

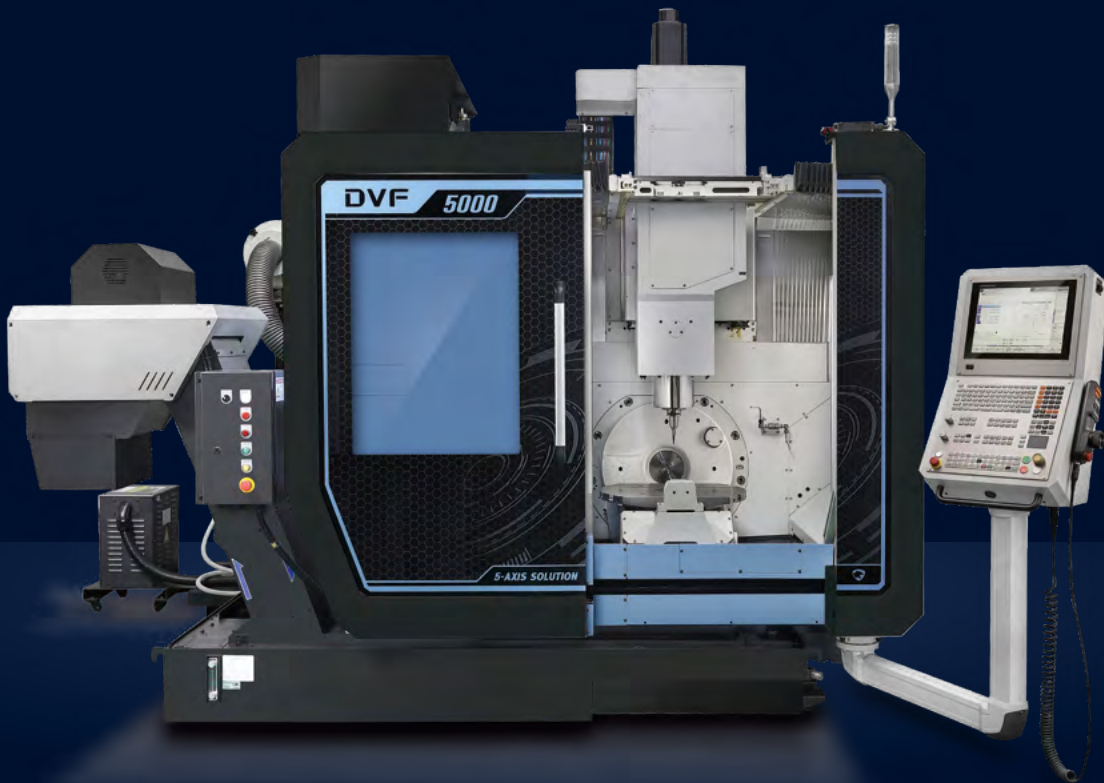


NEW COMPACT, SIMULTANEOUS 5-AXIS MACHINING CENTER
FOR HIGH-SPEED MACHINING

DVF

5000

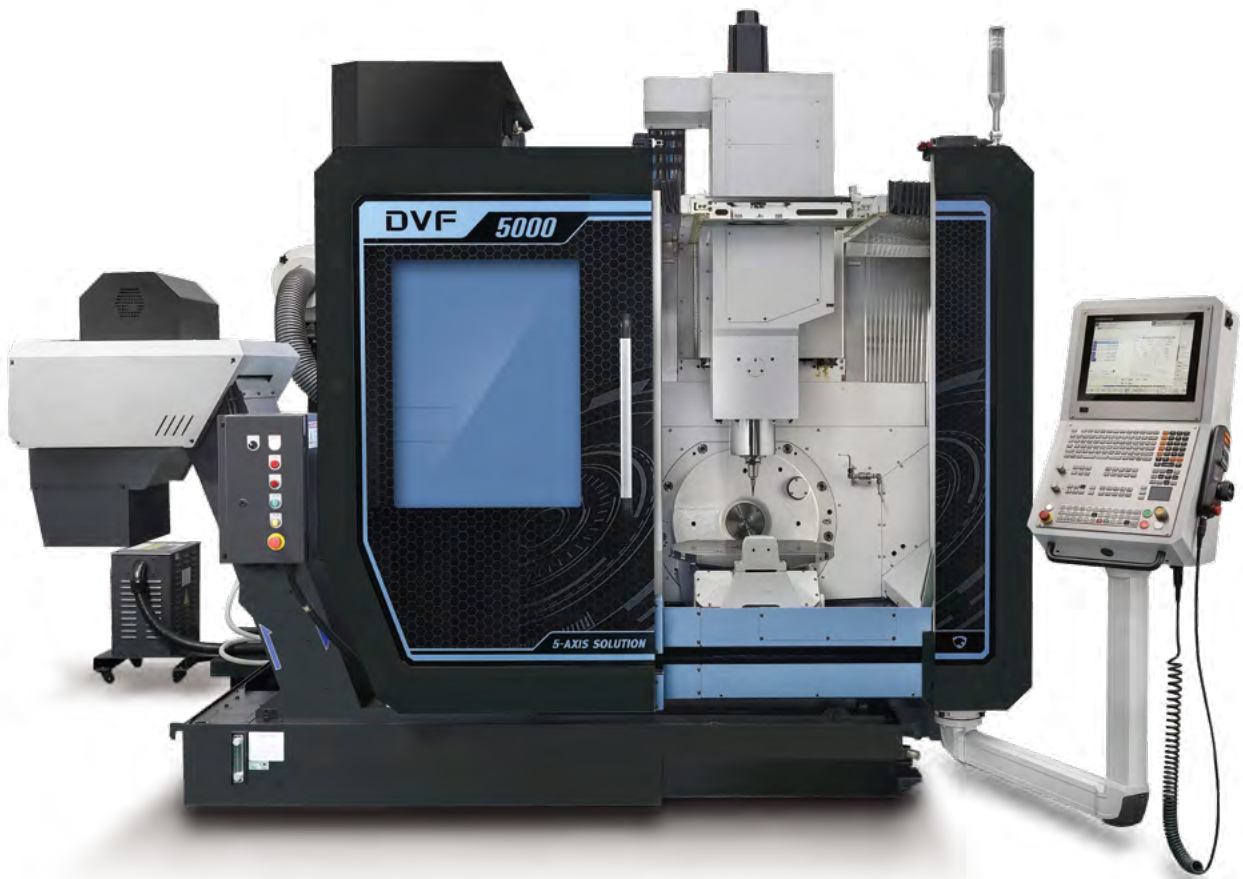
2nd Generation



DN SOLUTIONS

NEW DVF 5000 2nd Generation

DVF 5000 2nd generation provides significantly improved accuracy and higher productivity for simultaneous 5 axis machining compared to the previous model. The machine has stable bed structure/units and the top level cooling system for long-term base high accuracy condition. Its integrated automation, AWC(Auto Workpiece Changer) and Round Magazine provide "easy to make" automation solutions and enable to accelerate customer return on investment.



From small high precision medical parts to medium-sized automobile, aerospace and semiconductor parts, it is possible to cover various applications for both AL die-cast high-speed light cutting and titanium, inonel, Co-Cr difficult-to-cut machining with DVF's high rigidity, high speed spindle and rigid column/table structure.



FAST & PRECISE 5-AXIS EXCEEDS EXPECTATIONS

- 15000, 20000 r/min high speed spindle
- B-axis/C-axis 0.0001 degree control as standard
- Tool change time(C-T-C) 3.8s, 28% faster than previous model.
- Increased X/Y/Z-axis rapid traverse speed & acc./dec.
- Cooling functions as std. on spindle, motor/LM guide/ball screw(X/Y/Z), C-axis table motor
- Integrated thermal compensation systems for spindle and structure

FURTHER INCREASED MACHINING CAPACITY

- Ø630mm dia. 2-axis tilting table, 26% increased compared to previous model
- Max. Ø600 x H500mm machining area, 32% increased compared to previous model
- Max. 400kg table load capacity with stable table support structure
- X/Y/Z axis travel distance 650/520/480mm, up to 20% increased compared to previous model

EASY ACCESS, EASIER OPERATION

- Easy setup of workpieces with 580mm distance between operator and table center
- Easy tool exchange by placing the tool magazine door on the front and applying a tool removal device (Auto Kicking Device)
- Improved chip disposal capability with enhanced coolant flood & flushing functions
- Grease lubrication system
- Compact integrated automation system(AWC)

BASIC STRUCTURE

Roller LM guideways on X/Y/Z axes and 0.0001 deg. High accuracy B/C axis get higher accuracy and structural stability.

Table size

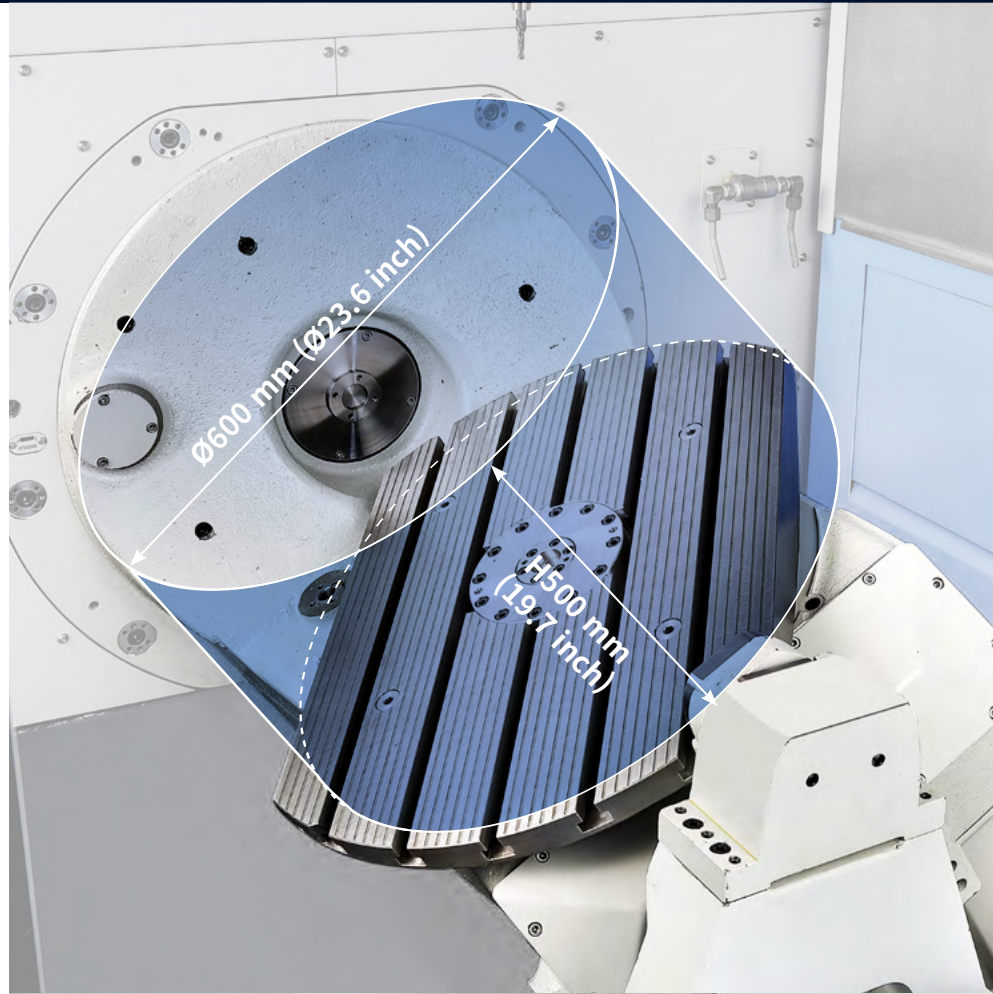
Ø630 x 450 mm
 ø24.8 inch x 17.7 inch

Maximum workpiece size

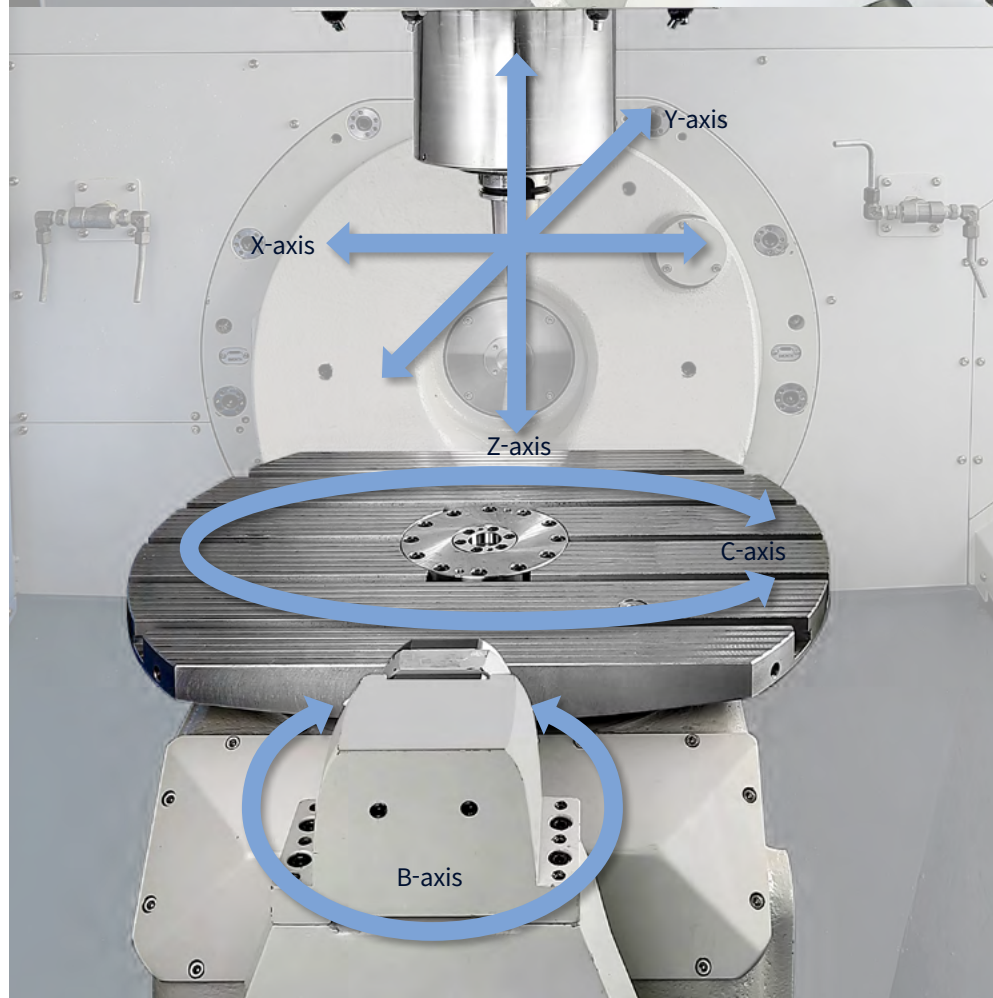
Ø600 x 500 mm
 ø23.6 inch x 19.7 inch

Maximum workpiece weight

400 kg
 881.8 lbs



Description	Unit	DVF 5000 ^{2nd}	
Travel distance	X-axis	mm (inch)	650 (25.6)
	Y-axis	mm (inch)	520 (20.5)
	Z-axis	mm (inch)	480 (18.9)
	B-axis	deg	140(-30~+110)
	C-axis	deg	360
Rapid traverse rate	X-axis	m/min (ipm)	42 (1653.5)
	Y-axis	m/min (ipm)	42 (1653.5)
	Z-axis	m/min (ipm)	42 (1653.5)
	B-axis	r/min	25
	C-axis	r/min	25



SPINDLE SPECIFICATIONS

Providing stable machining performance with a high-speed, direct-coupled or a built-in spindle.



15000 r/min, Direct-coupled

18.5 kW / 118 N·m (FANUC)
24.8 Hp / 87.1 ft-lbs

17 kW / 108 N·m (HEIDENHAIN)
22.8 Hp / 79.7 ft-lbs

16.5 kW / 79 N·m (SIEMENS)
22.1 Hp / 58.3 ft-lbs

15000 r/min High Torque Built-in

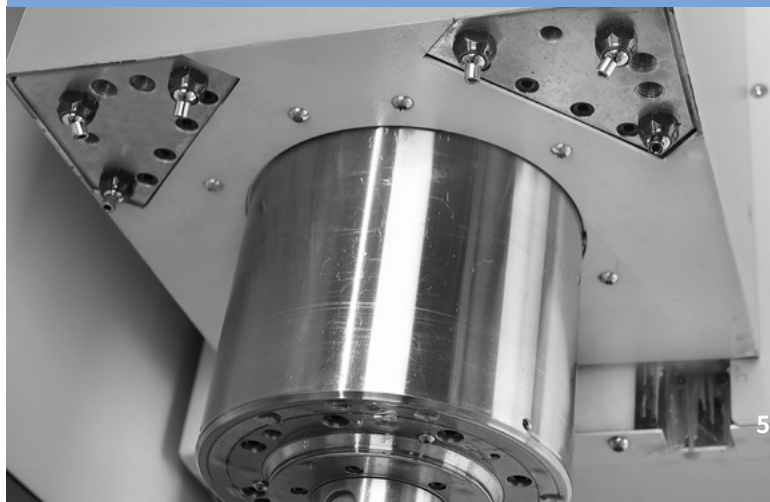
30 kW / 230 N·m (FANUC/HEIDENHAIN/SIEMENS)
40.2 Hp / 169.7 ft-lbs

20000 r/min, High Speed Built-in

37 kW / 221 N·m (FANUC)
49.6 Hp / 163.1 ft-lbs

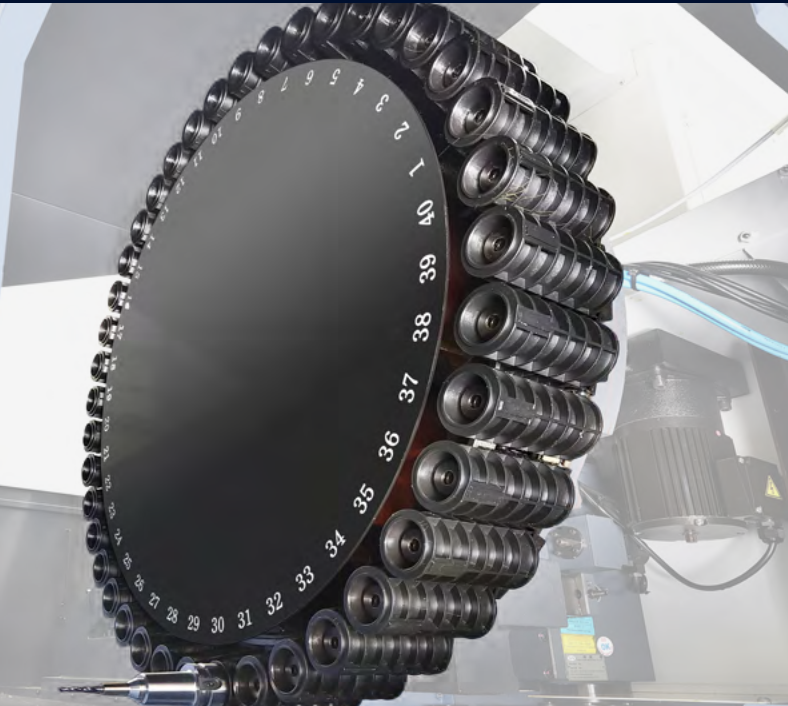
30 kW / 155 N·m (HEIDENHAIN/SIEMENS)
40.2 Hp / 114.4 ft-lbs

- Oil cooling spindle thermal compensation as standard
- Tool clamp confirmation sensor
- FANUC, HEIDENHAIN, SIEMENS controls



MAGAZINE SPECIFICATIONS

Servo tool magazine delivers high productivity and reliability.

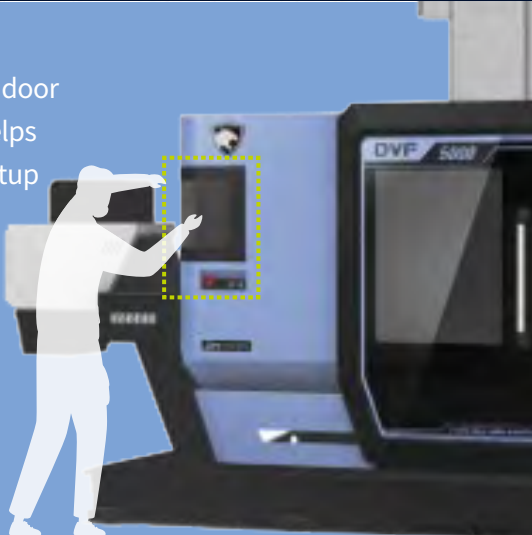


40 tools



120 tools

Tool magazine door at front side helps easy tooling setup and operation.



Tool type

ISO #40

Tool capacity

DRUM TYPE **30 {40 option}**

CHAIN TYPE **{60 / 120 option}**

Maximum tool diameter

CONTINUOUS **75 mm**

W/O ADJACENT TOOLS **125 mm**

Maximum tool length

300 mm

11.8 inch

Maximum tool weight

8 kg

17.6 lb

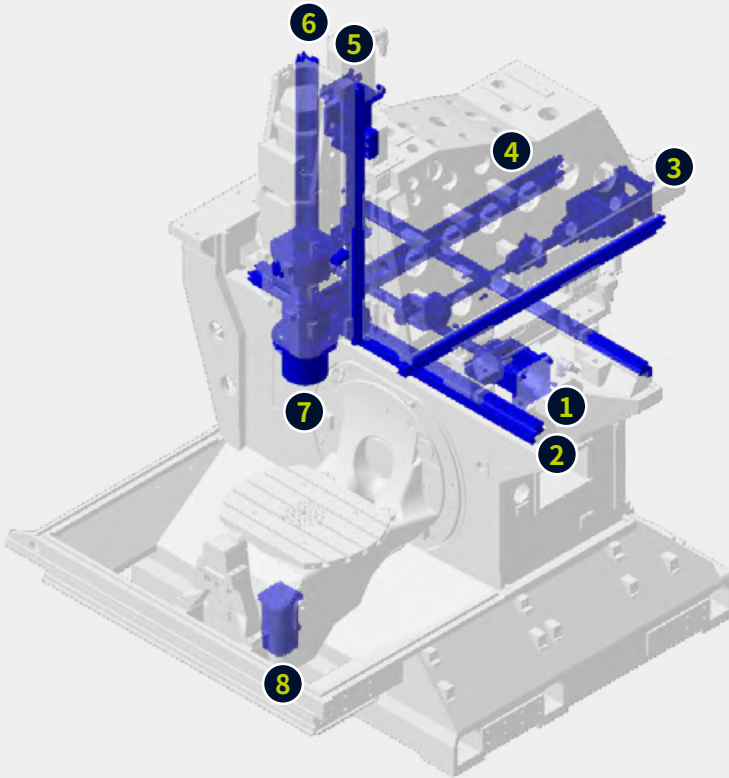
Tool-to-tool

T-T-T **1.3 sec**

C-T-C **3.8 sec**

COOLING & THERMAL COMPENSATION CONCEPT TO ACHIEVE HIGH ACCURACIES OVER LONG MACHINING RUN

X/Y/Z-axis Cooling (Guideways, Ball screw, Motor) & Cooled motor plate in C axis



- 1 Cooled motor plate in X axis & ball screw shaft
- 2 Cooled X axis linear guideways
- 3 Cooled motor plate in Y axis & ball screw shaft
- 4 Cooled Y axis linear guideways
- 5 Cooled motor plate in Z axis & ball screw shaft
- 6 Cooled Z axis linear guideways
- 7 Cooled Spindle bearing & Motor plate
- 8 Cooled motor plate in C axis

Thermal compensation function for Spindle and Structure as standard

- Real-time thermal displacement measuring and compensation through active thermal sensors
- 8 sensors are located : 2ea on spindle heads, 2ea on column units, 4ea on bed units



STANDARD | OPTIONAL SPECIFICATIONS

A range of options is available to suit individual requirements.

Description		DVF 5000 ^{2nd}	
Spindle	15000r/min, Direct-coupled	●	
	15000r/min, Built-in	○	
	20000r/min, Built-in	○	
Tool Magazine	30ea, Drum type	●	
	40ea, Drum type	○	
	60ea, Chain type	○	
	120ea, Chain type	○	
Tool type(shank)	BIG PLUS BT40	●	
	CAT40/DIN40/HSK-A63	○	
Coolant	Flood & Flushing	●	
	TSC	1.8kW, 0.2MPa	○
		4.0kW, 2.0MPa, Cyclone filter	○
		4.0kW, 2.0MPa, Paper filter	○
		2.9kW, 3.0MPa, Cyclone filter	○
		2.9kW, 3.0MPa, Paper filter	○
		7.5kW, 7.0MPa, Cyclone filter	○
	7.5kW, 7.0MPa, Paper filter	○	
	Chiller		○
	OIL SKIMMER	BELT TYPE	○
Coolant level switch	High/Low	○	
Chip disposal	Chip conveyor	Chip pan	●
		Left side, Hinged belt type	○
		Left side, Drum type	○
	Chip bucket	Forklift type, 300L	○
		Rotation type, 300L	○
	Air blower		○
	Air gun		○
	Coolant gun		○
Mist collector	Preparation(including internal hose)	○	
Chip disposal	Rotary joint	0.75kW(water soluble, none water soluble)	○
	Air clamping	Hyd. Fixture line thru table center(Max. 6 port)	○
	Fixture interface	B-axis/C-axis	●
Accuracy	Spindle Smart Thermal Control	2AB+GAP SENSING(5 PORTS)	○
	Structure Smart Thermal Control		○
	Linear scale	X/Y/Z axis	○
	Pulse encoder	X/Y/Z axis	●
	Rotary encoder	B/C axis	●
Measurement	IKC(Intelligent Kinematic Compensation)	S/W	○
		S/W + Receiver(RMI-Q)	○
		Datum ball	○
		Master tool	○
	Auto tool length measurement	RTS(Renishaw, Touch type)	○
		TT460(Heidenhain, Touch type)	○
		ZX SPEED(Blum, Touch type)	○
		NC4F(Renishaw, Laser type)	○
		SINGLE NT(Blum, Laser type)	○
		OMP400(Renishaw)	○
Auto workpiece measurement	TS460(Heidenhain)	○	
	TC-60(Blum)	○	
		○	
Automation	AWC(Automatic Workpiece Changer)	4/6/8/12 pallets	○
	Multi-AWC	24/28/32/40 pallets	○
	AUTO DOOR	Front door, with safety edge	○
		Side door, with safety edge	○
		Roof door	○
Others	LED work light		●
	3 color signal tower		●
	Electric cabinet cooling	Fan cooler	●(Fanuc)
		A/C(Air Conditioner)	○(Fanuc) / ●(Heidenhain, Siemens)
	EZ Work		●
	EZ Guide i		○
Automatic power off		●	

* Please contact DN Solutions for detailed specification information.

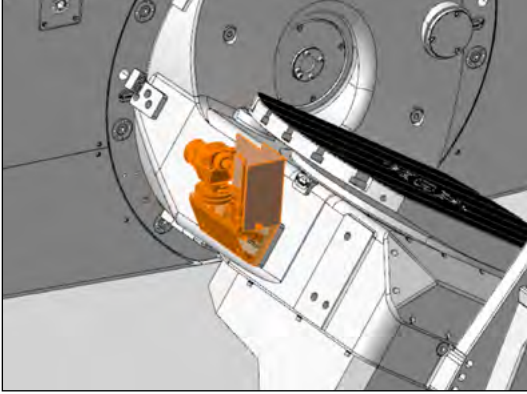
● Standard ○ Optional X Not applicable

*When using a semi-synthetic type or synthetic type, contact our sales representative or service center in advance.

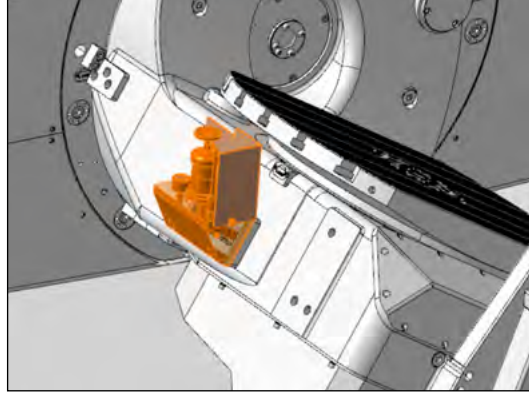
Fire Safety Precautions | There is a high risk of fire when using non-water-soluble cutting fluids, processing flammable materials, neglecting the controlled and careful use of coolants and modifying the machine without the consent of the manufacturer. Always check the SAFETY GUIDELINES carefully before using the machine.

PERIPHERAL EQUIPMENT

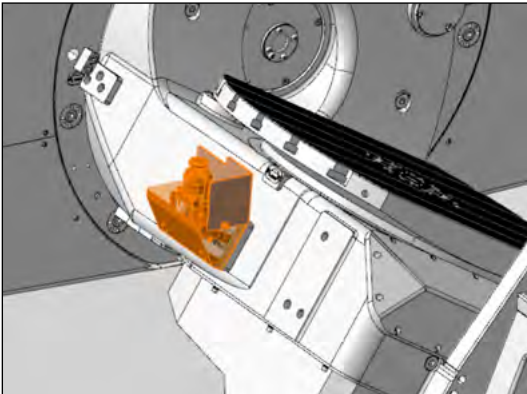
Automatic Tool Measurement



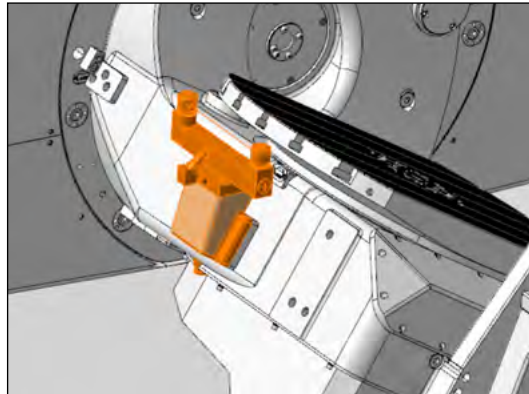
Renishaw(RTS)



Heidenhain(TT460)



Blum(ZX Speed)



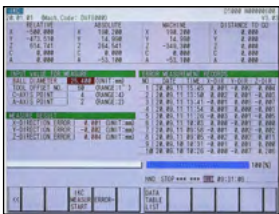
Renishaw(NC4F)

Intelligent kinematic compensation for 5-axis machining

For high-accuracy 5-axis machining, the Intelligent Kinematic Compensation function is recommended. This function minimizes errors in complex 5-axis machining applications by maintaining the tool point in the correct position relative to the workpiece.

In order to use this function, the following optional items are required:

SOFTWARE



FANUC NC : IKC



HEIDENHAIN NC ; IKC

RECEIVER Recommended Option



TOUCH PROBE Recommended Option



DATUM BALL Recommended Option



AUTO TOOL MEASUREMENT Recommended Option



MASTER TOOL Recommended Option



Touch type

RENISHAW

RTS

HEIDENHAIN

TT460

BLUM

ZX SPEED

Laser type

RENISHAW

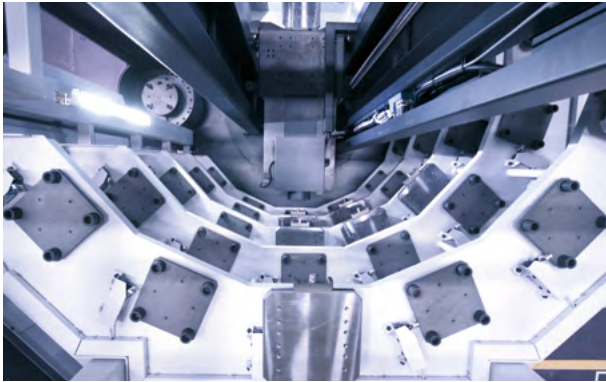
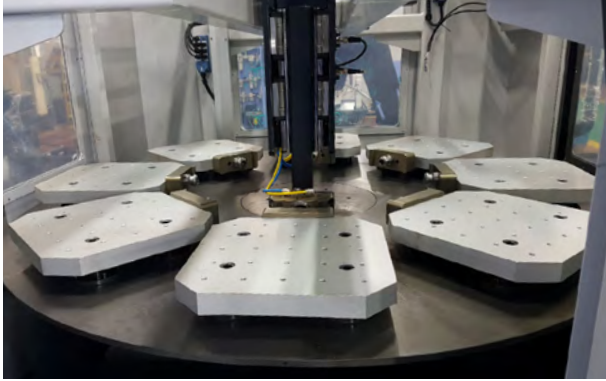
NC4F

BLUM

MICRO SINGLE NT

AWC, Multi-AWC

A compact loading/unloading automation capable of mounting up to 40 workpieces.



AWC

A compact automation system providing fast, reliable and high productivity workpiece change capabilities.

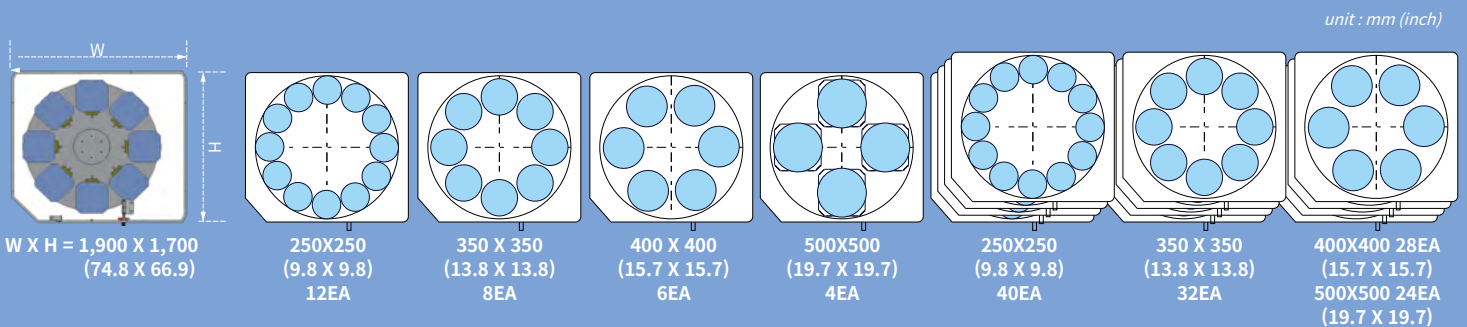


Multi-AWC option

Automation solution capable of mounting up to 40 workpieces.

Description	Pallet size	No. of pallets	Max. workpiece dia. x height	Max. workpiece weight
AWC	250x250 mm (9.8x9.8 inch)	12ea	Ø300x350 mm (11.8x13.8 inch)	130 kg (286.6 lb)
	350x350 mm (13.8x13.8 inch)	8ea	Ø400x350 mm (15.7x13.8 inch)	250 kg (551.1 lb)
	400x400mm (15.7x15.7 inch)	6ea	Ø450x350 mm (17.7x13.8 inch)	250 kg (551.1 lb)
	500x500mm (19.7x19.7 inch)	4ea	Ø550x350 mm (21.7x13.8 inch)	250 kg (551.1 lb)
Multi-AWC	250x250mm (9.8x9.8 inch)	40ea	Ø300x350 mm (11.8x13.8 inch)	65kg, 130kg (143.3, 286.6 lb) <small>option</small>
	350x350mm (13.8x13.8 inch)	32ea	Ø400x350 mm (15.7x13.8 inch)	250 kg (551.1 lb)
	400x400mm (15.7x15.7 inch)	28ea	Ø450x350 mm (17.7x13.8 inch)	250 kg (551.1 lb)
	500x500mm (19.7x19.7 inch)	24ea	Ø550x350 mm (21.7x13.8 inch)	250 kg (551.1 lb)

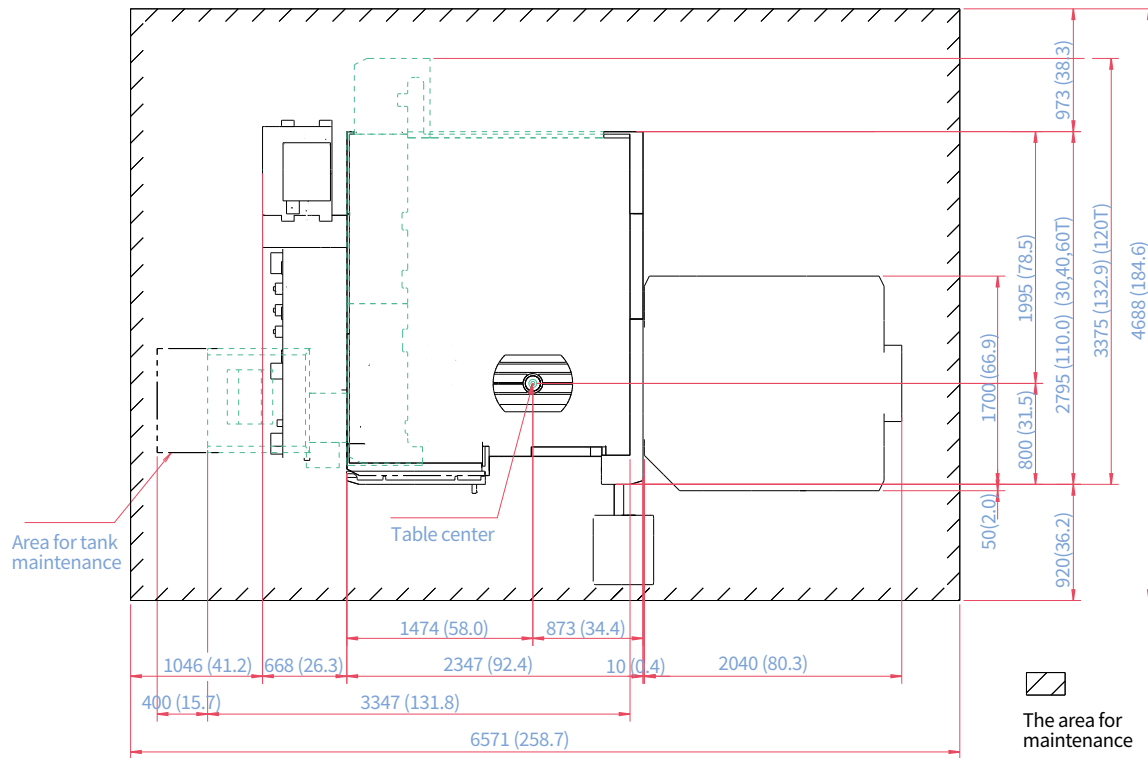
Pallet storage-table configuration



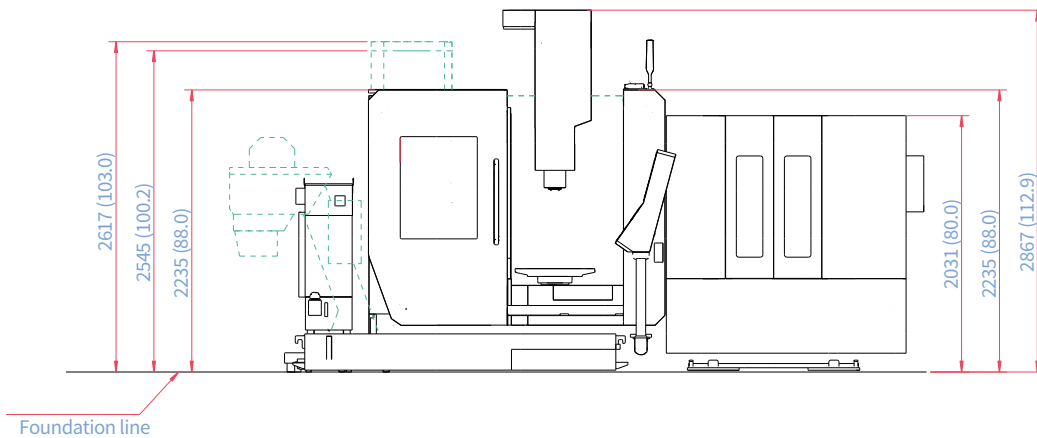
AWC DIMENSIONS

Units : mm (inch)

TOP



FRONT



*Some peripheral equipment can be placed in other areas

CUSTOMIZED USER-FRIENDLY FLEXIBLE OPERATION SOLUTIONS

CUFOS is a PC based control system created by DN Solutions. Equipped with intuitive user-friendly functions such as a smart phone screen and easy customization, CUFOS helps to improve operational efficiency and performance for the user.

CUFOS FEATURES

19 INCH TOUCH SCREEN

- Program memory : 40GB
- App-based Interface like smart phone, tablet PC

EASY PROGRAMMING

- Conversational Programming
- SSD Data Server : Program file sharing/ managing (CF card/USB/External PC)

EASY SET-UP/OPERATION

- CPS(Collision Protection System)
- Manual Viewer
- File Manager

EASY MAINTENANCE

- Status Monitor
- Alarm Guidance
- Maintenance Manager
- Easy connection with external S/W (creating additional App.)



CUFOS

CUFOS INTERFACE

User-friendly screen controls

CUFOS, the PC-based control created by DN Solutions, is an integrated system solution using an intuitive 19-inch touchscreen. The system provides a convenient operator interface, a high level of customization and many useful high technology apps.



Intuitive operation via touch screen

Simple customization is available for specific work environments.



Supports various apps in three fields—setup, machining and utility

It provides easy configuration by allowing users to add and edit functions on the home screen according to job requirements.

CUFOS Open CNC

CUFOS operation for enhanced productivity

The CUFOS operating system is based upon the integration of all aspects of the manufacturing process, including setting, machining and maintenance. It consolidates up-to-date software technology created by DN Solutions, to improve overall efficiency and productivity. Using the system's modular construction, each function can be easily integrated with external PC software systems and applications, such as CAM and Tool Data systems.



CUFOS



PC software



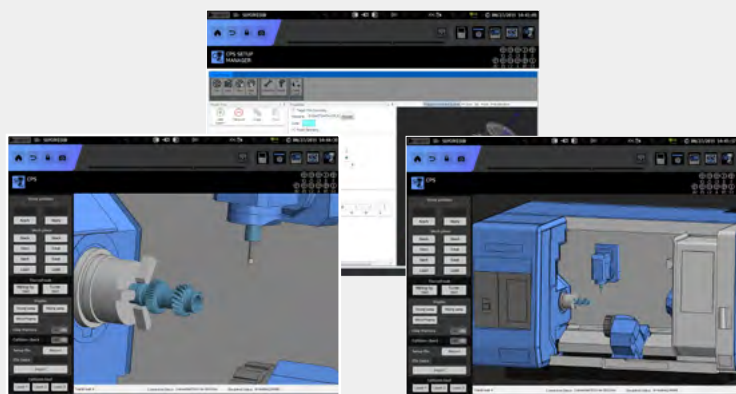
Applications



CPS (Collision Protection System)

A function to prevent real-time collision in Auto/Manual mode between the tool and equipment / machine elements inside the working area.

Use the Setup Manager with the CPS app to build up the machine model, and add tool, workpiece and workholding equipment details.



CONVENIENT OPERATION

HEIDENHAIN TNC640/TNC7

Visualized, intuitive task support, customized UI

The TNC7 makes machining even easier, for everything from programming to program validation and from machine setup to actual machining. You intuitively operate highly complex applications directly on the touchscreen with various integrated solutions for standard tasks.

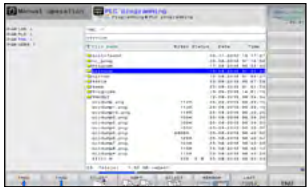
TNC7 **NEW**

- 19 inch touch screen
- 189GB Program memory
- Look-ahead 5000 blocks
- Touch Probe Cycles Graphical Programming

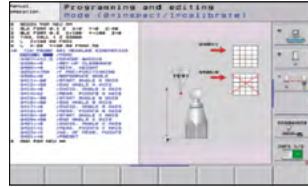


<TNC640>

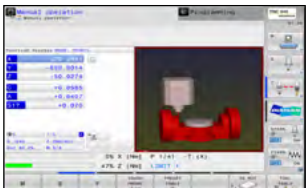
Conversational convenient function



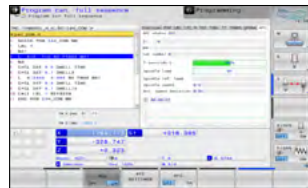
Data are controlled in the folder structure; convenient communication via USB devices



KinematicOpt & KinematicComp **option**
(Touch probe cycle for automatic measurement)



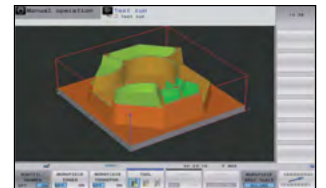
Collision protection system **option**



Adaptive feed control **option**



Various built-in pattern cycles for a wider scope of application (Software standard)



Graphic simulation

NUMERIC CONTROL SPECIFICATIONS



HEIDENHAIN

Item		Specifications	TNC640	TNC7
Controlled axis	Controlled axis		5 axes (X,Y,Z,C,B)	
	Simultaneously controlled axis		5 axes	
Interface function	Embedded ethernet		●	
	USB interface (USB 2.0)		●	
Feed function	Look-ahead	5000 blocks	●	
Axis compensation	KinematicsOpt	Automatic measurement and optimization of machine kinematics	●	
Collision monitoring	Dynamic collision monitoring (DCM)		○	
Network	MT Connect		⊗	
Others	Display unit	touch panel	15"	19"
	Program memory for NC programs		21GB	189GB

● Standard ○ Optional ✕ Not Available ⊗ Available

CONVENIENT OPERATION

SIEMENS SINUMERIK ONE

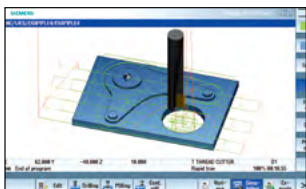
Even Faster & Easier processing + 21.5" screen

All programming, set-up, actual machining and verification process are getting easier and faster. Especially, intuitive conversational programming guidance with 3D UI(user interface) on 21.5" large touch screen is helpful for unskilled engineers.

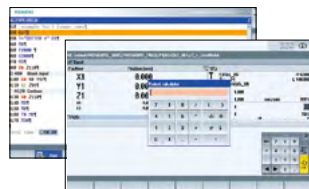
- 21.5 inch touch screen
- 50% improvement in processing speed (compared to S840D)
- Graphic programming
- PLC-based flexible automation/peripheral device expandability



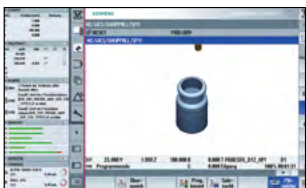
Conversational convenient function



Simulation and machining contour monitoring



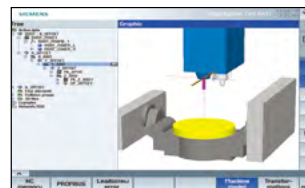
Smart function



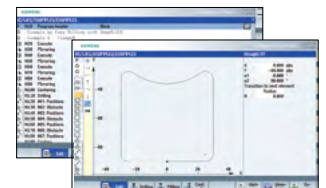
Side screen widget



5-axis kinematic measuring cycles



3D collision avoidance and collision avoidance ECO



Shop mill part programming

NUMERIC CONTROL SPECIFICATIONS

SIEMENS

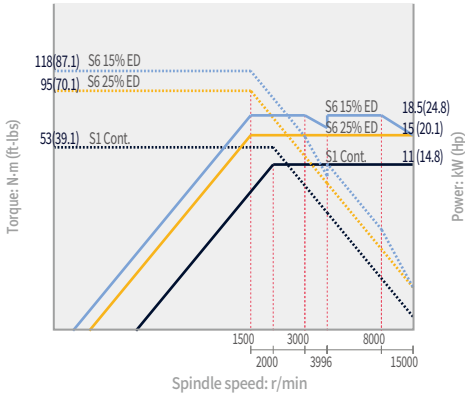
Item		Specifications	S-ONE
Controlled axis	Controlled axes (제어축수)		5 axes (X,Y,Z,C,B)
	Simultaneously controlled axes (동시 제어축수)		5 axes
Data input/output	Memory card input/output	(Local drive)	●
	USB memory input/output		●
Interface function	Ethernet	(X130)	●
Operation	On network drive	(without EES option, Extcall)	●
	On USB storage medium, e.g. memory stick	(without EES option, Extcall)	●
Program input	Workpiece coordinate system	G54 - G57	●
	Addition of workpiece coordinate system	G505 - G599	●
Interpolation & Feed function	Top surface		○
	Look ahead number of block		1000
Programming & Editing function	3D simulation, finished part		●
	Simultaneous recording		●
	Measure kinematics		●
	DXF Reader for PC integrated in SINUMERIK Operate		○
Operation Guidance Function	ShopMill		●
	EZ Work		●
Setting and display	Operation via a VNC viewer		●
Network	MTConnect		⊕
	OPCUA		○
Others	18.5" color display with touch screen		○
	21.5" color display with touch screen		●
	CNC user memory	10 MB	●
	Max. CNC user memory	28 MB	○
	Collision avoidance (machine, working area)		○
	Collision avoidance ECO (machine, working area)		●

POWER | TORQUE

FANUC

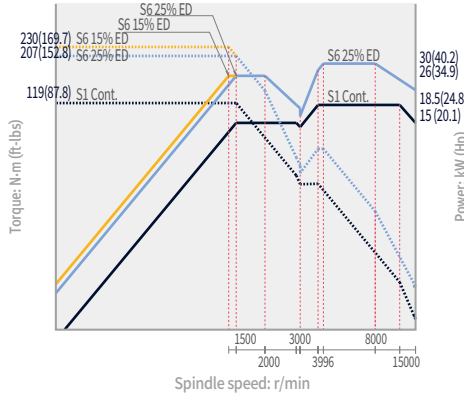
15000r/min Direct

Power 18.5/11 kW (24.8/14.8 Hp)
Torque 118 N·m (87.1 ft-lbs)



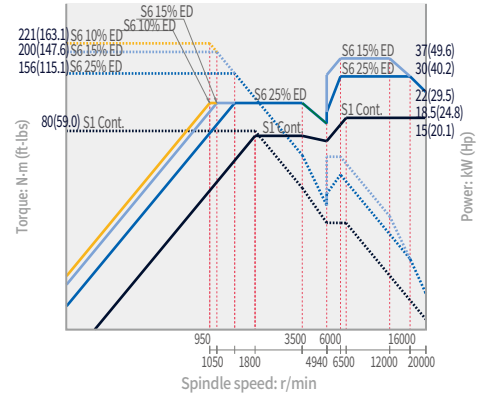
15000r/min Built-in option

Power 30/15 kW (40.2/20.1 Hp)
Torque 230 N·m (169.7 ft-lbs)



20000r/min Built-in option

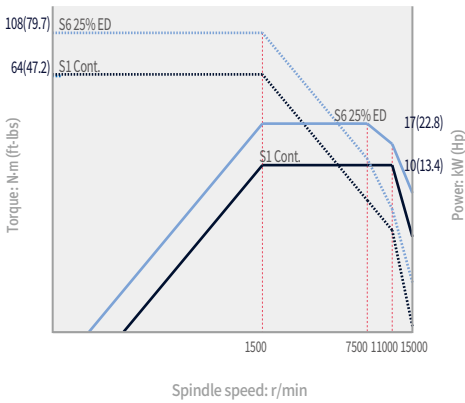
Power 37/15 kW (49.6/20.1 Hp)
Torque 221 N·m (163.1 ft-lbs)



HEIDENHAIN

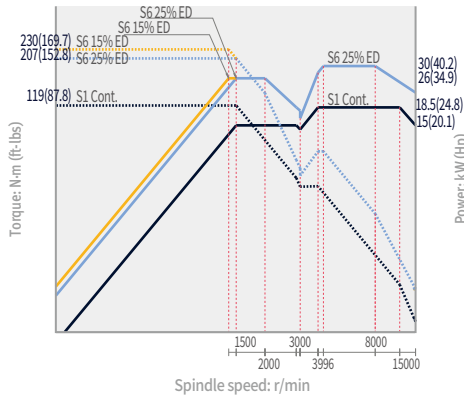
15000r/min Direct

Power 17/10 kW (22.8/13.4 Hp)
Torque 108 N·m (79.7 ft-lbs)



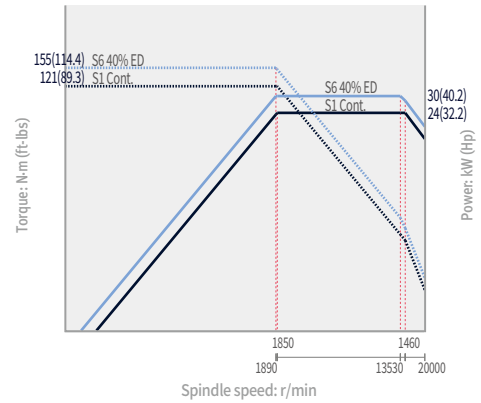
15000r/min Built-in option

Power 30/15 kW (40.2/20.1 Hp)
Torque 230 N·m (169.7 ft-lbs)



20000r/min Built-in option

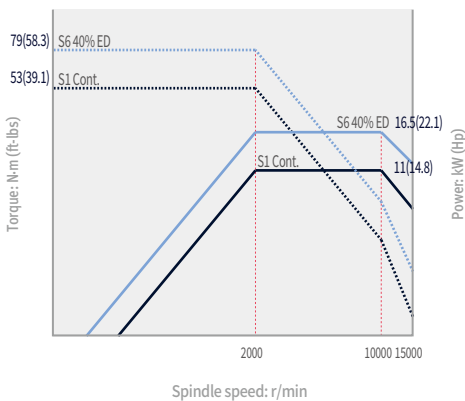
Power 30/24 kW (42.9/32.2 Hp)
Torque 155 N·m (114.4 ft-lbs)



SIEMENS

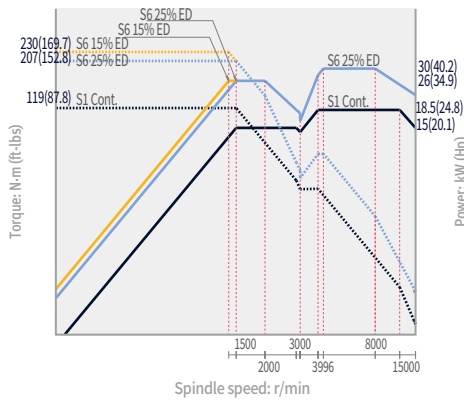
15000r/min Direct

Power 16.5/11 kW (22.1/14.8 Hp)
Torque 79 N·m (58.3 ft-lbs)



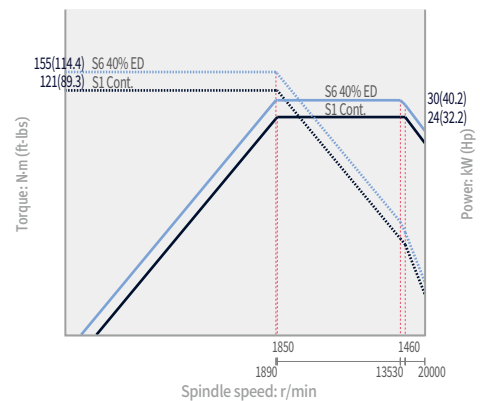
15000r/min Built-in option

Power 30/15 kW (40.2/20.1 Hp)
Torque 230 N·m (169.7 ft-lbs)



20000r/min Built-in option

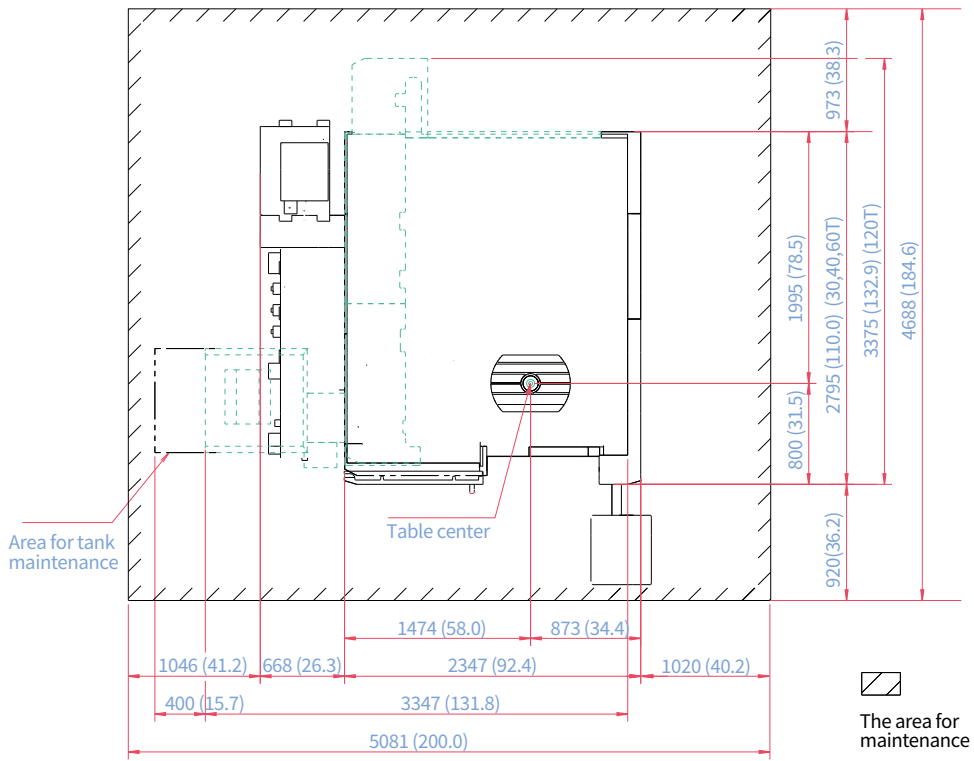
Power 30/24 kW (42.9/32.2 Hp)
Torque 155 N·m (114.4 ft-lbs)



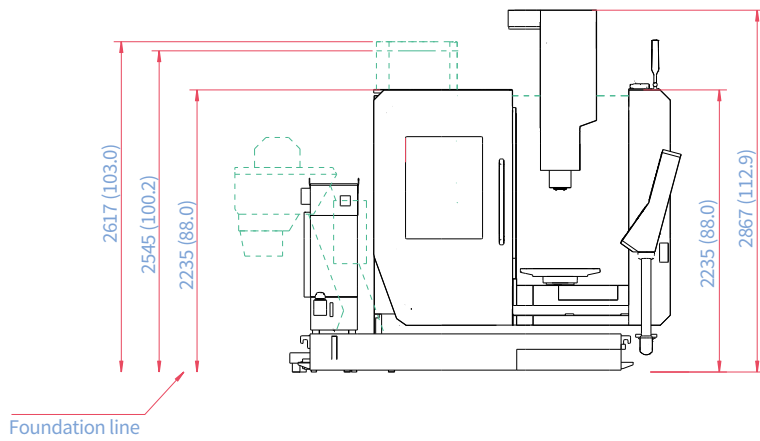
DIMENSIONS

Units : mm (inch)

TOP



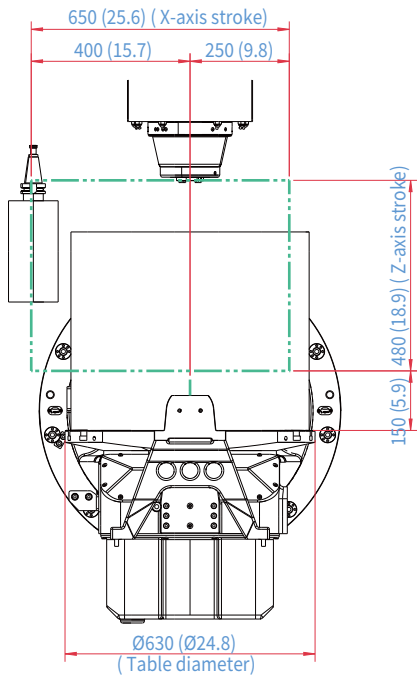
FRONT



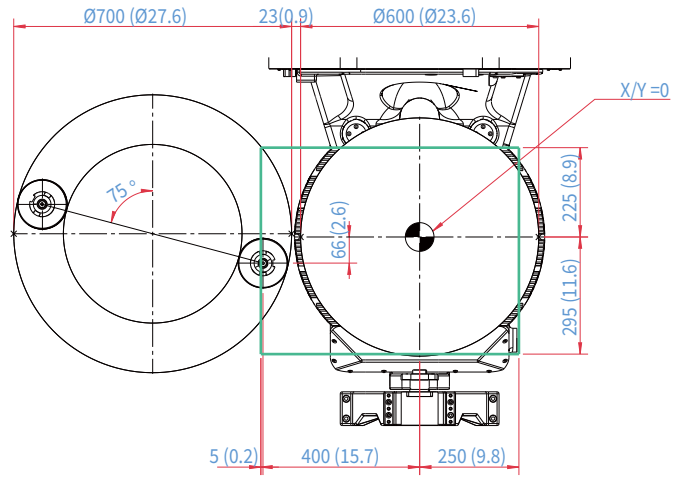
*Some peripheral equipment can be placed in other areas

INTERFERENCE

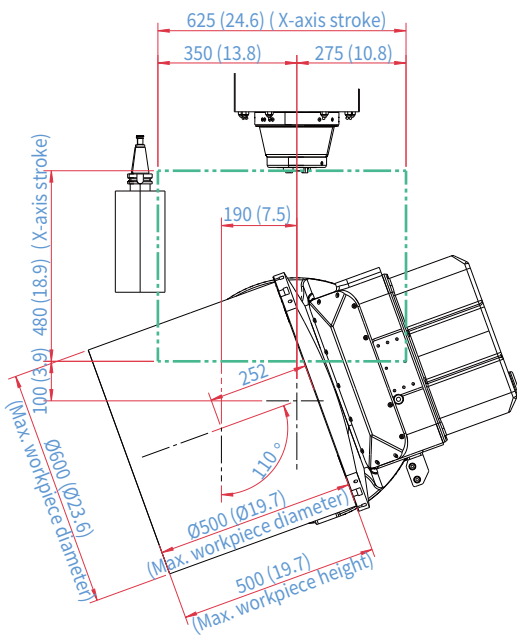
Units : mm (inch)



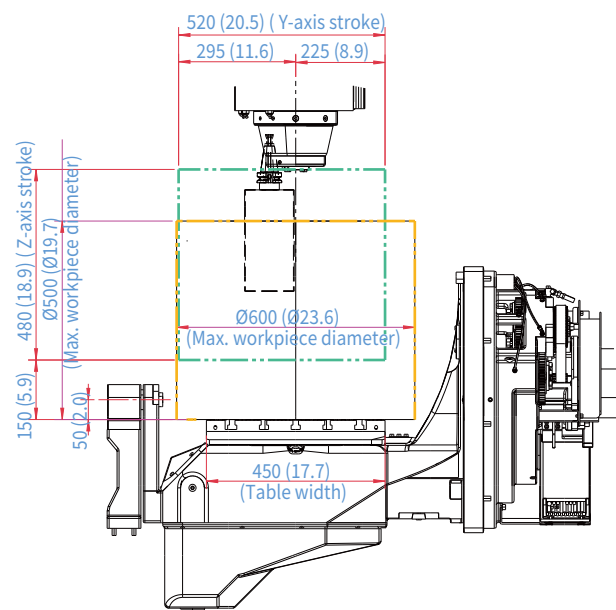
Front view



Front view



Front view



Right view

MACHINE SPECIFICATIONS

Description		Unit	DVF 5000 ^{2nd}	
Travel distance	X axis	mm (inch)	650 (25.6)	
	Y axis	mm (inch)	520 (20.5)	
	Z axis	mm (inch)	480 (18.9)	
	B axis	deg	B : 140(+110~-30)	
	C axis	deg	360	
Table	Table size	mm (inch)	Ø630 x 450 (Ø24.8 x 17.7)	
	Max. workpiece size	mm (inch)	Ø600 x H500 (Ø23.6 x H19.7)	
	Table loading capacity	kg (lb)	400 (881.8)	
Spindle	Max. speed	r/min	15000 {20000}	
	Max. power	kW (Hp)	CUFOS : 18.5/11(24.8/14.8) (S3 15%/cont) {30/18.5(40.2/24.8) (S3 25%/cont)} TNC640/TNC7 : 17/10(22.8/13.4) (S3 25%/cont) {30/24(40.2/32.2) (S6 40%/cont)} Sinumerik One : 16.5/11(22.1/14.8)(S6 40%/cont) {30/24(40.2/32.2) (S6 40%/cont)}	
	Max.torque	N·m (ft-lbs)	CUFOS : 118 {156} (87.1 {115.1}) TNC640/TNC7 : 108 {155} (79.7 {114.4}) Sinumerik One : 79 {155} (58.3 {114.4})	
Rapid traverse rate	X axis	m/min (ipm)	42 (1653.5)	
	Y axis	m/min (ipm)	42 (1653.5)	
	Z axis	m/min (ipm)	42 (1653.5)	
	B axis	r/min	25	
	C axis	r/min	25	
Automatic tool changer	Tool shank		ISO #40	
	Tool storage capa.	ea	30 {40, 60, 120}	
	Max. tool diameter	Continuous	mm (inch)	75 (3.0)
		Without adjacent tools	mm (inch)	125 (4.9)
	Max. tool length	mm (inch)	300 (11.8)	
	Max. tool weight	kg (lb)	8 (17.6)	
	Tool change time	T-T-T	sec	1.3/1.5 (60Hz/50Hz)
C-T-C		sec	3.8/4.3 (60Hz/50Hz)	
Coolant	Coolant tank capacity	L (gal)	500 (132.1)	
Machine dimensions	Height	mm (inch)	2867 (112.9)	
	Length x Width	mm (inch)	2795 x 2347 (110.0 x 92.4)	
	Weight	kg (lb)	8000 (17636.7)	
Control	NC system	-	CUFOS, TNC640/TNC7, Sinumerik One	

WHY 5-AXIS MACHINING?

Single setup efficiency

5-axis machining allows you to approach the workpiece from all angles, with complete access to five sides of the part in a single setup. This reduces the overall number of part setups compared to traditional machining, which minimizes machine downtime and maximizes chip making time.



Improved part accuracy

When making parts with multi-sided features using traditional 3-axis machining, multiple part setups are required. This means new inaccuracies can arise each time the workpiece is repositioned. 5-axis machining eliminates stacked tolerances and improves overall part dimensional accuracy.

Extended machine shop capability

DN Solutions 5-axis machines open up new doors for your machine shop. The increased efficiency will make you instantly more competitive, and full 5-axis machining capabilities give you the opportunity to quote on jobs that previously weren't possible. So, what are you going to make today?



“Compared with similar machines from Japan or Europe, DN Solutions has the same level of precision and quality at a better value for money.”

– OMGM Group, Italy

“Our DN Solutions 5-axis is making complex, high precision parts for aerospace and defense. Cycle times have been reduced dramatically.”

– Aerotech Precision Manufacturing, Great Britain

The DN Solutions promise, MACHINE GREATNESS, has two important meanings. The first is simple: DN Solutions makes great machines. The second is a challenge to our end-users. With a product line that is this comprehensive, accurate and reliable, we equip our customers to machine greatness. The big question: ***Why should you choose DN Solutions over other options?***

Here's why...



**MACHINE
GREATNESS™**



WHAT YOU MAKE AND HOW YOU MAKE IT MATTERS—SO MAKE IT
GREAT WITH DN SOLUTIONS.

UNBEATABLE MACHINES

You won't find a more comprehensive range or a better combination of value, performance and reliability anywhere else.

ROBUST PRODUCT LINE

We offer an impressive range of machine models and hundreds of configurations. Whatever your machining needs and requirements, there's a DN Solutions for you.

READILY AVAILABLE - ANYWHERE IN THE WORLD

Machining centres (including 5-axis machines), lathes, multi-tasking turning centres and mill-turn machines, and horizontal borers with best-in-class specifications are all available...ready to install.

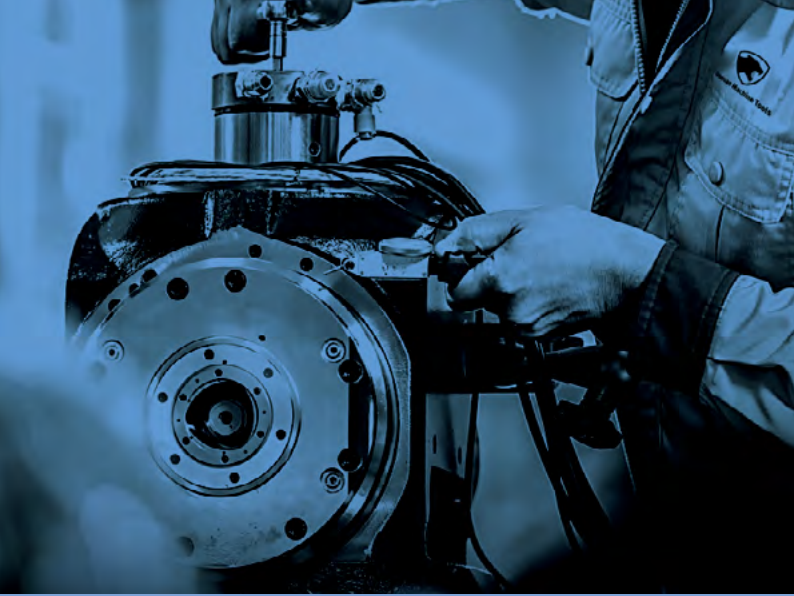
EXPERT SERVICE

Our dedicated, experienced and knowledgeable team is totally committed to improving your productivity, growth and success.

CUSTOMER SUPPORT AND SERVICES

We're there for you whenever you need us.

We help our customers operate at maximum efficiency by providing them with a range of tried, tested and trusted services - from pre-sales consultancy to post-sales support.



FIELD SERVICES

- On-site service
- Machine installation and testing
- Scheduled preventive maintenance
- Machine repair service



PARTS SUPPLY

- Supplying a wide range of original DN Solutions spare parts
- Parts repair service



TRAINING

- Programming, machine setup and operation
- Electrical and mechanical maintenance
- Applications engineering



TECHNICAL SUPPORT

- Supports machining methods and technology
- Responds to technical queries
- Provides technical consultancy

RESPONDING TO CUSTOMERS ANYTIME, ANYWHERE

DN Solutions Global Network

DN Solutions provides systems-based professional support services, before and after the machine tool sale, by responding quickly and efficiently to customers. By supplying spare parts, product training, field service and technical support, we provide the expert care, attention and assistance our customers expect from a market leader.



Global sales and service support network

6	Corporations
155	Dealer networks
51	Technical centers Technical Center, Sales Support, Service Support, Parts Support
204	Service posts
3	Factories





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* For more details, please contact DN Solutions.

* Specifications and information contained within this catalogue may be changed without prior notice.