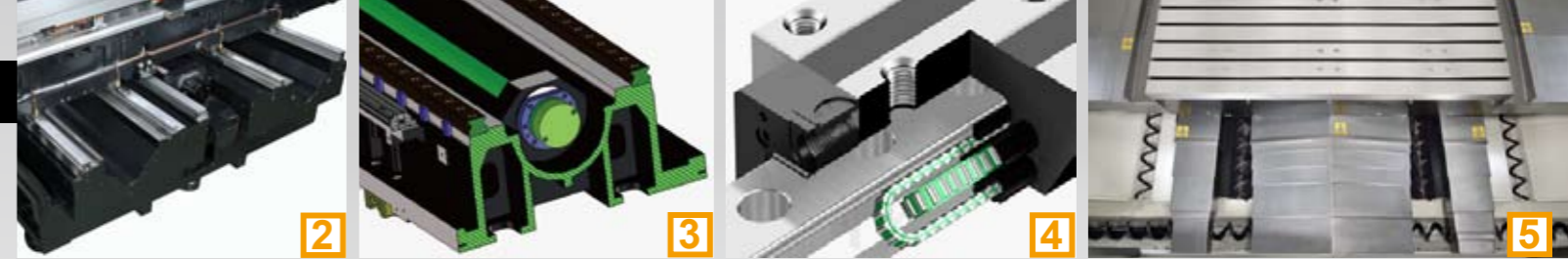
RIGID TAP A6061 Aluminum

Tapping

M1.2

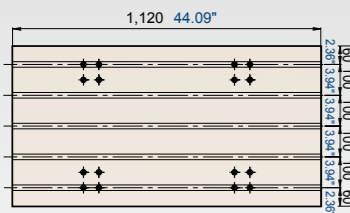
Tool M1.2 x 0.25P
Spindle Speed 1,200rpm
Feedrate 300mm/min.

	NXV 1020A	NXV 1020AM
Product position	Parts machining	Die & Mold machining
Spindle lubrication System	Std.:12,000rpm (Grease Lubrication) Opt.:15,000rpm (Oil-air Lubrication)	Std.:12,000rpm (Oil-air Lubrication) Opt.:15,000rpm (Oil-air Lubrication)
Spindle Cooling System	Optional	Standard
Feedrate System	Standard resolution	High resolution
Applied Industries	Automotive, job shops and electronic industries.	Automotive mold, machine mold and electronic mold industries.

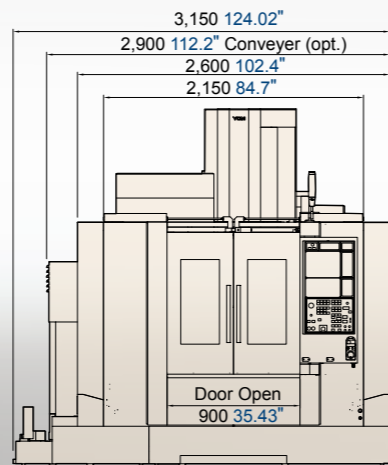
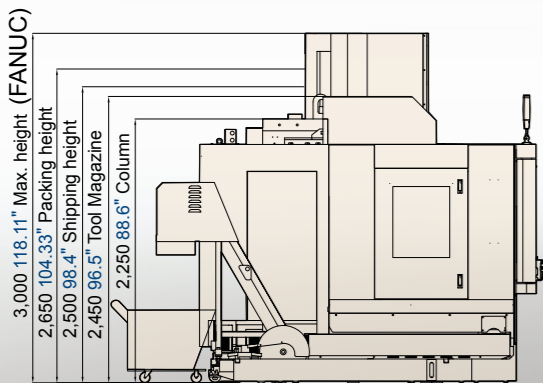
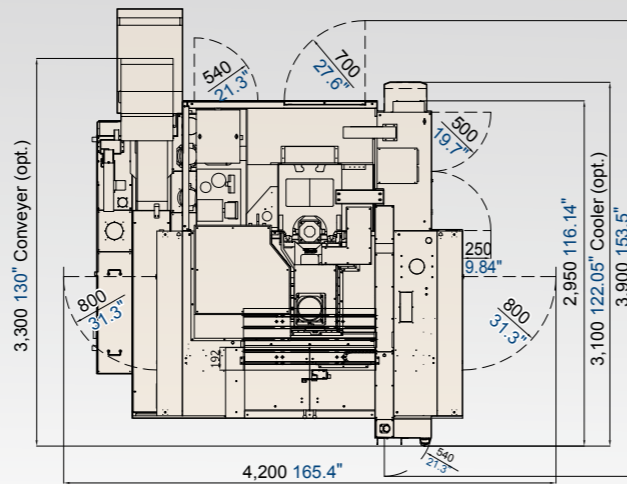
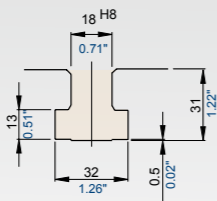


■ Triple-Chip Auger

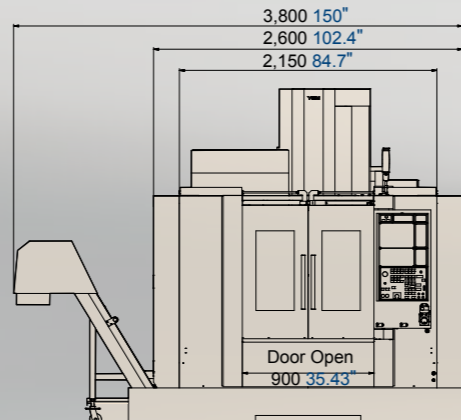
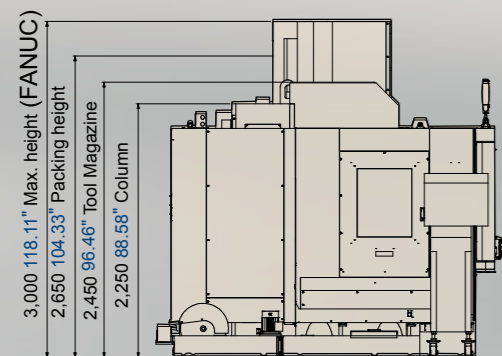
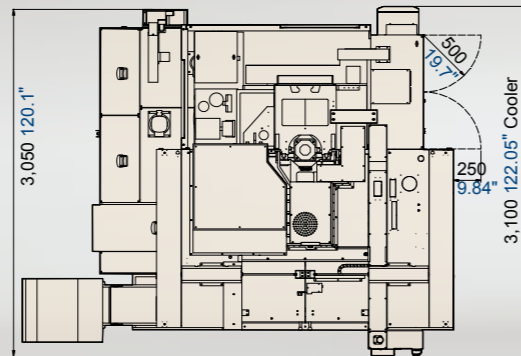
■ TABLE SIZE



■ T-SLOTS



■ Dual-Chip Auger



NXV 1380A / 1680A

The NXV 1380A / 1680A high rigidity vertical machining center offers extended travels at an affordable price. It is most suitable for automotive applications. The NXV 1380A / 1680A provides high speed high precision and extreme rigidity with excellent cost performance.



- 1 6 slide blocks on X-axis supporting 1,500 maximum load on table.
- 2 4 linear guideways on Y-axis providing best dynamic balance.
- 3 Dual wall structure saddle providing high rigidity.
- 4 High rigidity and high loading roller type linear guideways applied on the three axes.
- 5 Penta chip augers (4 Y-axial +1 X-axial) ensure fluent chip removal prevent chips from piling up.
- 6 Pretension ballscrews applied on the three axes increase axial rigidity providing less thermal deformation.
- 7 Wide base structure with 10 leveling pads.



NXV 1380A/1680A Rapid Feedrate

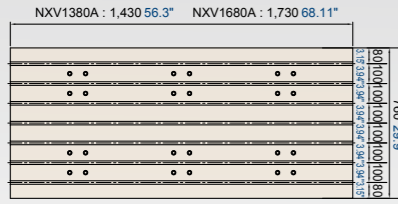
X	30 m/min	1,181 ipm
Y	30 m/min	1,181 ipm
Z	24 m/min	945 ipm

NXV 1380A / NXV 1680A		
ACCURACY	ISO 10791-4	YCM*
Axial Travel	Full Length	
Positioning (X/Y/Z) A	0.042/0.025/0.025 mm 0.00165"/0.001"/0.001"	0.014/0.01/0.01 mm 0.0006"/0.0004"/0.0004"
Repeatability (X/Y/Z) R	0.02/0.015/0.015 mm 0.0008"/0.0006"/0.0006"	0.01/0.007/0.007 mm 0.0004"/0.0003"/0.0003"

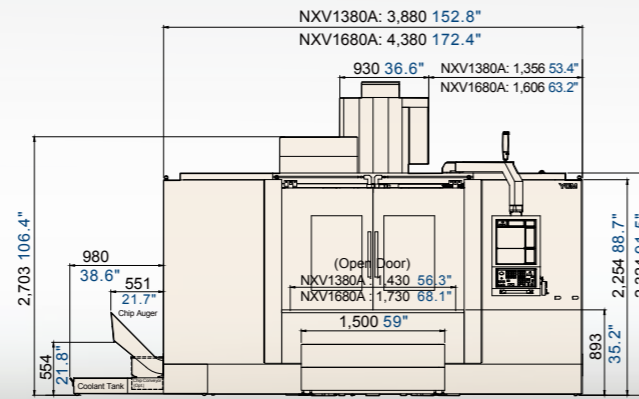
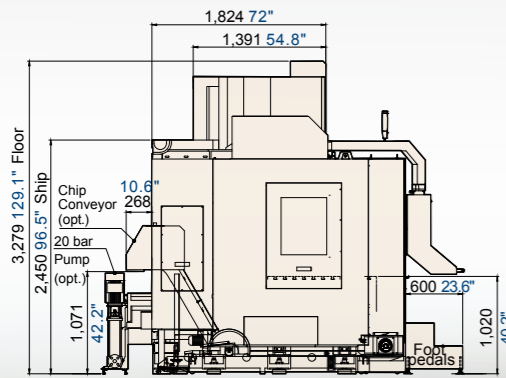
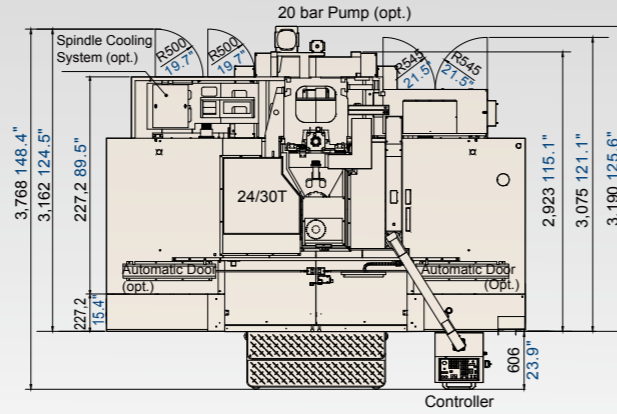
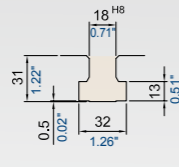
*All values shown above are measured for the machine in good air-conditioned environments.

■ DIMENSIONS Unit: mm inch **NXV 1380A / NXV 1680A**

■ TABLE SIZE



■ T-SLOTS

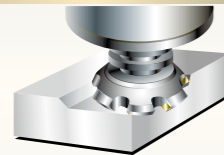


■ CUTTING CAPACITY NXV 1680A BBT40 12,000rpm/30kW (opt.) Fanuc System

FACE MILL S45C Steel

Depth of Cut

9
mm

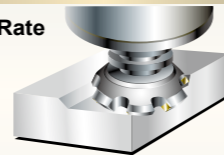


Tool: ø80mm x 5T
Spindle Speed: 600rpm
Feedrate: 450mm/min.
Width of Cut: 60mm

FACE MILL S45C Steel

Material Removal Rate

907
cc/min.

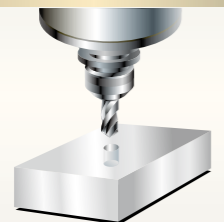


Tool: ø63mm x 5T
Spindle Speed: 1,400rpm
Feedrate: 4,200mm/min.
Width of Cut: 60mm
Depth of Cut: 3.6mm

U-DRILL S45C Steel

Cutter Diameter

ø59
mm

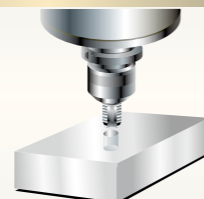


Tool: ø59mm
Spindle Speed: 1,160rpm
Feedrate: 116mm/min.
Depth of Cut: 50mm

TAP S45C Steel

Tapping

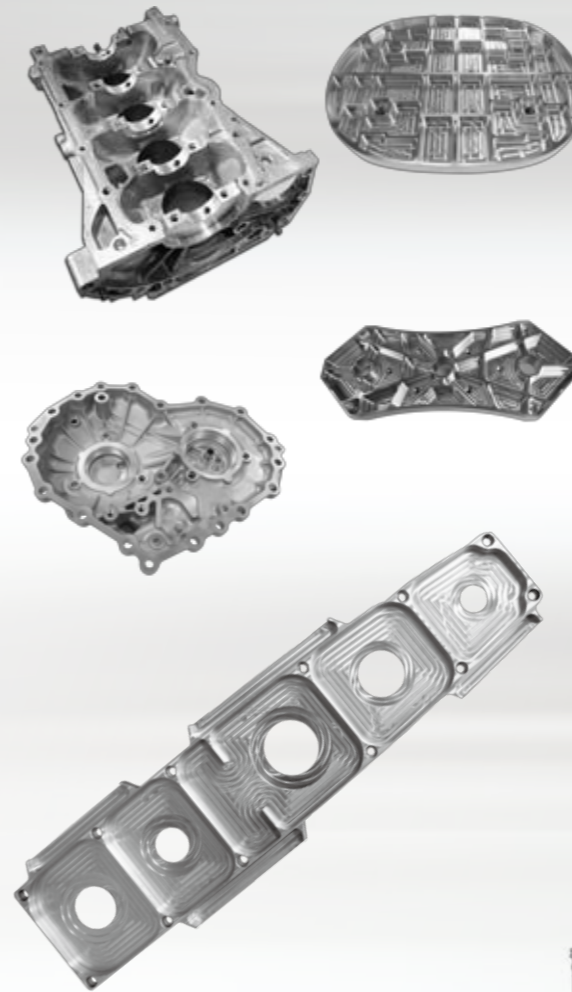
M36



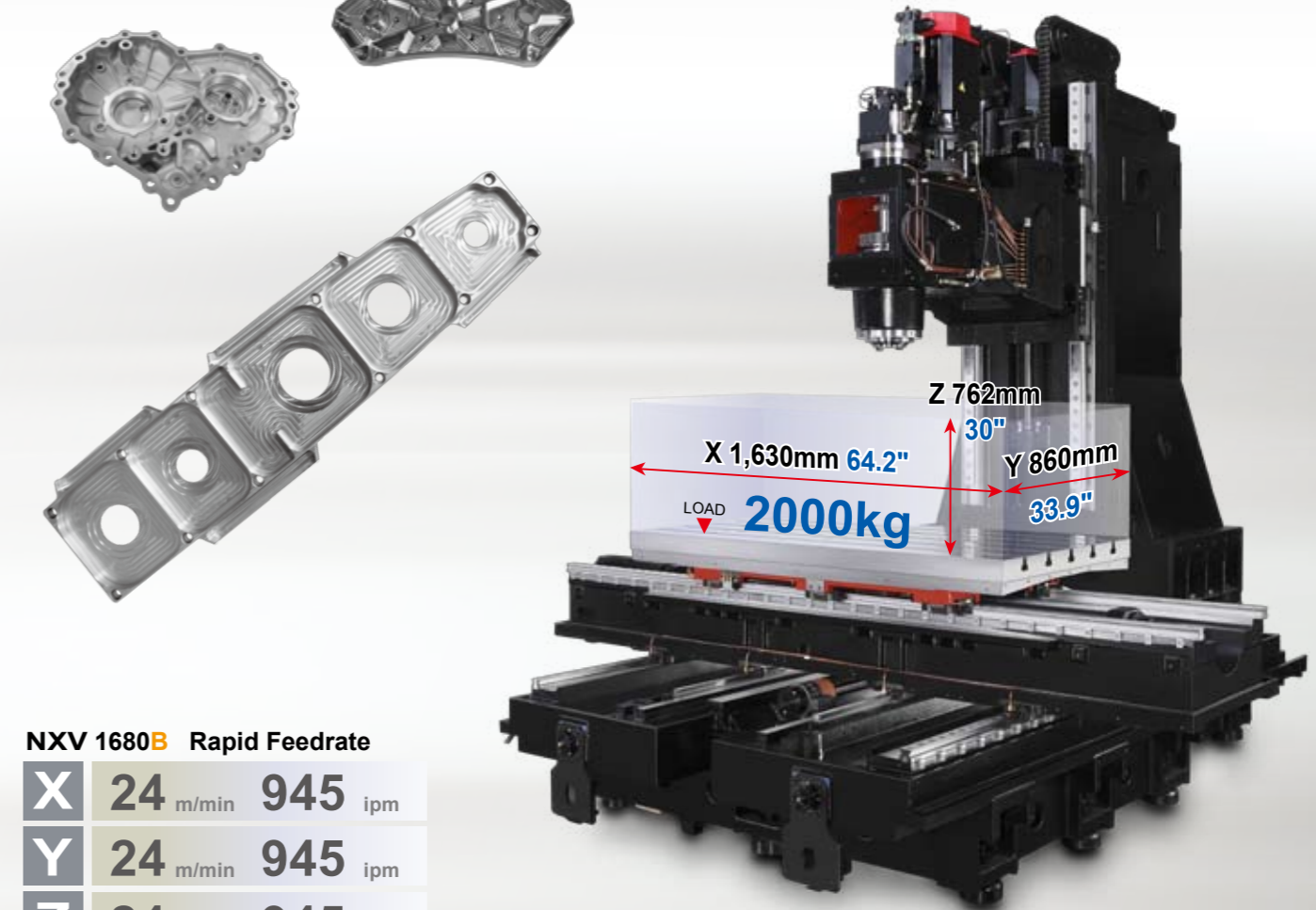
Tool: M36 x 4P
Spindle Speed: 44rpm
Feedrate: 176mm/min.
Depth of Cut: 25mm

NXV 1680B

The NXV 1680B high rigidity vertical machining center offers extended travels at an affordable price. It is most suitable for automotive and aerospace applications.



■ Quad-Chip auger system ensure fluent chip removal prevent chips from piling up.



NXV 1680B Rapid Feedrate

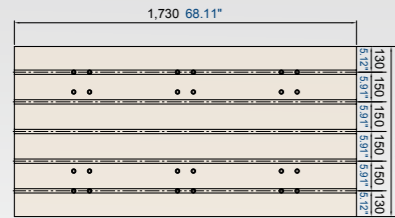
X	24 m/min	945 ipm
Y	24 m/min	945 ipm
Z	24 m/min	945 ipm



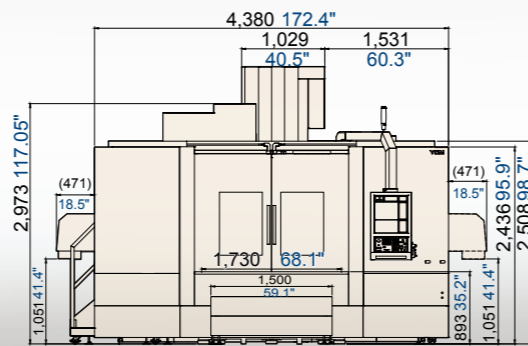
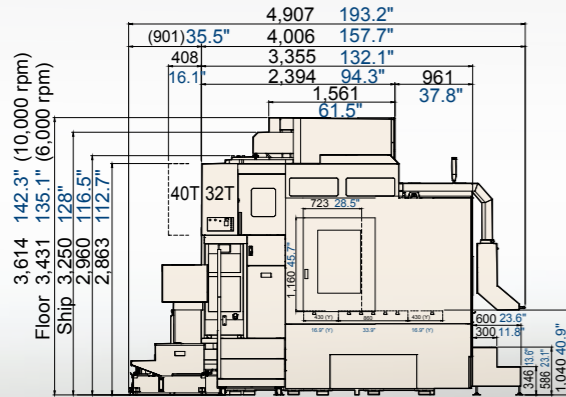
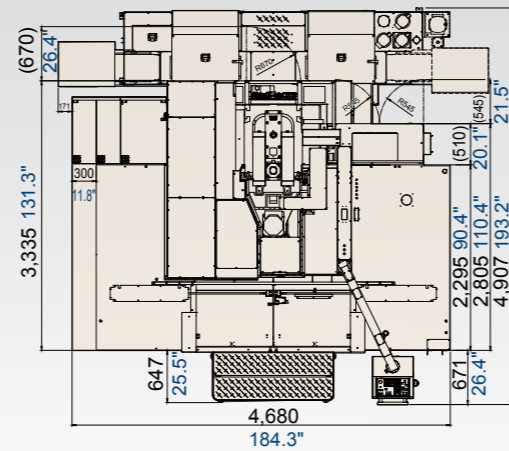
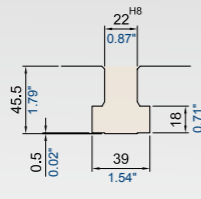
NXV 1680B		
ACCURACY	ISO 10791-4	YCM*
Axial Travel	Full Length	
Positioning (X/Y/Z) A	0.042/0.025/0.025 mm 0.00165"/0.001"/0.001"	0.014/0.01/0.01 mm 0.0006"/0.0004"/0.0004"
Repeatability (X/Y/Z) R	0.02/0.015/0.015 mm 0.0008"/0.0006"/0.0006"	0.01/0.007/0.007 mm 0.0004"/0.0003"/0.0003"

*All values shown above are measured for the machine in good air-conditioned environments.

■ TABLE SIZE



■ T-SLOTS

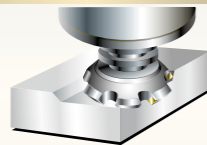


■ CUTTING CAPACITY NXV 1680B BT50 6,000rpm Fanuc System

FACE MILL S45C Steel

Depth of Cut

9
mm

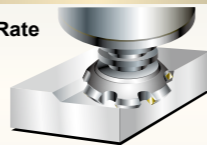


Tool $\phi 160\text{mm} \times 10\text{T}$
Spindle Speed 375rpm
Feedrate 375mm/min.
Width of Cut 125mm

FACE MILL S45C Steel

Material Removal Rate

756
cc/min.

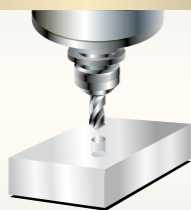


Tool $\phi 125\text{mm} \times 8\text{T}$
Spindle Speed 375rpm
Feedrate 1,800mm/min.
Width of Cut 120mm
Depth of Cut 3.5mm

U-DRILL S45C Steel

Cutter Diameter

$\phi 65$
mm

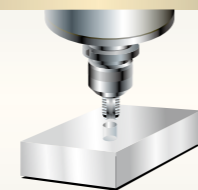


Tool $\phi 65\text{mm}$
Spindle Speed 500rpm
Feedrate 100mm/min.
Depth of Cut 50mm

TAP S45C Steel

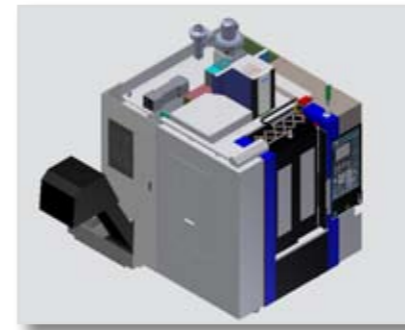
Tapping

M48



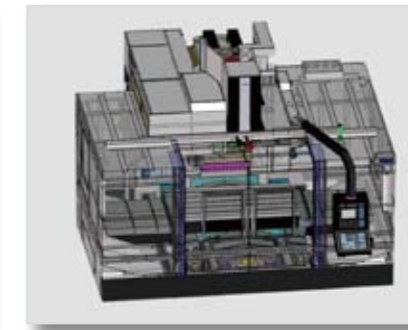
Tool M48 x 5P
Spindle Speed 34rpm
Feedrate 170mm/min.
Depth of Cut 40mm

■ NXV 600A

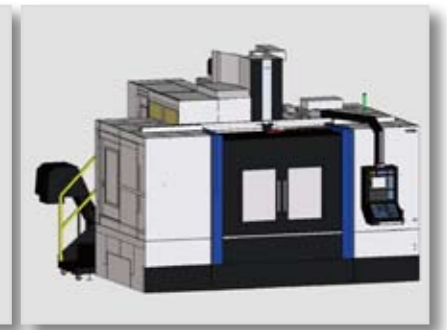


■ Chip Conveyor (opt.)

■ NXV 1680B

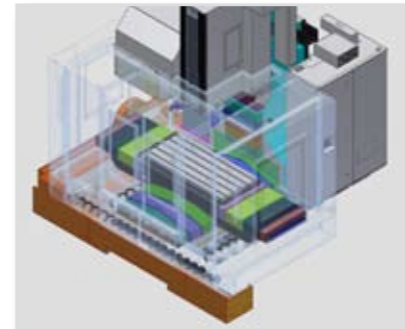


■ Quad-Chip Auger System

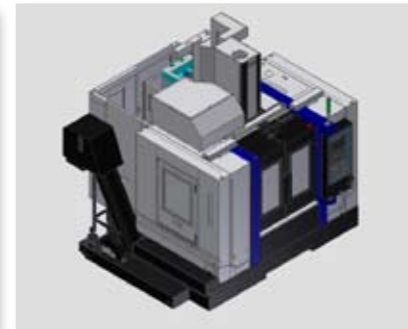


■ Quad-Chip Auger with Rear Side Chip Conveyor (opt.)

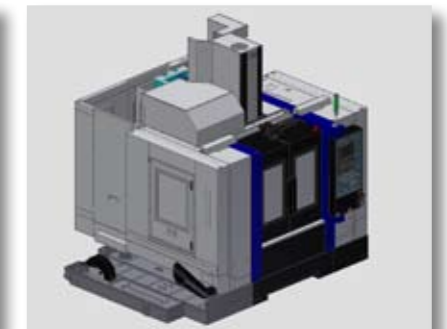
■ NXV 1020A / AM, NXV 600A



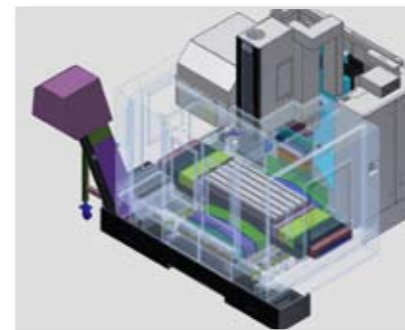
■ Triple-Chip Auger System



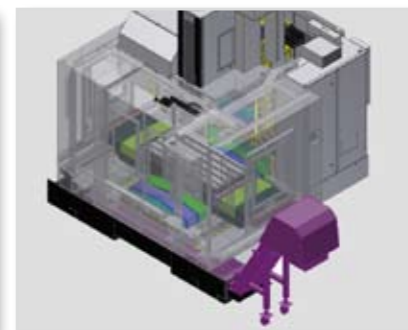
■ Rear Side Chip Conveyor (opt.)



■ Triple Chip Auger with 45° Pipe

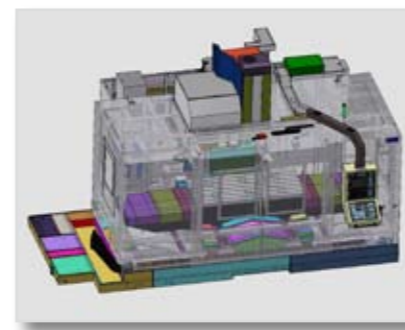


■ Dual-Chip Auger System (opt.)

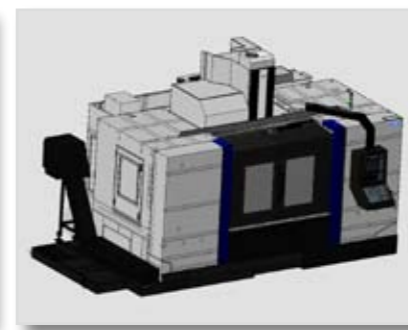


■ Left / Right-Hand Side Chip Conveyor (opt.)

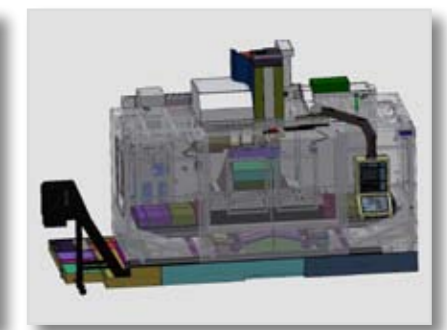
■ NXV 1380A / 1680A



■ Penta-Chip Auger with 45° Pipe



■ Penta-Chip Auger with Rear Side Chip Conveyor (opt.)



■ Quad-Chip Auger with Left-hand Side Chip Conveyor (opt.)

MXP-200 FA

YCM CONTROL
by FANUC

- High Response AC Digital Servo & Spindle Drives with High Definition
- AICC II High Speed High Accuracy with Manual / Auto Switching on/off Machining
- JERK Control Function (opt.)
- High Rigidity Tapping, Helical Interpolation
- Custom Marco B and Tool Path Graphics
- Manual Guide i with large Screen Display .
- Program File Management for Easy Program Classifying
- USB Interface for Easy Parameters & CNC Programs Transfer
- 512KB Memory
- High Speed Positioning Function (opt.)
- Memory Card Program Edit & Operation
- NANO Smoothing Function (opt.)
- 400 Pairs Tool Offset, 400 Total Registered Programs
- 48 Pairs of Workpieces Coordinate System
- Extended Parts Program Editing (Cut, Copy, and Paste. Maximum 4,000 Characters)

i-OPERATION Plus II

Software Enhancement Exclusively from YCM



Pre-machining Preparation

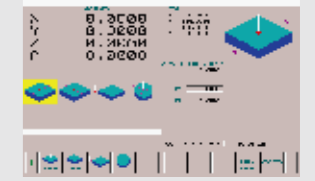
Intelligent Tool Data Management
Comprehensive tool data management function allows operators to monitor and manage all positions in tool magazine



Tool Length Measurement
Graphic measuring interface provides automatic tool length measurement function



Workpiece Coordinate Calculation
Conversational operating window provides convenient and fast setup of workpiece coordinates



NEW RENISHAW GUI System (Conversational Graphic Operating Interface)

Tool measurement & measurement correction



Workpiece measurement

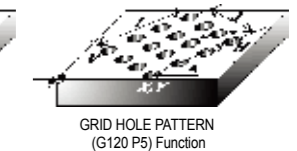
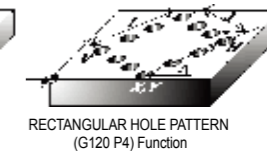
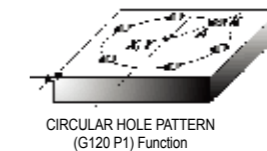


Programming

NEW I_PATTERN

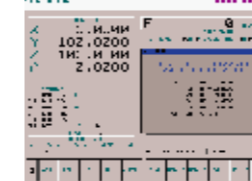


15 sets of machining cycle program
Reduces program input and memory time
Graphic interface & conversational command input



Machining

High Performance Machining Mode M300
With 5 sets of parameter settings, the users choose the most suitable mode for optimum machining



High Speed Machining Mode M400
Increases drilling and tapping speed, reduces machining time for job shop and precision mold machining



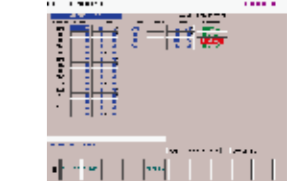
NEW Tool Load Management
Instant tool load monitoring with alarm function



Multi-display Function
Displays 4 statuses simultaneously with configurable status display



NEW Tool Life Management
Indicates tool status of each group with tool life alert



Instant Message Alert

Pop-up Alarm Display



Instantly provides troubleshooting procedure
Quick response to alarm

Smart control panel (IPANEL)



Easy to set up and operate important functions

Maintenance

Intelligent Maintenance



Provide users with periodic maintenance options and descriptions

Instantly provide users with maintenance notifications

Counter Function



Allow users to keep count of workpieces with the function of overtime cycle alarm provides easy control over machining cycle time

1. Main Counter
2. Periodical Counter
3. Daily Counter
4. Over Cycle Alarm

i-Direct

A remote monitoring system

The YCM Production Line Monitoring System i-Direct overcomes the limitations of time and distance. This software provides plant operators with instant production status, including production value, output, standby, alarm time, status display and malfunction records of the machine. These data could be browsed online and printed. When incidents occur, i-Direct will automatically warn plant operators through e-mail or MMS message. With i-Direct Production Line Monitoring System the plant operators can easily keep track of production statuses regardless of time and distance.



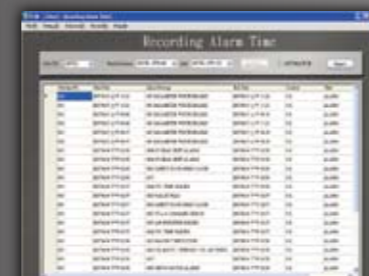
i-Direct Main Page



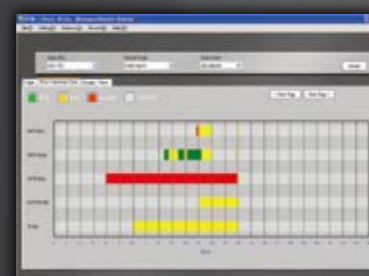
Plant Operation Status Monitoring



Single Machine Status Browsing



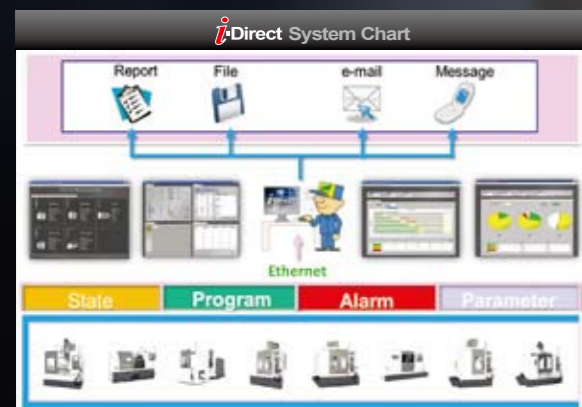
Machine Status Time Record



Production Status Process Record



Production Management Statistics



SIEMENS SINUMERIK 828D

The new CNC-controller for the compact class.

The performance of the SINUMERIK 828D is in a class of its own. Even in the compact frame size, the familiar SINUMERIK state-of-the-art technology ensures the highest possible levels of precision and productivity.



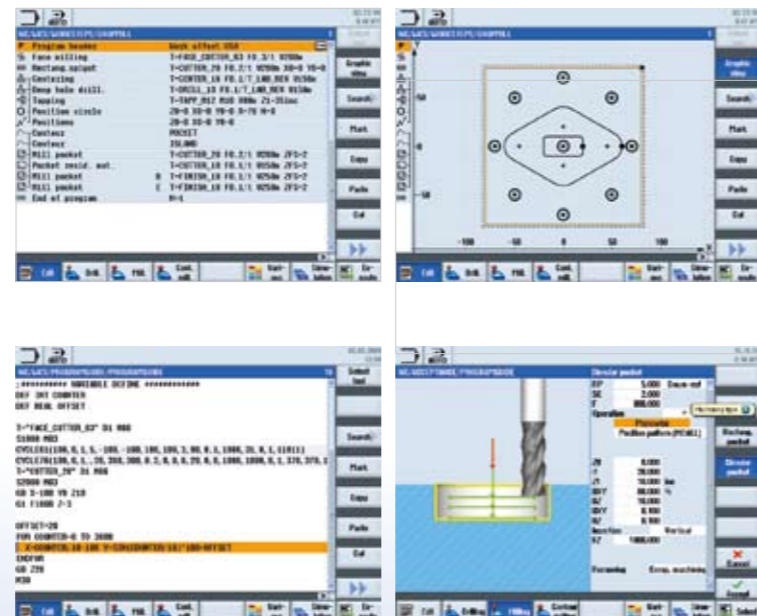
Programming the way you want it

SINUMERIK offers unique programming methods for every application. These include: **Workstep programming for ShopMill/ShopTurn and SINUMERIK high-level language with programGUIDE. ISO-Code programming is also supported.**

• ShopMill/ShopTurn

workstep programming

- Extremely short programming times
- For production of individual parts and small batches



• SINUMERIK high-level language with programGUIDE

- Maximum flexibility and very short processing times
- For production of medium and large batch sizes

1. Communicative

- Front interfaces (IP65)
- RJ45 Ethernet
- USB 2.0
- Compact Flash (CF) card

2. Heavy-duty

Panel front made of die-cast magnesium

3. Optimum readability

10.4" TFT color display

4. Outstanding performance

- Two versions with different performance capabilities
- PPU 260/261
- PPU 280/281

5. User-friendly

- Fully fledged QWERTY keyboard
- Hard keys with protective foil
- Degree of protection IP65

6. Clever

3/8" thread for add-on components

7. Maintenance-free

- No battery (permanent data buffering thanks to NV-RAM technology!)
- No fan
- No hard disk

8. Optimum connection

- Rear interfaces
- USB 2.0
- RJ45 Ethernet
- DRIVE-CLiQ
- PLC I/O interface
- RS232 C
- NC inputs/outputs

SPECIFICATIONS

	NXV600A	NXV560A - APC	NXV1020A	NXV1020AM	NXV1380A	NXV1680A	NXV1680B
SPINDLE							
Spindle Speed (opt.)	12,000 rpm (15,000 rpm)		12,000 rpm (12,000 rpm / 15,000 rpm)		6,000 rpm (10,000 rpm)		
Spindle Power (opt.)	18.5 kW (18.5 kW) 25 HP (25 HP)		18.5 kW (18.5 kW) 25 HP (25 HP)		12,000 rpm : 18.5 kW 25 HP (15,000 rpm : 18.5 kW) (25 HP) (12,000 / 15,000 rpm : 30 kW) (40 HP)		18.5 kW (22 kW) 25 HP (30 HP)
Spindle Taper	BBT40						BT50 (BBT50)
TRAVEL							
X-axis Travel	600 mm 23.6"		1,020 mm 40.16"		1,330 mm 52.4"	1,630 mm 64.2"	1,630 mm 64.2"
Y-axis Travel	410 mm 16.1"		520 mm 20.47"		762 mm 30"		860 mm 33.9"
Z-axis Travel	450 mm 17.7"		540 mm 21.26"		700 mm 27.6"		762 mm 30"
Distance Between Spindle Nose & Table Top	110-560 mm 4.3-22"	25-475 mm 0.98"-18.7"	140-680 mm 5.51"-26.77"		100-800 mm 3.94"-31.5"		200-962 mm 7.9"-37.9"
TABLE							
Table Size	700 x 420 mm 27.6" x 16.5"	560 X 410 mm 22.05"-16.14"	1,120 x 520 mm 44" x 20.47"		1,430 x 760 mm 56.3" x 29.9"	1,730 x 760 mm 68.1" x 29.9"	1,730 x 860 mm 68.1" x 33.9"
No. T-slots x Size x Pitch	3 x 14 mm x 100 mm 3 x 0.55" x 3.9"	-	5 x 18 mm x 100 mm 5 x 0.71" x 3.94"		7 x 18 mm x 100 mm 7 x 0.71" x 3.94"		5 x 22 mm x 150 mm 5 x 0.87" x 5.91"
Max. Load on Table	300kg 660 lb	120 kg 265 lb	500kg 1,102 lb		1,500kg 3,307 lb		2,000kg 4,409 lb
FEEDRATE							
X/Y/Z Rapid Feedrate	48 / 48 / 48 m/min. 1,890 / 1,890 / 1,890 ipm		48 / 48 / 32 m/min. 1,890 / 1,890 / 1,260 ipm		24 / 24 / 16 m/min. 945 / 945 / 630 ipm		30 / 30 / 24 m/min. 1,181 / 1,181 / 945 ipm
Cutting Feedrate	1-20,000 mm/min. 0.04-787 ipm		1-20,000 mm/min. 0.04-787 ipm		20,000 / 20,000 / 16,000 mm/min. 787 / 787 / 630 ipm		1-20,000 mm/min. 0.04-787 ipm
ATC							
Tool Magazine Capacity (opt.)	24T		24T (30T / 40T)		24T (30T / 48T / 60T)		32T (40T)
Max. Tool Weight (per piece)	6kg 13.2 lb						20kg 44 lb
Max.Tool Dimensions (opt.) (W/O Adjacent Tools)	ø76 x 250 mm (ø125 x 250 mm) ø3" x 9.84" (ø4.92" x 9.84")		24T : ø90 x 300 mm (ø140 x 300 mm) 30T/40T : ø76 x 300 mm (ø125 x 300 mm) 24T : ø3.54" x 11.81" (ø5.51" x 11.81") 30T/40T : ø3" x 11.81" (ø4.92" x 11.81")		24T : ø90 x 300 mm (ø140 x 300 mm) 30T/48T/60T : ø76 x 300 mm (ø125 x 300 mm) 24T : ø3.54" x 11.81" (ø5.51" x 11.81") 30T/48T/60T : ø3" x 11.81" (ø4.92" x 11.81")		32T / 40T: ø120 x 350 mm (ø240 x 350 mm) 32T / 40T : ø4.72" x 13.78" (ø9.45" x 13.78")
Tool Changer Method	Arm Type						
Tool Selection Method	Random						
GENERAL							
Pneumatic Supplier	5.5 kg/cm ² 78.2psi						
Power Consumption (Transformer)	26.2 kVA (30 kVA)	27.8 kVA (30 kVA)	31.3 kVA (40 kVA)		33.9 kVA (40kVA)		43.3 kVA (65 kVA)
Machine Weight	3,000 kg 6,614 lb	3,830 kg 8,444 lb	5,350 kg 11,795 lb		10,500 kg 23,149 lb	11,000 kg 24,251 lb	15,500 kg 34,171 lb

Note: Above specifications may vary depending on the machine and the surrounding environment. The manufacturer reserves the right to modify the design, specifications, mechanisms, etc., to improve the performance of the machine without notice. The test data provided in this catalog is performed under specific test procedures and environmental conditions. Above specifications are mainly for FANUC. The data for Power Consumption (Transformer) is FANUC standard, and different spindle motor may vary from those stated here. If you have any questions about other CNC controllers, please contact YCM sales representative.