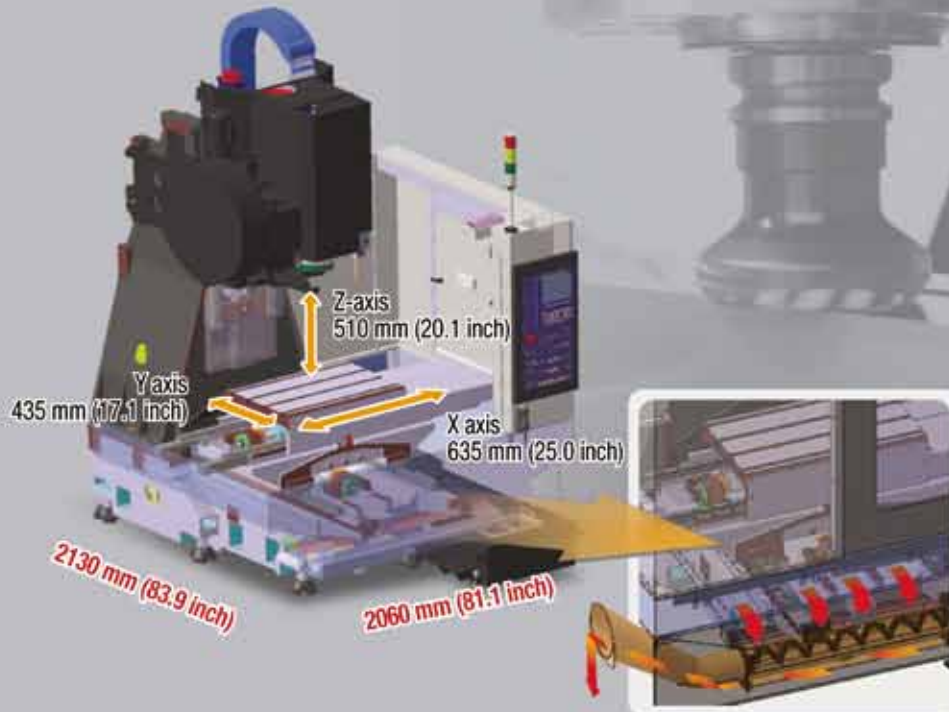




DNM 400a

Compact Vertical Machining Center

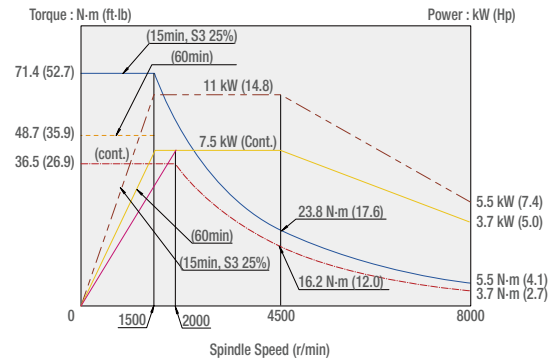
- Compact design for space saving
- Enhanced machining productivity
- Fit for light cutting operations





Main Spindle

Spindle power-torque diagram



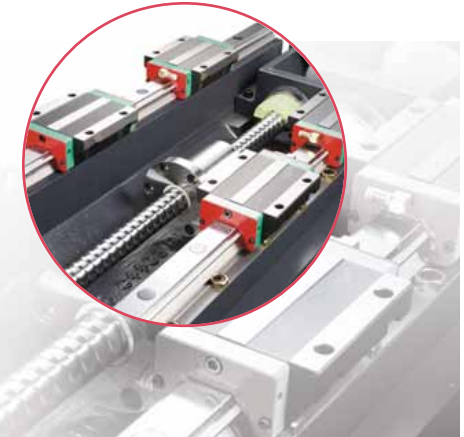
Spindle motor power (15min/Cont.) **11 / 7.5 kW**
(14.8 / 10.1 Hp)

Max. Spindle speed **8000 r/min**

Rapid Traverse



The linear motion guide ways and the high-speed servo motors enable fast axis movements, which reduce machining time and non-cutting time, resulting in enhanced productivity.



		DNM 400a
X-axis	m/min (ipm)	30 (1181.1)
Y-axis	m/min (ipm)	30 (1181.1)
Z-axis	m/min (ipm)	30 (1181.1)

Auto Tool Changer

Fast tool change time on a cam-type tool changer helps improve productivity.



Tool change time (T-T-T)

DNM series **1.3 s**

• This value is based on the motor on-off time and 60Hz.



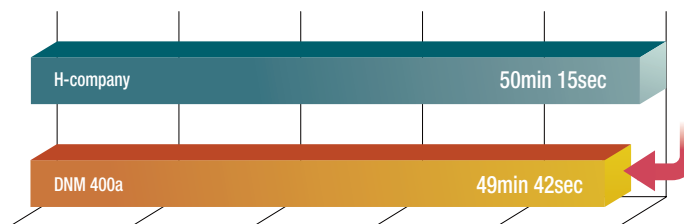
Tool storage capacity

20 tools

Machining Productivity

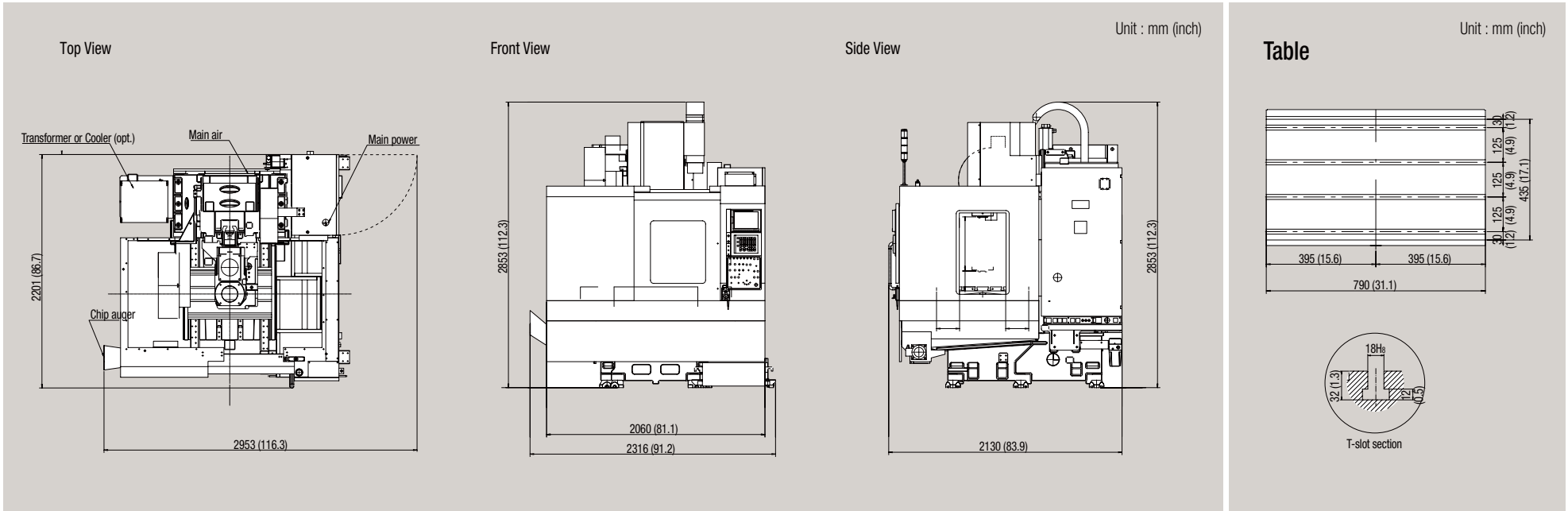
The basic concept of the machine design enables fast machining performance, which ensures an improvement in productivity.

Comparison of Cutting Time



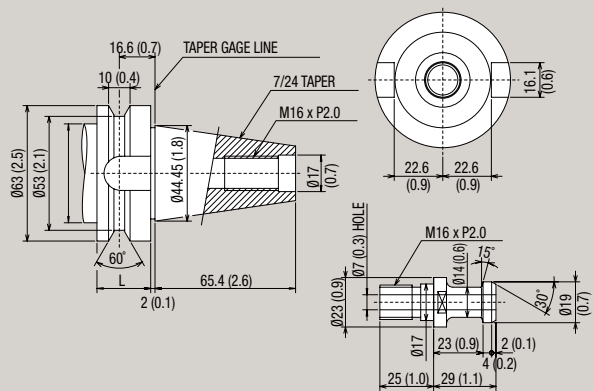
Material : Aluminum (Al606-T6)
Size : 561 x 210 x 40 mm
(22.1 x 8.3 x 1.6 inch)
No. of tools used : 18 tools

External Dimensions

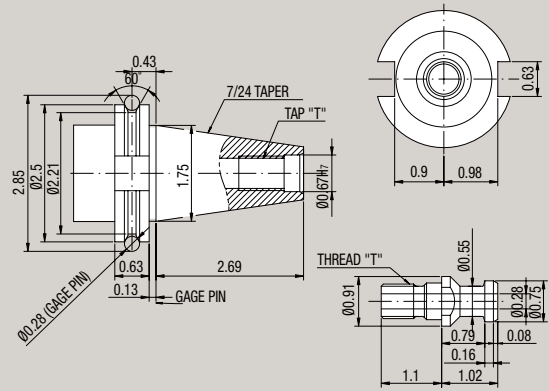


Tool Shank

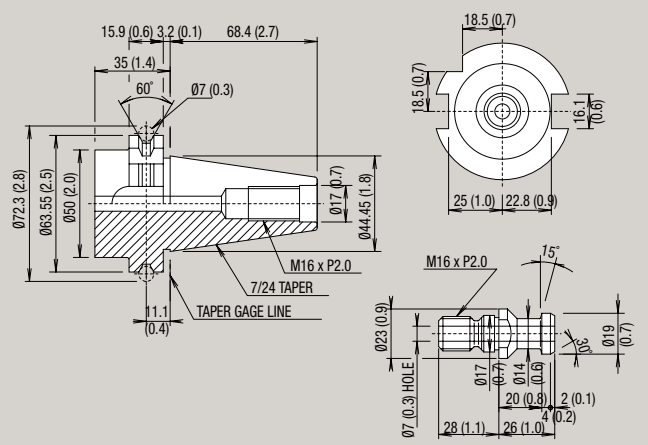
BT40 Unit : mm (inch)



CAT40 Unit : inch



DIN40 Unit : mm (inch)



Machine Specifications

	Features		DNM 400a
Travel	X-axis	mm (inch)	635 (25.0)
	Y-axis	mm (inch)	435 (17.1)
	Z-axis	mm (inch)	510 (20.1)
	Distance from Spindle to table surface	mm (inch)	150-660 (5.9-26.0)
Table	Table size	mm (inch)	790 x 435 (31.1 x 17.1)
	Table loading capacity	kg (lb)	400 (881.8)
	Table surface		4-125 x 18Hø
Spindle	Max. spindle speed	r/min	8000
	Spindle Taper		ISO #40 7/24 Taper
	Max. Torque	N-m (ft-lb)	71 (695.8) / 15min
Feedrate	Rapid traverse rate (X / Y / Z)	m/min (ipm)	30 (1181.1)
	Cutting feedrate	mm/min (ipm)	15000 (590.6)
Automatic tool changer	Type of tool shank		BT / CAT / DIN 40
	Tool storage capacity	ea	20
	Max. tool diameter	mm (inch)	Ø80 (3.2)
	Max. tool diameter without adjacent tools	mm (inch)	Ø125 (4.9)
	Max. tool length	mm (inch)	300 (11.8)
	Max. tool weight	kg (lb)	8 (17.6)
	Method of tool selection		memory random
	Tool change time (tool-to-tool)	s	1.3
Motor	Spindle motor	kW (Hp)	11 / 7.5 (14.8 / 10.1) [15min/Cont.]
	Feed motor (X / Y / Z)	kW (Hp)	1.2 / 1.2 / 1.8 (1.6 / 1.6 / 2.4)
Power source	Electric power supply (Rated capacity)	kVA	27.4
	Compressed air supply	MPa (psi)	0.54 (78.3)
Tank capacity	Coolant tank capacity	L (gal)	300 (79.3)
	Lubrication tank capacity	L (gal)	1.4 (0.37)
Machine size	Machine height	mm (inch)	2853 (112.3)
	Machine dimension (L x W)	mm (inch)	2130 x 2060 (83.9 x 81.1)
	Machine weight	kg (lb)	4000 (8818.5)
NC system			DOOSAN FANUC i series

- The specifications and information above-mentioned may be changed without prior notice.
- For more details, please contact Doosan.



Doosan Machine Tools

<http://www.doosanmachinetools.com>

www.facebook.com/doosanmachinetools

Optimal Solutions for the Future

Head Office

Yeonkang Bldg., 6th FL., 270, Yeonji-dong,
Jongno-gu, Seoul, Korea
Tel +82-2-3670-5345 / 5362
Fax +82-2-3670-5382

Doosan Machine Tools America

19A Chapin Rd., Pine Brook, NJ 07058, U.S.A.
Tel +1-973-618-2500
Fax +1-973-618-2501

Doosan Machine Tools China

Room 101,201,301, Building 39 Xinzhuan Highway
No.258 Songjiang District,China Shanghai(201612)
Tel +86 21-5445-1155
Fax +86 21-6405-1472

Doosan Machine Tools Europe

Emdener Strasse 24, D-41540 Dormagen, Germany
Tel +49-2133-5067-100
Fax +49-2133-5067-001

Doosan Machine Tools Japan

#2412, Mita Kokusai Bldg. 1-4-28 Mita,
Minato-ku, Tokyo 108-0073, Japan
Tel +81 3 5730 9013
Fax +81 3 5730 9016

Doosan Machine Tools India

106 / 10-11-12, Amruthahalli, Byatarayanapura,
Bellary road, Bangalore-560 092, India
Tel +91-80-4266-0122 / 121 / 100



ver. EN 160502 SU

NC Unit Specifications

DOOSAN FANUC i series



Standard Feature

- Assembly & operation tools
- Auger chip conveyor
- Coolant tank & chip pan
- Door interlock for safety
- Enclosure splash guard (Top cover **opt.**)
- Flood coolant system
- Installation parts
- Operator call lamp (red, yellow, green)
- Portable MPG
- Work light

Optional Feature

- 4th axis preparation
- Automatic power off
- Automatic tool length measurement
- Hydraulic line for fixture
- Pneumatic line for fixture
- Rotary table
- Shower coolant
- Spindle head cooling system
- Test bar
- Through spindle coolant (Top cover **std.**)
- Top cover

- Number of tool offsets : 400 ea
- Tool life management : 128 sets
- Tool offset memory C : Geometry / Wear and Length / Radius offset memory
- No. of Registered programs : 400 ea
- Part program storage : 1280 m
- Additional work coordinate system : G54.1 P1 - 48 (48 pairs)
- AI APC(Advanced Preview Control) : 20 block preview
- MDI / DISPLAY unit : 8.4" Color TFT LCD, keyboard for data input (small), soft-keys
- Embedded ethernet

* For more details, please contact Doosan Machine Tools.

* The specifications and information above-mentioned may be changed without prior notice.

* Doosan Machine Tools Co., Ltd. is a subsidiary of MBK Partners, a Korean private equity firm. The trademark DOOSAN is used under a licensing agreement with Doosan Corporation, the registered trademark holder.