HIGH PERFORMANCE Y-AXIS HORIZONTAL TURNING CENTERS

PUMA

2100Y/SY/LY/LSYⅡ ·
2600Y/SY/LY/LSY/YB/SYB/LYB/LSYBⅡ



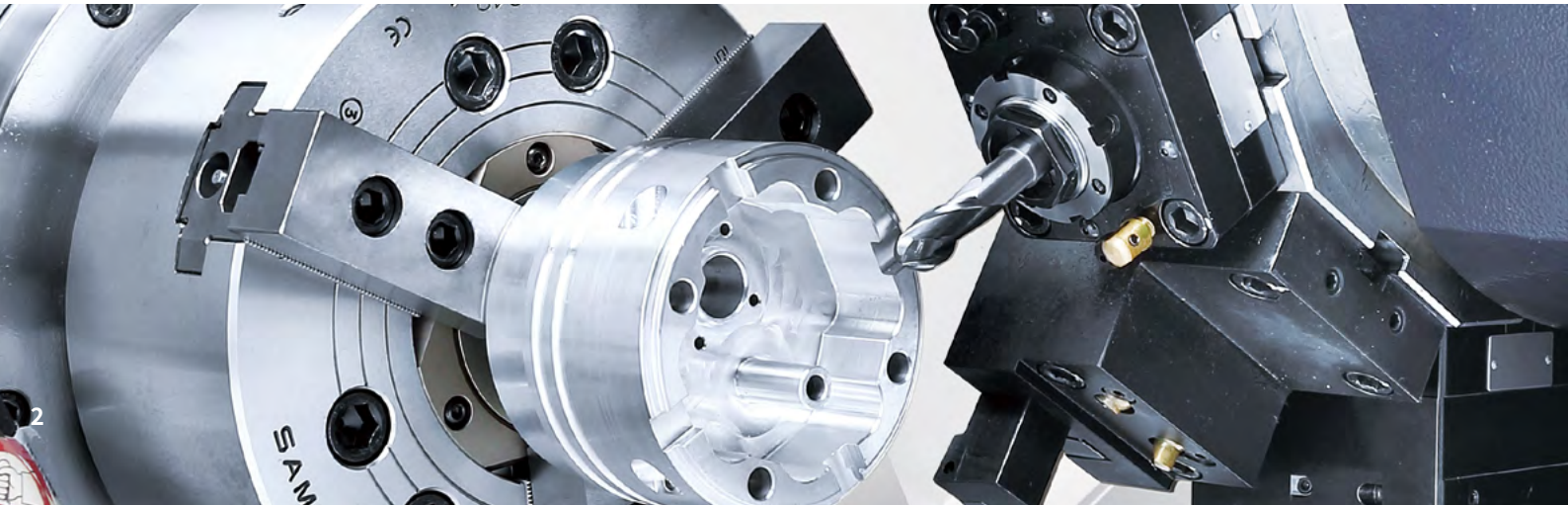
DN SOLUTIONS

PUMA SERIES · **2100** · **2600** Y II

PUMA 2100 / 2600 Y II turning centers have been redesigned to deliver even more power and precision. A comprehensive line up of machines with chuck sizes from 8” to 12”, integrated Y-axes and sub-spindles makes Puma 2100/2600Y II turning centers unrivalled and unbeatable in their performance.



PUMA 2100Y II





PUMA 2600SY II

HIGH RIGIDITY AND PRECISION

The turning centres have a rigid and stable structure which helps eliminate vibrations and ensure high accuracy machining and improved process reliability.

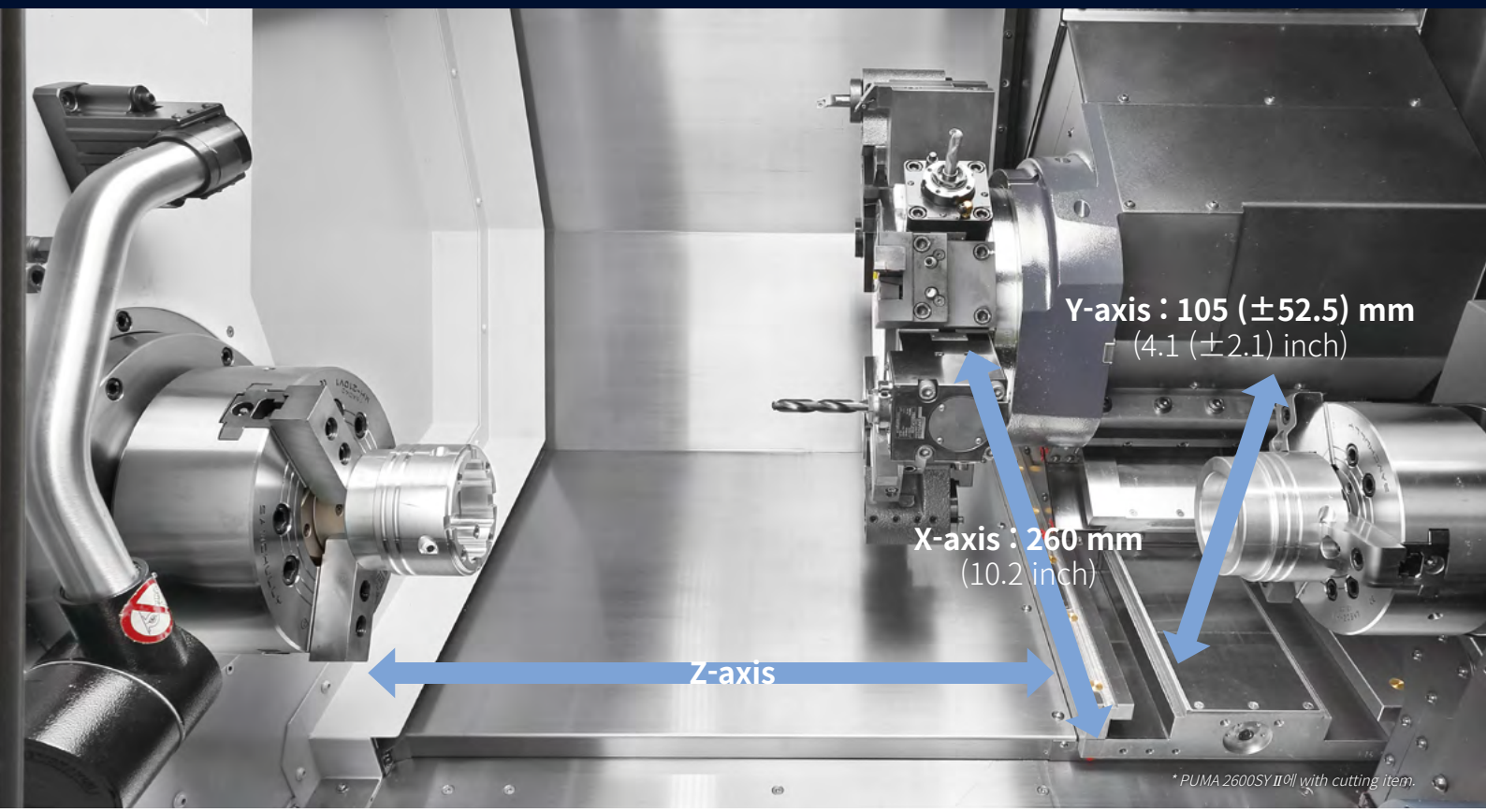
HIGH PERFORMANCE Y-AXIS FOR COMPLEX MACHINING

All machines in the range feature powerful, high torque spindles which, in conjunction with their Y-axis capabilities, enables them to machine high-precision, complex parts in fewer set ups.

IMPROVED USER CONVENIENCE

The EZ work, with its hot keys and a range of user-friendly functions enable fast, trouble-free job set ups and efficient and reliable monitoring and management.

MACHINING AREA



Model	Unit	Max. Turning diameter	Max. Turning length	Travel distance (Z-axis)
PUMA 2100Y / SY II	mm (inch)	406 (16.0)	520 (20.5)	590 (23.2)
PUMA 2100LY / LSY II	mm (inch)		760 (29.9)	830 (32.7)
PUMA 2600Y / SY II	mm (inch)	376 (14.8)	760 (29.9)	830 (32.7)
PUMA 2600LY / LSY II	mm (inch)		1280 (50.4)	1350 (53.1)
PUMA 2600YB / SYB II	mm (inch)		725 (28.5)	830 (32.7)
PUMA 2600LYB / LSYB II	mm (inch)		1245 (49.0)	1350 (53.1)

Y1/Y2-axis stroke

PUMA 2100 / 2600Y II series

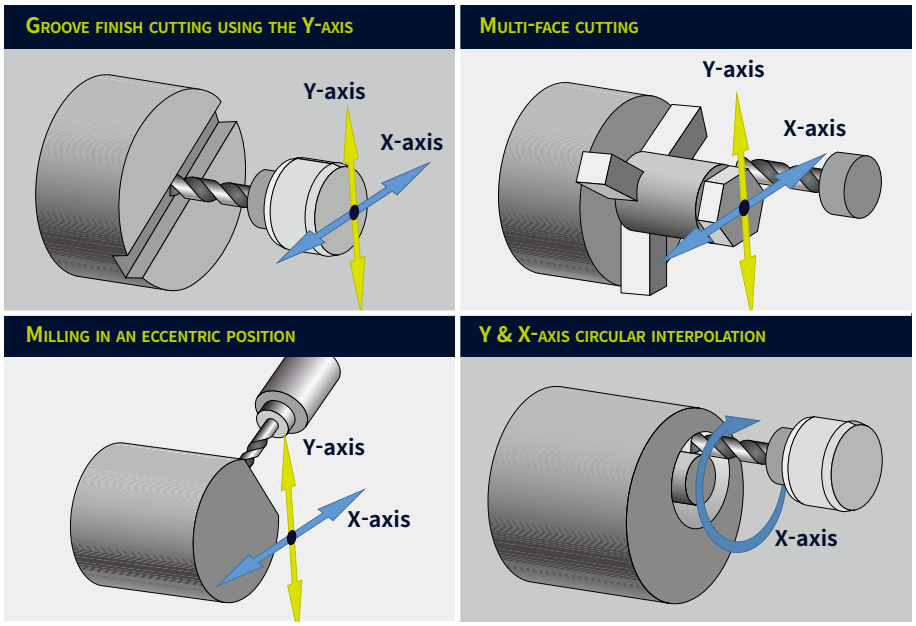
105 (±52.5) mm
4.1(±2.1) inch

High performance Y-axis for complex machining

Box guideways, applied to all axes, increase rigidity, reduce vibration and ensure powerful and precise machining. The Y-axis enables complex highly accurate shapes and features to be machined quickly and reliably.

Y-axis milling

A wide variety of multi-axis milling operations can be achieved using the Y-axis.



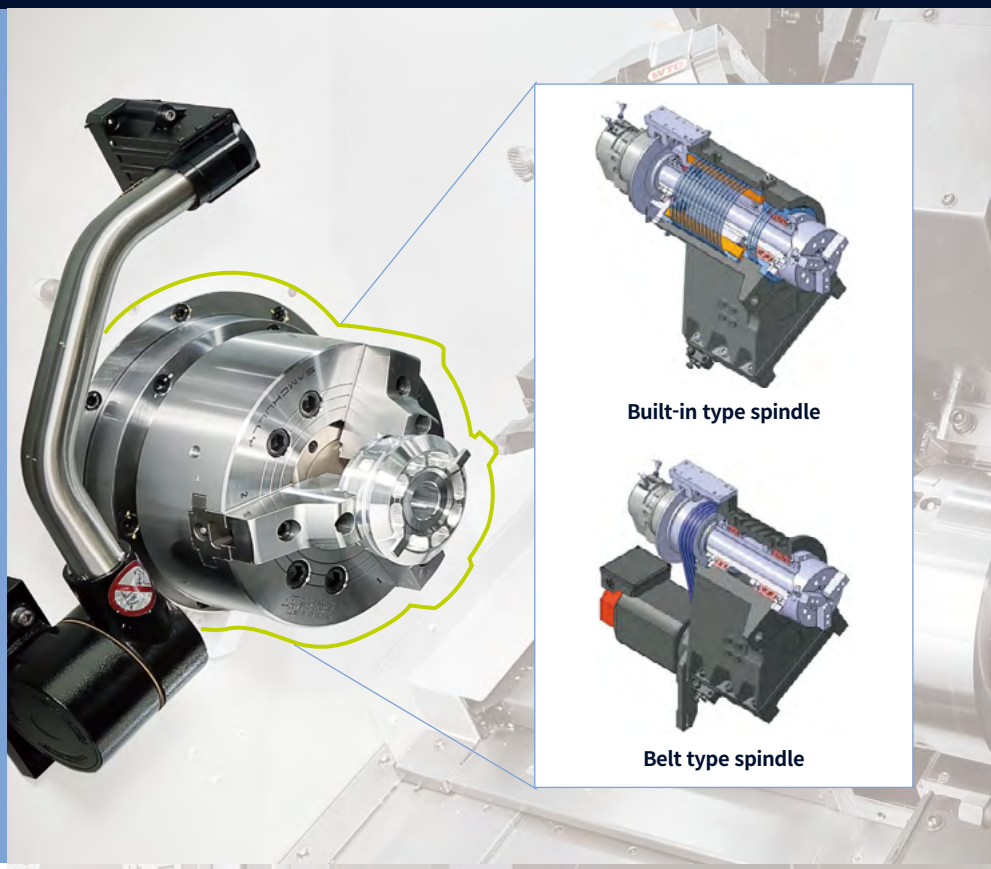
SPINDLE

The high-power/high-torque motor spindle enables high precision and heavy-duty cutting operations to be performed…ensuring improved productivity.

A durable spindle for stable, heavy-duty cutting operations

An enhanced durable spindle featuring redesigned bearings provides increased rigidity.

Model	Driven type	Max. speed r/ min	Max. power kW (Hp)	Max. torque N·m (ft-lbs)
PUMA 2100Y / SY II series	Built-in	5000	22 (29.5)	358 (264.2)
PUMA 2600SY/ LSY II series	Built-in	4000	22 (29.5)	599 (442.1)
PUMA 2600YB / SYB II series	Belt	2800	22 (29.5)	1123 (828.8)



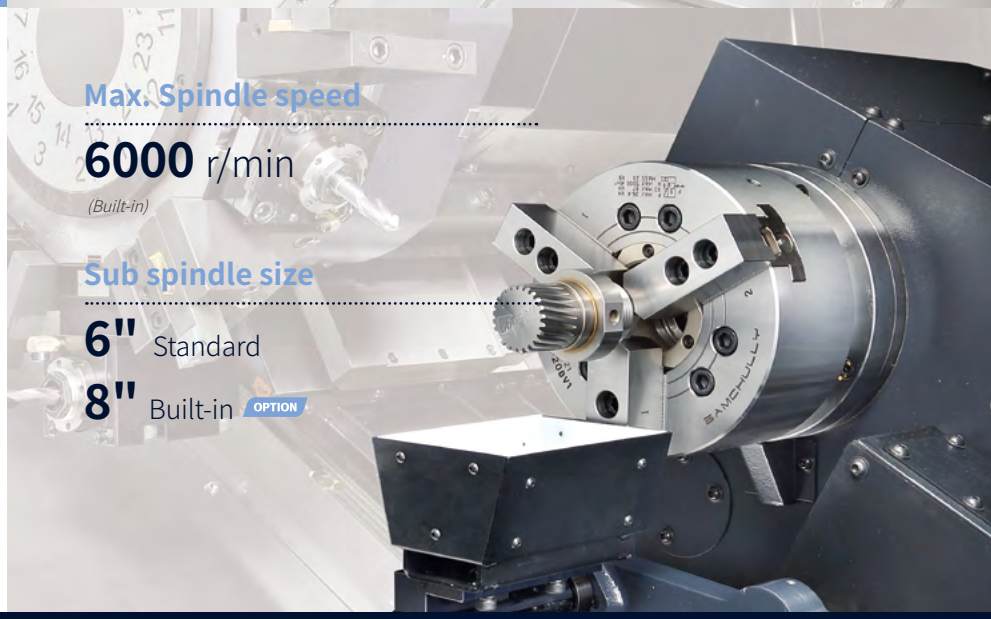
Built-in type spindle

Belt type spindle

Sub-spindle

The sub-spindle function allows the backends of components to be machined in a single setup.

Model	Driven type	Max. speed r/ min	Max. power kW (Hp)	Max. torque N·m (ft-lbs)
PUMA 2100SY II /LSY II series	6" Built-in	6000 / 5000 OPTION	15 (20.1)	134 (98.9)
PUMA 2600SY /LSY II series	8" Built-in OPTION			
PUMA 2600SYB /LSYB II series	6" Belt*	4500	7.5 (10.1)	85 (62.7)



Max. Spindle speed

6000 r/min

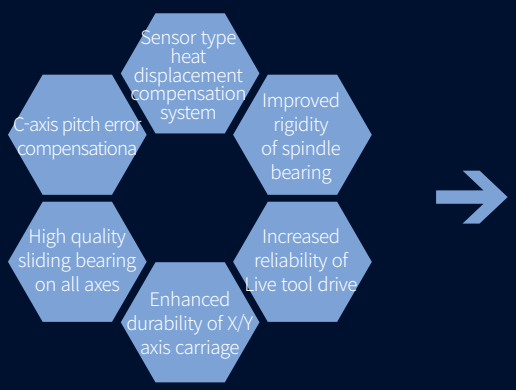
(Built-in)

Sub spindle size

6" Standard

8" Built-in OPTION

Improved precision from a highly rigid design



Compared to previous model

Continuous machining accuracy

40% **Improved**

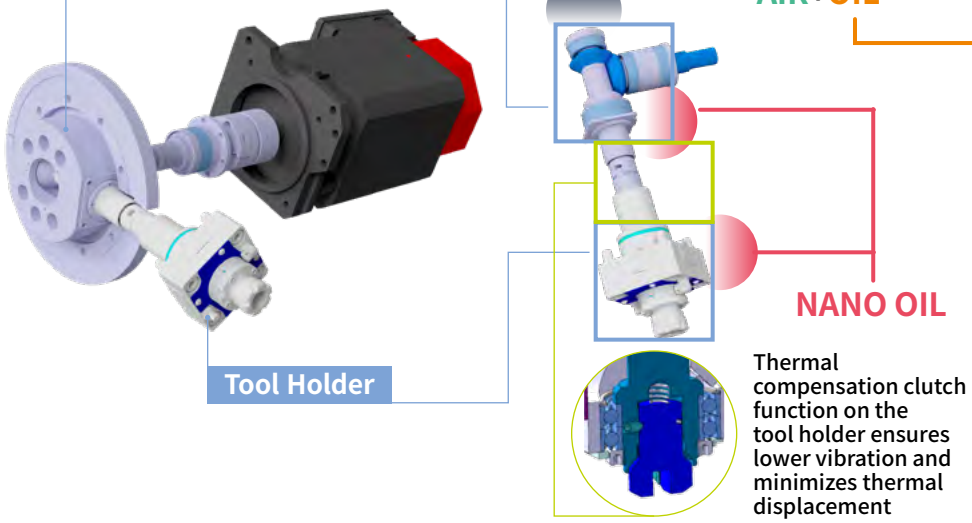
Higher C-axis accuracy

TURRET

Turret rotation is controlled by a servo-motor that ensures fast and reliable tool selection. DN Solutions's unique BMT turret design is used on M and Y specification models to enhance heavy-duty milling performance.

New rotary tool drive for greater stability and higher accuracy

The new rotary tool drive with air/oil cooling, low-heat bearings and a clutch function with thermal compensation minimizes thermal displacement and maintains high-precision machining performance even during long periods of operation.
Also, when using the 10,000 r/min high-speed milling function (option), both the rotary tool drive and the tool holder are simultaneously cooled via an additional 'Nano cooling' function.



AIR+OIL Unit



- Cooling and Lubrication : Mixed Spray Air+Oil
- Tool Holder Cooling : Coolant Cooling

NANO Cooling Unit : Only for 10000 r/min option



- Cooling and Lubrication : NANO Oil Spray
- Tool Holder Cooling : Coolant Cooling + NANO Oil Spray



No. of tool stations / Tool type

PUMA 2100Y II series

12st/**BMT55P**

16st/**BMT55P** OPTION

20st/**BMT45P** OPTION

12st/**BMT55P/24**st. indexing OPTION

PUMA 2600Y II / YB II series

12st/**BMT65P**

12st/**BMT65P/24**st. indexing OPTION

Rotary tool spindle power/torque (Fanuc)

PUMA 2100Y II series

5.5 kW/**48** N·m
7.4 Hp/35.4 ft-lbs

PUMA 2600Y II series

7.5 kW/**95** N·m
10.1 Hp/70.1 ft-lbs

Rotary tool spindle speed

5000 {10000 OPTION} r/min

Rotary tool spindle power/torque (Siemens)

7.79 kW/ **79.8** N·m
10.4 Hp/58.9 ft-lbs

TAILSTOCK

A high rigidity hydraulic tailstock clamped to the bed slideway provides stability and support for long workpieces.

Tailstock type

- Manual
- Programmable
- Servo-driven

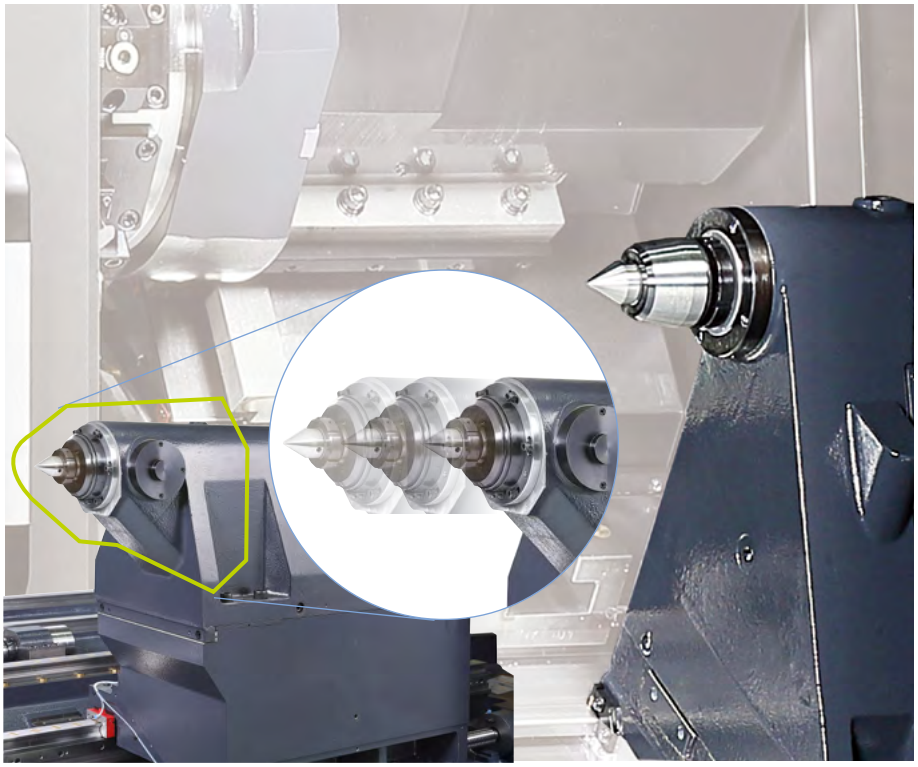
Servo-driven tailstock

The servo-driven tailstock makes set-ups faster and easier to complete. The operator inputs the correct

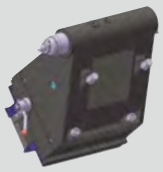
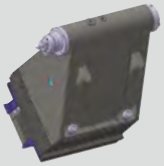
M-code information into the control and the tailstock moves to its correct position automatically, via linear motion control of the servo motor and the ball-screw. No manual adjustments are required.

Tailstock EZ function

With the programmable tailstock, the Z-axis position is recorded automatically as the clamped position of tailstock.



Tailstock type

Tailstock type		PUMA 2100Y Ⅱ / LY Ⅱ	PUMA 2600Y Ⅱ / LY Ⅱ PUMA 2600YB Ⅱ / LYB Ⅱ
 Manual	Live center MT4	●	X
	Built-in center MT3	○	
	Live center MT5	X	●
	Built-in center MT4		○
 Programmable	Live center MT4	○	X
	Built-in center MT3		
	Live center MT5	X	○
	Built-in center MT4		
 Servo-driven	Live center MT4	○	X
	Built-in center MT3		
	Live center MT5	X	○
	Built-in center MT4		

● *Standard* ○ *Optional* X *N/A*

STANDARD & OPTIONAL SPECIFICATIONS

A range of options is available to suit individual requirements.

Description		PUMA 2100 / 2600Y Ⅱ series	PUMA 2100 / 2600SY Ⅱ series
Special chucks		△	△
Soft jaws		●	●
Dual pressure chucking		○	○
Hydraulic chuck pressure switch		○	○
Chuck clamp confirmation		●	●
Tailstock center : Live center		●	X
Tailstock center : Dead center		○	X
Tailstock : Manual		●	X
Tailstock : Programmable		○	X
Tailstock : Servo-driven		○	X
Automatic quill advance & retract		○	X
6" sub spindle		X	●
8" sub spindle		X	○ *(PUMA 2600SYBⅡ Not applicable)*
Tool setter : Manual		○	○
Tool setter : Automatic_electric		○	○
Axis-tool number display		●	●
Structure thermal compensation		●	●
Auto workpiece measurement		○	○
Linear scale (X-axis)		○	○
Linear scale (Z-axis)		○	○
Linear scale (Y-axis)		○	○
Feedback system : Absolute position encoder		●	●
Bar feeder interface		○	○
Bar puller		△	△
Workpiece ejector		X	○
Parts catcher with box		○	○
Parts catcher with conveyor		○	○
Workpiece cut off confirmation		X	○
Automatic front door : with safety device		○	○
Chip conveyor type : Right side		○	○
Chip conveyor type : Rear side *1		○	○
Chip bucket		○	○
TSC for main / left spindle		○	○
Oil skimmer		○	○
Coolant level switch : Sensing level - Low		○	○
Coolant chiller		○	○
Oil mist collector		○	○
Coolant blower		○	○
Air blower		○	○
Air gun		○	○
Signal tower (yellow, red, green)		○	○
Gantry loader		△	△
V-stand for shaft workpiece		○	X
Quick change tooling(CAPTO)		○	○
Sketch-turn S/W		○	○
Customized Special Option	MAIN SPINDLE TSC	SD17568-P2100 Ⅱ-TSC (PUMA 2100Y Ⅱ / LY Ⅱ) SD18582-P2600 Ⅱ-TSC (PUMA 2600Y Ⅱ / LY Ⅱ)	SD17568-P2100 Ⅱ-TSC (PUMA 2100SY Ⅱ / LSY Ⅱ) SD18582-P2600 Ⅱ-TSC (PUMA 2600SY Ⅱ / LSY Ⅱ)
	4 JAW MAIN CHUCK	MHF208 (PUMA 2100Y Ⅱ / LY Ⅱ) MHF210 (PUMA 2600Y Ⅱ / LY Ⅱ)	MHF208 (PUMA 2100SY Ⅱ / LSY Ⅱ) MHF210 (PUMA 2600SY Ⅱ / LSY Ⅱ)
	WORKPIECE MEASUREMENT *2	OLP40	

Please contact your DN Solutions representative for detailed machine information.

*1 : PUMA 2100/L, PUMA 2600

● *Standard* ○ *Optional* X *N/A*

Steady rest

Steady Rest		PUMA 2100		PUMA 2600	
		Std.	L	Std.	L
Type	Hydraulic	○	○	○	○
	Programmable	○	○	○	○
Size	SLU-1	○	○	○	○
	SLU-2	○	○	○	○
	SLU-B3.1	○	○	○	○

● *Standard* ○ *Optional* X *N/A*

High pressure coolant

Model		PUMA 2100 / 2600 Ⅱ series	
		60Hz	50Hz
Standard	1.5 bar	0.4kW x 0.15 Mpa x 60L/min	0.4kW x 0.1 Mpa x 60L/min
Option	4.5 bar	0.75kW x 0.45 Mpa x 30L/min	0.75kW x 0.3 Mpa x 30L/min
	7 bar	1.1kW x 0.7 Mpa x 30L/min	1.1kW x 0.5 Mpa x 30L/min
	10 bar*	1.1kW x 1.0 Mpa x 20L/min	1.1kW x 0.7 Mpa x 20L/min
	14.5 bar*	4.0kW x 1.45 Mpa x 30L/min	4.0kW x 1.0 Mpa x 30L/min
Special option	20 bar*	2.2kW x 2.0 Mpa x 25L/min	2.2kW x 2.0 Mpa x 17L/min
	70 bar*	7.5kW x 7.0 Mpa x 29L/min	7.5kW x 7.0 Mpa x 20L/min

** Recommend using coolant chiller.*

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

Chip Conveyor OPTION


Long


Short


Needle


Sludge

Hinged belt type*

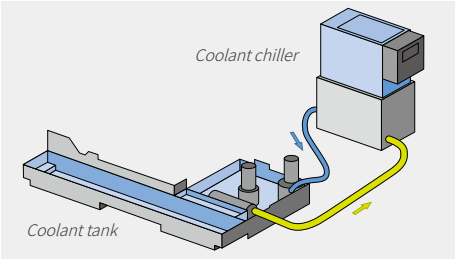
The most common type of chip conveyor. Appropriate for use with steels generating chips of 30mm or more in length.

Drum filter type**

Chip conveyor with integrated magnet: Appropriate for cast iron workpieces generating fine chips.

Chip conveyor type \ Material		Carbon steel			Cast iron		Aluminium		
		Long	Short	Needle	Short	Sludge	Long	Short	Needle
Hinged belt type*		○	△	X	△	X	○	△	X
Drum filter type**	Hinged type	○	△	X	△	X	○	△	X
	Scrapper	X	○	△	○	△	X	○	△

○ : Suitable, △ : Possible, X : Not suitable



Coolant Chiller (recommended) OPTION

Coolant chiller is highly recommended to prevent temperature increases and to minimize thermal deformation, when using a water-insoluble coolant or a high-pressure coolant system with power over 1.5 kW.



Quick change CAPTO OPTION

The quick change tool system simplies tool change operations. Recommended for users who need to change tools frequently or to reduce set-up times.



Axis-tool number display

The axis and tool number display provides extra certainty and peace of mind that the correct axis has been selected (before moving to MPG manual mode), and confirmation of the tool (number) being used at any given time.

Optional equipment OPTION

Collet chuck



Part catcher



Tool setter



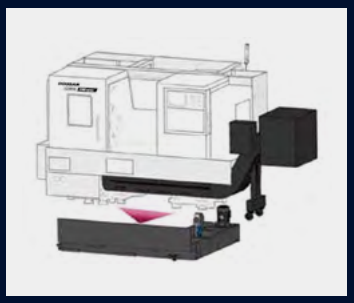
Oil skimmer



Mist collector



Easy-to-clean Coolant Tank



Signal tower



Coolant blower



DN SOLUTIONS FANUC i PLUS

DN Solutions Fanuc i Plus maximizes customer productivity and convenience.



15” Screen + New OP

DN Solutions Fanuc i Plus’ operation panel enhances operating convenience by incorporating common-design buttons and layout. It features a Qwerty keyboard for fast and easy data input and operation.

DN Solutions Fanuc i Plus

- 15-inch color display
- Intuitive and user-friendly design

USB and PCMCIA card QWERTY keyboard

- EZ-Guide i standard
- Ergonimic operator panel
- 2MB Memory
- Hot keys



iHMI touchscreen OPTION

iHMI provides an intuitive interface that uses a touchscreen for quick and easy operation.

Range of applications

Providing various applications related to planning, machining, improvement and utility, for customer convenience.



SKETCH-TURN OPTION

DN Solutions Conversational programming software for PC

- Easy to learn for beginners
- Time savings in programming
- Reduce processing cycle time

NUMERIC CONTROL SPECIFICATIONS

FANUC

Description	Item	Specifications	Y DN Solutions Fanuc i Plus	SY DN Solutions Fanuc i Plus
Controlled axis	Controlled axes		4(X,Z,C,Y)	6(X,Z,C1,Y,C2,B)
	Simultaneously controlled axes		4 axes	4 axes
Data input/output	Fast data server		○	○
	Memory card input/output		●	●
	USB memory input/output		●	●
	Large capacity memory(2GB)	Note *2) Available Option only with 15" Touch LCD (iHMI Only)	○ *2)	○ *2)
Interface function	Embedded Ethernet		●	●
	Fast Ethernet		○	○
	Enhanced Embedded Ethernet function		●	●
Operation	DNC operation	Included in RS232C interface.	●	●
	DNC operation with memory card		●	●
Program input	Workpiece coordinate system	G52 - G59	●	●
Feed function	AI contour control I	G5.1 Q_, 40 Blocks	●	●
	AI contour control II	G5.1 Q_, 200 Blocks	○	○
Operation Guidance Function	EZ Guidei (Conversational Programming Solution)		●	●
	iHMI with Machining Cycle	Note *1) Only with 15" Touch LCD standard	○ *1)	○ *1)
	EZ Operation package		●	●
Setting and display	CNC screen dual display function		●	●
Network	FANUC MTConnect		✪	✪
	FANUC OPC UA		✪	✪
Others	Display unit	15" color LCD	●	●
		15" color LCD with Touch Panel	○	○
	Part program storage size & Number of registerable programs	640M(256KB)_500 programs	X	X
		5120M(2MB)_1000 programs	●	●

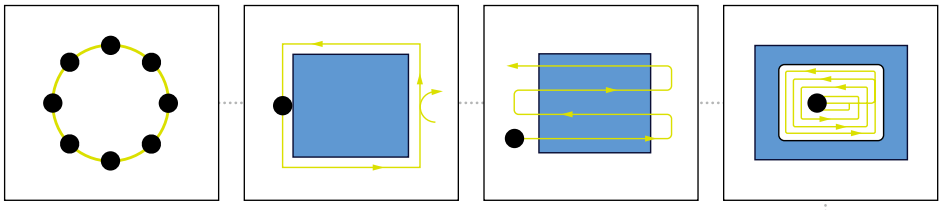
Network: FANUC MTConnect and FANUC OPC UA available.

● *Standard* ○ *Optional* X *N/A* ✪ *Available*

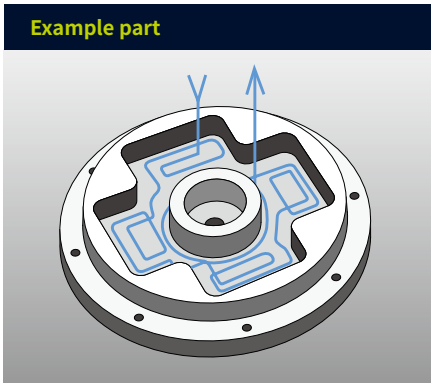
EZ-Guide i

Using the DN Solutions EZ-Guide i, users can create a cutting program for any desired shape, including patterns, by entering just the dimensions.

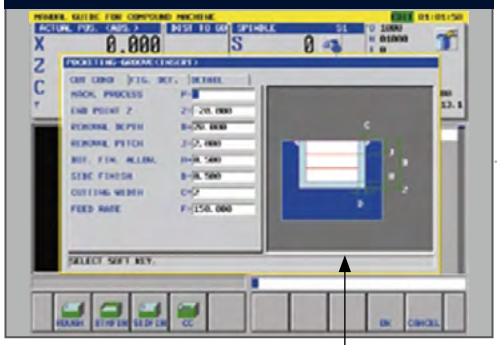
Example programming : Cutting shape



Example part



EZ-Guide i screen



Enter the dimensions of the shape

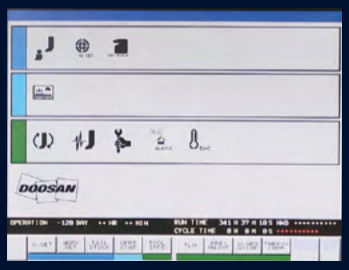
Automatic creation of cutting program

```
O7000 (SAMPLE PROGRAM) ;
...
M3 S1500 ;
G0 X50. Y125. ;
G0 Z30. ;
G1040 T0.5 J3. H0.2 K0.5 ... ;
G1020 H120. V50. U37. W68. ... ;
G0 Z80. ;
M5 ;
```

A cutting program is automatically created with the entered values.

EZ work

DN Solutions's EZ work supports the user with functions relating to tool data, error diagnostics, set up and machine monitoring.

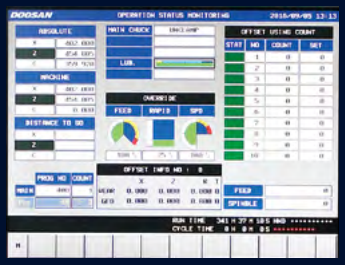


Select menu screen



Convenient set up for peripheral equipment

Helps tool setter guide, work setting, tailstock setting, and other measurement and parameter control to reduce setting-up time and facilitates operation.



Screen for monitoring the machine and operating conditions

The screen provides a complete view of machine operation. information on the feed system position, offset, feedrate and spindle speed, tool life and count in an easy-to-view screen.



Management Convenience Screen

Helps to prepare tools and provides for visual information on alarms to reduce maintenance time.

CONVENIENT OPERATION

SIEMENS S828D

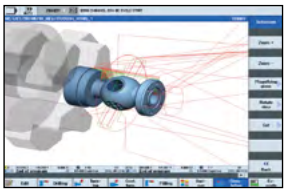
15.inch display + New OP

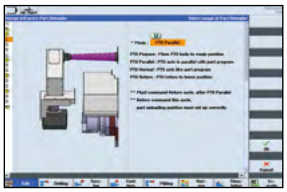
Siemens 828D' operation panel enhances operating convenience by incorporating common-design buttons and layout. It features a Qwerty keyboard for fast and easy data input and operation.

- **15.6 inch display**
- USB (standard)
- QWERTY keyboard



Convenient conversational functionality





Shop-turn mode
[various]
⬇
[attachments]

Cutting and operation support function

This function shows a cutting and tool path simulation in real-time.

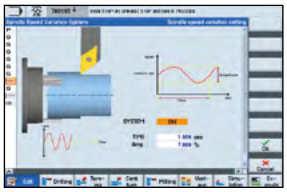
The automation elements (parts catcher, parts unloader etc.), can be easily controlled via interactive screens.



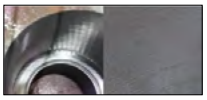
[Custom]
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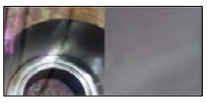
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[operating parameter]
⬇
[TC service]



[various]
⬇
[attachment]
⬇
[DSSV]



Before applying the function



After applying the function

Operation safety function

Protection Zone Synchronized Actions checks the interference between the turret and the spindle to prevent collisions caused by operator error.

Maintenance and service convenience function

Maintenance and service of major equipment and peripheral devices, including the timer and parts counter settings can be easily undertaken.

Machining accuracy improvement

The NC controls spindle speed at an optimal level for precision threading and turning, making it possible to automatically improve surface roughness.

NUMERIC CONTROL SPECIFICATIONS

SIEMENS

Description	Item	Specifications	2-Axis S828D	M S828D	S S828D	MS S828D	Y S828D	SY S828D
Controlled axis	Controlled axes		X,Z,SP	X,Z,C,R	X,Z,C,C2,B	X,Z,C,R,C2,B	X,Z,C,R,Y	X,Z,C,R,C2,Y,B
	Simultaneously controlled axes		4 axes	4 axes	4 axes	4 axes	4 axes	4 axes
Data input/ output	Memory card input/output		X	X	X	X	X	X
	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 - G59, G507 - G599	●	●	●	●	●	●
Feed function	Advanced surface		X	X	X	X	X	X
	Top surface		X	X	X	X	X	X
	Look ahead number of block		1	1	1	1	1	1
Programming & Editing function	3D simulation, finished part		●	●	●	●	●	●
	Simultaneous recording		●	●	●	●	●	●
	DXF Reader for PC integrated in SINUMERIK Operate		○	○	○	○	○	○
Operation Guidance Function	Shopturn		●	●	●	●	●	●
	EZ Operation package		●	●	●	●	●	●
Setting and display	Operation via a VNC viewer		●	●	●	●	●	●
Network	MTConnect		✪	✪	✪	✪	✪	✪
	OPCUA		○	○	○	○	○	○
Others	Display unit	15.6" color display with touch screen	●	●	●	●	●	●
	Part program storage size	CNC user memory 10 MB	●	●	●	●	●	●
		CNC user memory 100 MB	○	○	○	○	○	○
		CNC user memory 6GB	X	X	X	X	X	X
		CNC user memory 40GB (with PCU or IPC)	X	X	X	X	X	X
		CNC user memory without limit(Execution from extenal storage devices)(EES / Using by USB or Network)	○	○	○	○	○	○
		HMI user memory for CNC part program 6GB	X	X	X	X	X	X

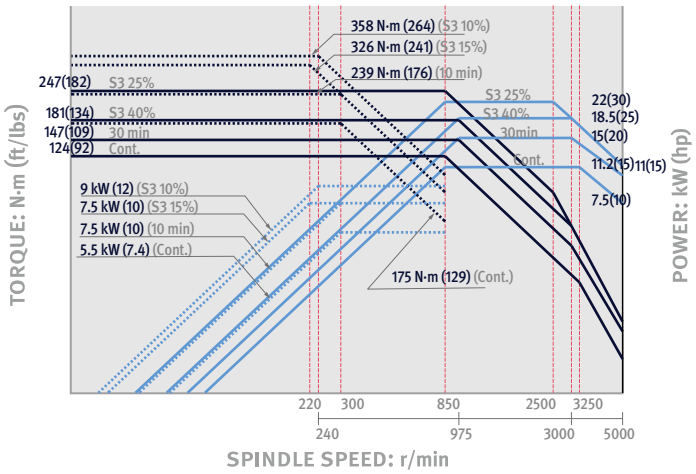
● *Standard* ○ *Optional* X *N/A* ✪ *Available*

POWER | TORQUE

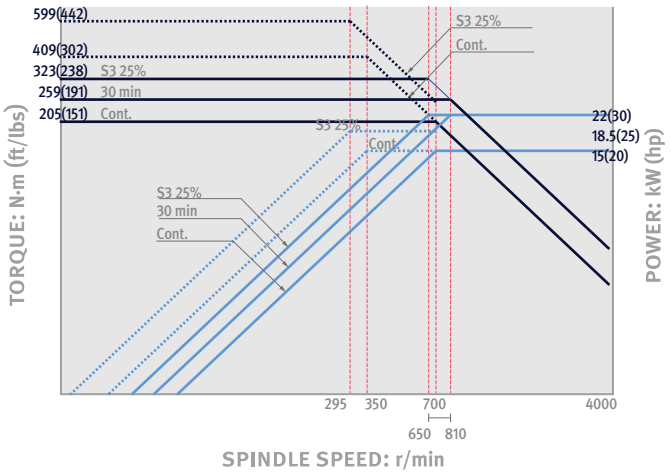
FANUC

Main Spindle

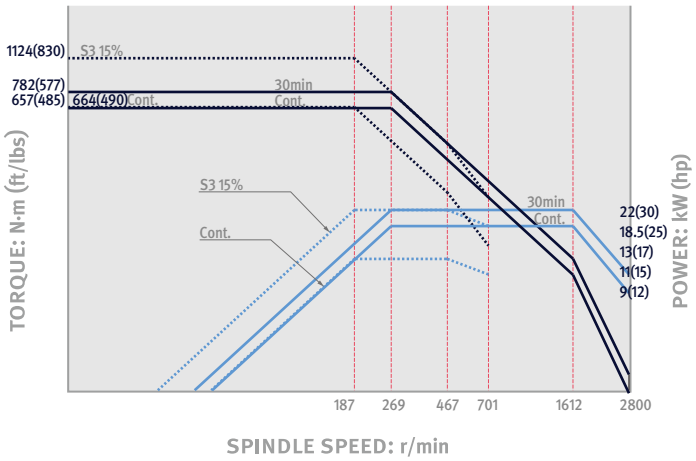
Built-in_PUMA 2100Y Ⅱ / SY Ⅱ series



Built-in_PUMA 2600Y Ⅱ / SY Ⅱ series

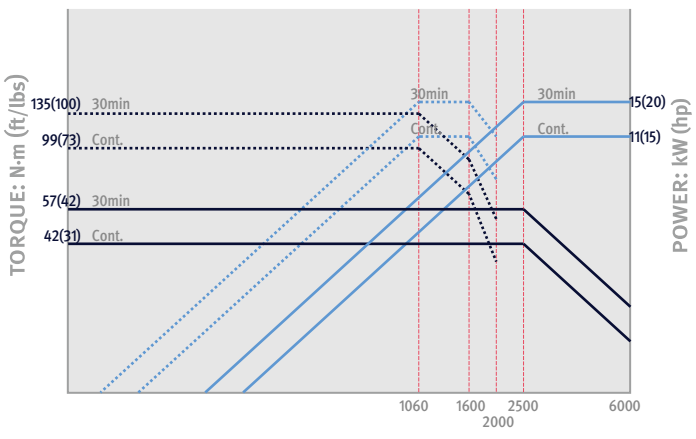


Belt_PUMA 2600YB Ⅱ / SYB Ⅱ series

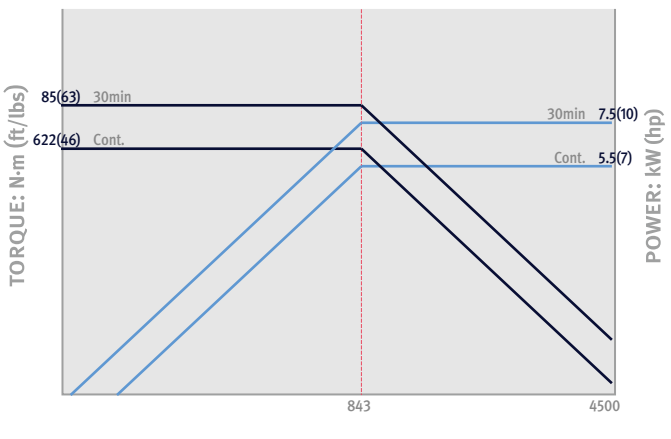


Sub-Spindle

Built-in_PUMA 2100SY Ⅱ /LSY Ⅱ series, **PUMA** 2600SY Ⅱ /LSY Ⅱ series



Belt_PUMA 2600SYB Ⅱ / LSYB Ⅱ series

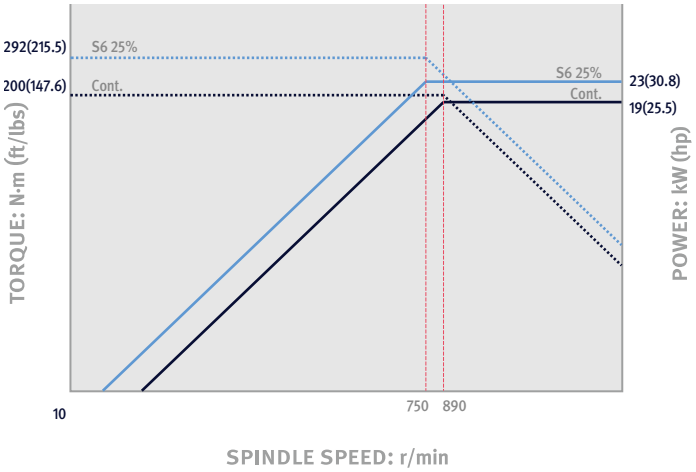


POWER | TORQUE

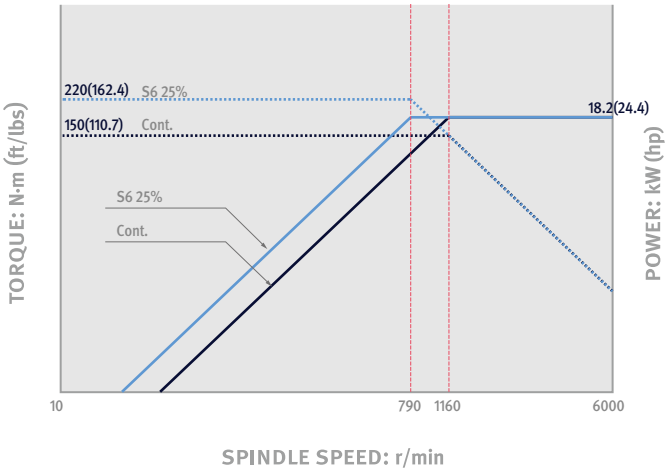
SIEMENS

Main Spindle

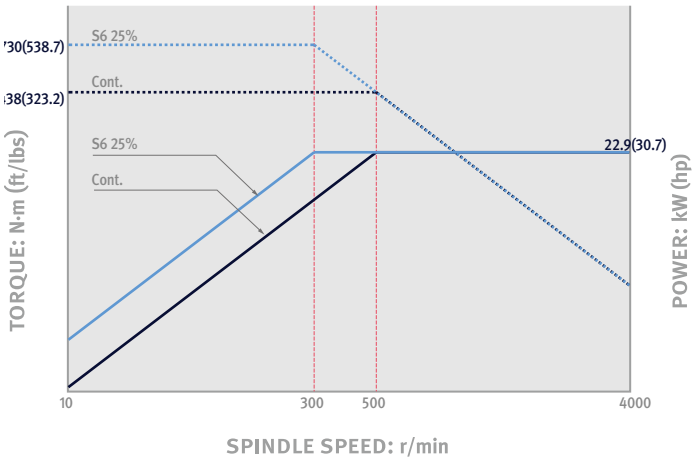
Built-in_PUMA 2100Y Ⅱ / SY Ⅱ series



Built-in_PUMA 2600Y Ⅱ / SY Ⅱ series

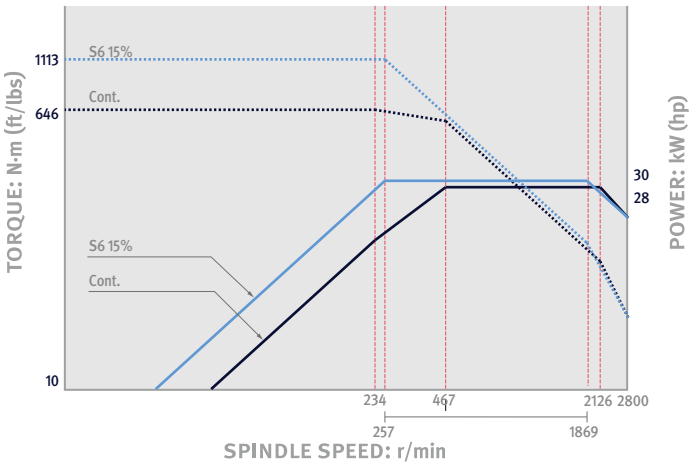


Belt_PUMA 2600YB Ⅱ / SYB Ⅱ series

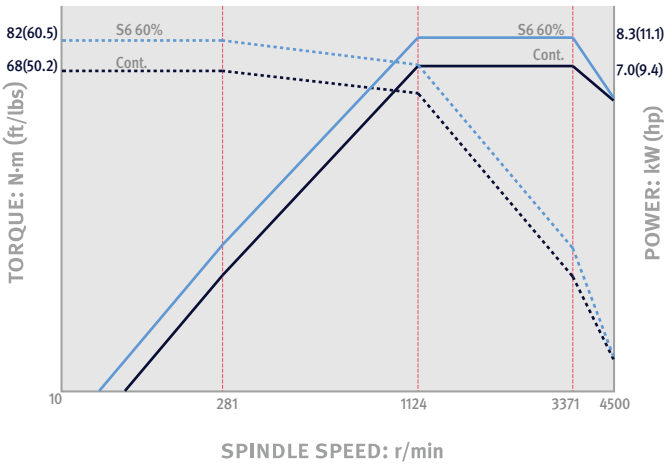


Sub-Spindle

Built-in_PUMA 2100SY Ⅱ /LSY Ⅱ series, **PUMA** 2600SY Ⅱ /LSY Ⅱ series



Belt_PUMA 2600SYB Ⅱ / LSYB Ⅱ series



POWER | TORQUE

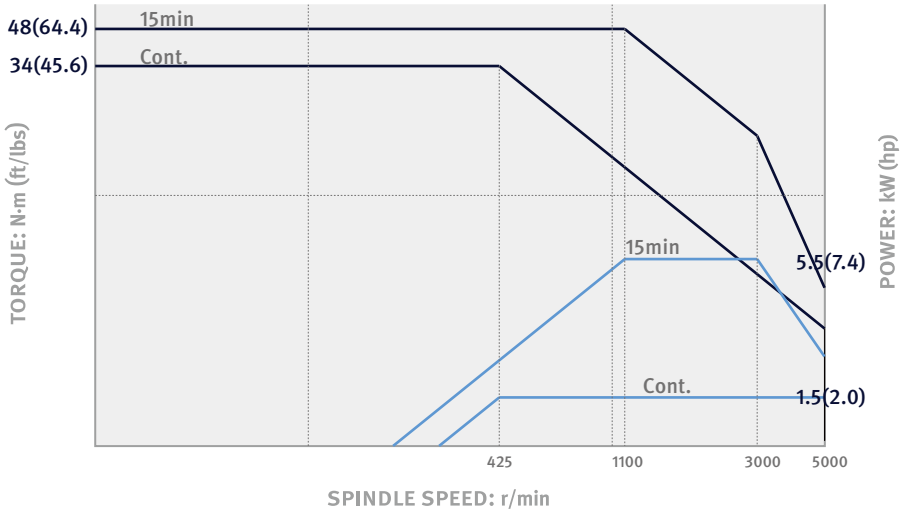
Rotary tool

PUMA 2100Y Ⅱ / SY Ⅱ series

Max. speed
5000 r/min

Max. power
5.5 kW
7.4 Hp

Max. torque
48 N·m
35.4 ft-lbs

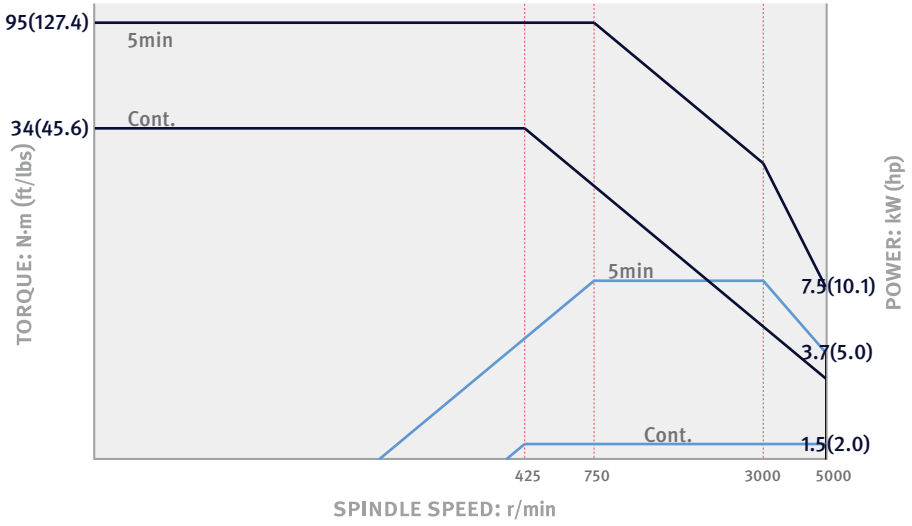


PUMA 2600Y Ⅱ / SY Ⅱ series

Max. speed
5000 r/min

Max. power
7.5 kW
10.1 Hp

Max. torque
95 N·m
70.1 ft-lbs

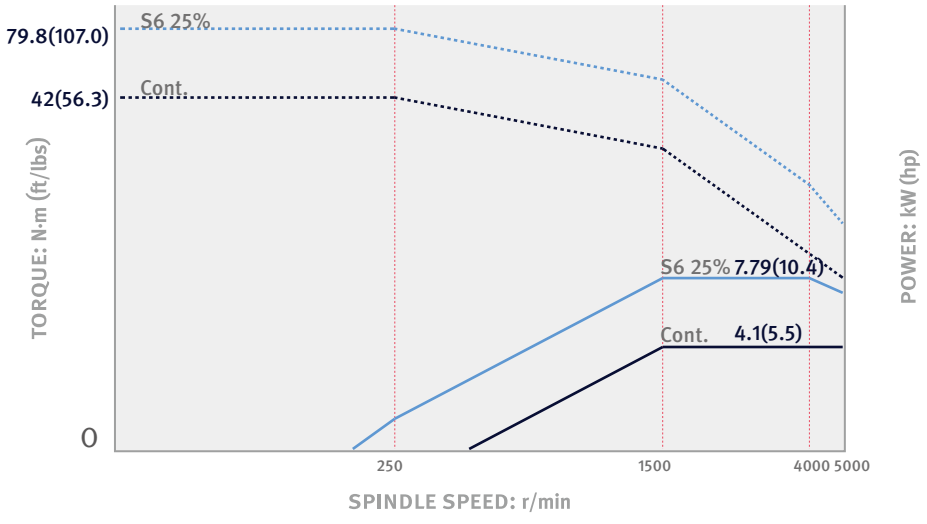


PUMA 2100 Ⅱ / **PUMA** 2600 Y Ⅱ / YB Ⅱ series

Max. speed
5000 r/min

Max. power
7.79/4.1 kW
10.4/5.5 Hp

Max. torque
79.8 N·m
58.9 ft-lbs

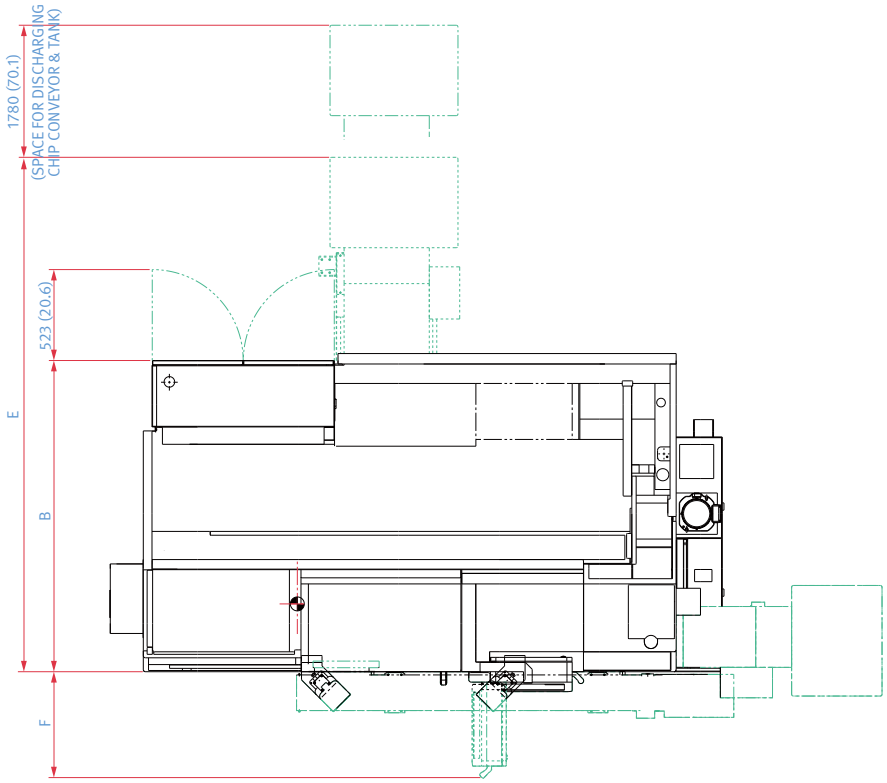


EXTERNAL DIMENSIONS

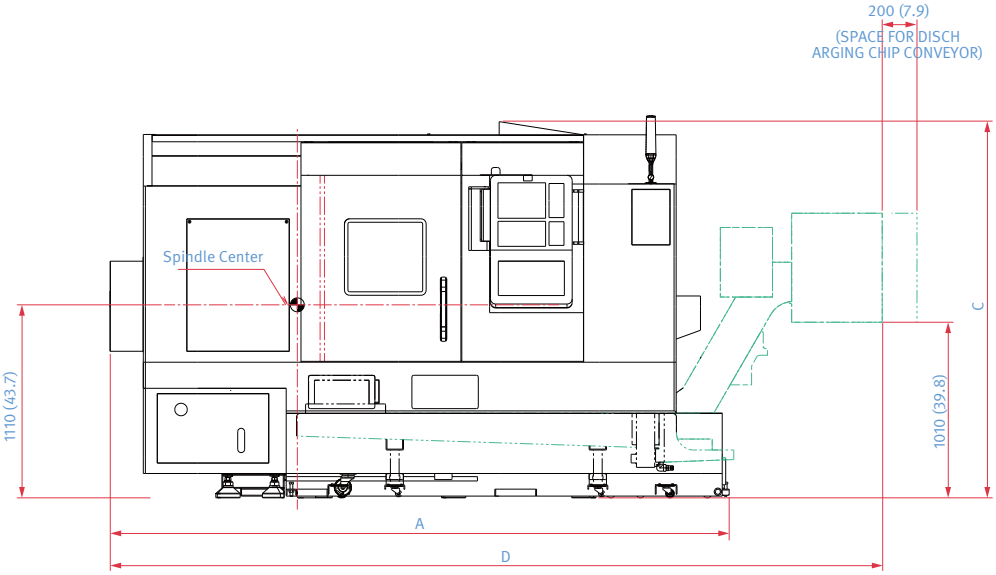
PUMA 2100 / 2600 Y Ⅱ series

Unit : mm (inch)

TOP



FRONT



Model	A (Length)	B (Width)	C (Height)	D (Length with side chip conveyor)	E (Width with rear chip conveyor)	F
PUMA 2100Y Ⅱ/ SY Ⅱ	3190 (125.6)	1945 (76.6)	2163 (85.2)	4070 (160.2)	3074 (121.0)	490 (19.3)
PUMA 2100LY Ⅱ/ LSY Ⅱ	3410 (134.3)	1945 (76.6)	2163 (85.2)	4290 (168.9)	3074 (121.0)	490 (19.3)
PUMA 2600Y Ⅱ/ SY Ⅱ	3560 (140.2)	1945 (76.6)	2163 (85.2)	4440 (174.8)	3074 (121.0)	490 (19.3)
PUMA 2600LY Ⅱ/ LSY Ⅱ	4435 (174.6)	2049 (80.7)	2163 (85.2)	5490 (216.1)	-	545 (21.5)
PUMA 2600YB Ⅱ/ SYB Ⅱ	3873 (152.5)	1945 (76.6)	2163 (85.2)	4753 (187.1)	3074 (121.0)	490 (19.3)
PUMA 2600LYB Ⅱ/ LSYB Ⅱ	4438 (174.7)	2049 (80.7)	2163 (85.2)	5492(216.2)	-	545 (21.5)

** Some peripheral equipment can be placed in other places.*

MACHINE SPECIFICATIONS

Description			Unit	PUMA 2100Y II / LY II	PUMA 2100SY II / LSY II	PUMA 2600Y II / LY II
Capacity	Swing over bed		mm (inch)	780 (30.7)	780 (30.7)	780 (30.7)
	Swing over front door		mm (inch)	680 (26.8)	680 (26.8)	680 (26.8)
	Swing over saddle*		mm (inch)	630 (24.8)	630 (24.8)	630 (24.8)
	Recom. Turning diameter		mm (inch)	210 (8.3)	210 (8.3)	255 (10.0)
	Max. turning diameter		mm (inch)	406 (16.0)	406 (16.0)	376 (14.8)
	Max. turning length		mm (inch)	520 / 760 (20.5 / 29.9)	520 / 760 (20.5 / 29.9)	760 / 1280 (29.9 / 50.4)
	Bar working diameter		mm (inch)	65 (2.6)	65 (2.6)	81 {76} (3.2 {3.0})
Travels	Travel distance	X-axis	mm (inch)	260 (10.2)	260 (10.2)	260 (10.2)
		Z-axis	mm (inch)	590 / 830 (23.2 / 32.7)	590 / 830 (23.2 / 32.7)	830 / 1350 (32.7 / 53.1)
		Y-axis	mm (inch)	105 (±52.5) (4.1 (±2.1))	105 (±52.5) (4.1 (±2.1))	105 (±52.5) (4.1 (±2.1))
		B-axis	mm (inch)	-	590 / 830 (23.2 / 32.7)	-
Feedrates	Rapid traverse	X-axis	m/min (ipm)	30 (1181.1)	30 (1181.1)	30 (1181.1)
		Z-axis	m/min (ipm)	30 (1181.1)	30 (1181.1)	30 (1181.1)
		Y-axis	m/min (ipm)	10 (393.7)	10 (393.7)	10 (393.7)
		B-axis	m/min (ipm)	-	30 (1181.1)	-
Spindle	Spindle speed (Belt Type)		r/min	-	-	-
	Spindle speed (Built-in Type)		r/min	5000	5000	4000
	Spindle nose			ASA A2-6	ASA A2-6	ASA A2-8
	Spindle bearing diameter (Front)		mm (inch)	120 (4.7)	120 (4.7)	140 (5.5)
	Spindle through hole diameter		mm (inch)	76 (3.0)	76 (3.0)	91 (3.6)
	Min. spindle indexing angle (C-axis)		deg	0.001	0.001	0.001
Turret	No. of tool stations		st	12 {24 / 16 / 20}*	12 {24 / 16 / 20}*	12 {24 / 16 / 20}*
	OD tool size		mm (inch)	25 {20 / 25 / 20} (1.0 {0.75 / 1.0 / 0.75})*	25 {20 / 25 / 20} (1.0 {0.75 / 1.0 / 0.75})*	25 {20 / 25 / 20} (1.0 {0.75 / 1.0 / 0.75})*
	Boring bar diameter		mm (inch)	40 {32 / 40 / 32}* (1.6 {1.3 / 1.6 / 1.3)	40 {32 / 40 / 32}* (1.6 {1.3 / 1.6 / 1.3)	50 {40 / 40 /32}* (2.0 {1.6 / 1.6 /1.3})
	Indexing time (1st swivel time)		s	0.15	0.15	0.15
	Rotary tool spindle speed		r/min	5000	5000	5000
Tail stock	Quill diameter		mm (inch)	80 (3.1)	-	100 (3.9)
	Quill bore taper (Live)			MT#4 {MT#3-Dead}*	-	MT#5 {MT#4-Dead}*
	Tailstock travel		mm (inch)	590 / 830 (23.2 / 32.7)	-	830 / 1350 (32.7 / 60.2)
Sub-spindle	Spindle speed		r/min	-	6000 {5000}	-
	Spindle nose			-	ASA A2-5 {A2-6}	-
	Spindle bearing diameter (Front)		mm (inch)	-	100 {120} (3.9 {4.7})	-
	Spindle through hole diameter		mm (inch)	-	62 {76} (2.4 {3.0})	-
	Min. spindle indexing angle (C-axis)		deg	-	0.001	-
Motors	Main spindle motor		kW (Hp)	22 / 18.5 / 11 (29.5 / 24.8 / 14.8) (S3 15% / S3 40% / S1 Cont.)	22 / 18.5 / 11 (29.5 / 24.8 / 14.8) (S3 15% / S3 40% / S1 Cont.)	22 / 22 / 15 (29.5 / 29.5 / 20.1) (S3 25% / 30min / S1 Cont.)
	Sub spindle motor		kW (Hp)	-	15 / 11 (20.1 / 14.8)	-
	Rotary tool spindle motor		kW (Hp)	5.5 (7.4)	5.5 (7.4)	7.5 (10.1)
	Coolant pump motor		kW (Hp)	0.4 (0.5)	0.4 (0.5)	0.4 (0.5)
Power source	Electric power supply (Rated capacity)		kVA	30.7	50.44	41.98
Machine size	Machine height		mm (inch)	2163 (85.2)	2163 (85.2)	2163 (85.2)
	Machine dimension	length	mm (inch)	3190 / 3410 (125.6 / 134.3)	3190 / 3410 (125.6 / 134.3)	3560 / 4435 (140.2 / 174.6)
		width	mm (inch)	1945 (76.6)	1945 (76.6)	1945 / 2049 (76.6 / 80.7)
	Machine weight		kg (lb)	5550 / 6050 (12235.5 / 13337.8)	6000 / 6500 (13227.5 / 14329.8)	6100 / 7400 (13448.0 / 16314.0)
Control	CNC System		-	DN Solutions Fanuc i Plus / SIEMENS 828D		

*{ } : Option * Please contact to specification for SIEMENS 828D.

MACHINE SPECIFICATIONS

Description			Unit	PUMA 2600 Y II / LSY II	PUMA 2600YB II / LYB II	PUMA 2600SYB II / LSYB II
Capacity	Swing over bed		mm (inch)	780 (30.7)	780 (30.7)	780 (30.7)
	Swing over front door		mm (inch)	680 (26.8)	680 (26.8)	680 (26.8)
	Swing over saddle*		mm (inch)	630 (24.8)	630 (24.8)	630 (24.8)
	Recom. Turning diameter		mm (inch)	255 (10.0)	315 (12.4)	315 (12.4)
	Max. turning diameter		mm (inch)	376 (14.8)	376 (14.8)	376 (14.8)
	Max. turning length		mm (inch)	760 / 1280 (29.9 / 50.4)	725 / 1245 (28.5 / 49.0)	725 / 1245 (28.5 / 49.0)
	Bar working diameter		mm (inch)	81 {76} (3.2 {3.0})	102 (4.0)	102 (4.0)
Travels	Travel distance	X-axis	mm (inch)	260 (10.2)	260 (10.2)	260 (10.2)
		Z-axis	mm (inch)	830 / 1350 (32.7 / 53.1)	830 / 1350 (32.7 / 53.1)	830 / 1350 (32.7 / 53.1)
		Y-axis	mm (inch)	105 (±52.5) (4.1 (±2.1))	105 (±52.5) (4.1 (±2.1))	105 (±52.5) (4.1 (±2.1))
		B-axis	mm (inch)	830 / 1350 (32.7 / 53.1)	-	830 / 1350 (32.7 / 53.1)
Feedrates	Rapid traverse	X-axis	m/min (ipm)	30 (1181.1)	30 (1181.1)	30 (1181.1)
		Z-axis	m/min (ipm)	30 (1181.1)	30 (1181.1)	30 (1181.1)
		Y-axis	m/min (ipm)	10 (393.7)	10 (393.7)	10 (393.7)
		B-axis	m/min (ipm)	30 (1181.1)	-	30 (1181.1)
Spindle	Spindle speed (Belt Type)		r/min	-	2800	2800
	Spindle speed (Built-in Type)		r/min	4000	-	-
	Spindle nose			ASA A2-8	ASA A2-11	ASA A2-11
	Spindle bearing diameter (Front)		mm (inch)	140 (5.5)	160 (6.3)	160 (6.3)
	Spindle through hole diameter		mm (inch)	91 (3.6)	115 (4.5)	115 (4.5)
	Min. spindle indexing angle (C-axis)		deg	0.001	0.001	0.001
Turret	No. of tool stations		st	12 {24 / 16 / 20}*	12 {24 / 16 / 20}*	12 {24 / 16 / 20}*
	OD tool size		mm (inch)	25 {20 / 25 / 20} (1.0 {0.75 / 1.0 / 0.75})*	25 {20 / 25 / 20} (1.0 {0.75 / 1.0 / 0.75})*	25 {20 / 25 / 20} (1.0 {0.75 / 1.0 / 0.75})*
	Boring bar diameter		mm (inch)	50 {40 / 40 /32}* (2.0 {1.6 / 1.6 /1.3})	50 {40 / 40 /32}* (2.0 {1.6 / 1.6 /1.3})	50 {40 / 40 /32}* (2.0 {1.6 / 1.6 /1.3})
	Indexing time (1st swivel time)		s	0.15	0.15	0.15
	Rotary tool spindle speed		r/min	5000	5000	5000
Tail stock	Quill diameter		mm (inch)	-	100 (3.9)	-
	Quill bore taper (Live)			-	MT#5 {MT#4-Dead}*	-
	Tailstock travel		mm (inch)	-	830 / 1350 (32.7 / 60.2)	-
Sub-spindle	Spindle speed		r/min	6000 {5000}	-	4500
	Spindle nose			ASA A2-5 {A2-6}	-	ASA A2-5
	Spindle bearing diameter (Front)		mm (inch)	100 {120} (3.9 {4.7})	-	90 (3.5)
	Spindle through hole diameter		mm (inch)	62 {76} (2.4 {3.0})	-	62 (2.4)
	Min. spindle indexing angle (C-axis)		deg	0.001	-	0.001
Motors	Main spindle motor		kW (Hp)	22 / 22 / 15 (29.5 / 29.5 / 20.1) (S3 25% / 30min / S1 Cont.)	26 / 22 / 18.5 (34.9 / 29.5 / 24.8) (S6 25% / S6 60% / S1 Cont.)	26 / 22 / 18.5 (34.9 / 29.5 / 24.8) (S6 25% / S6 60% / S1 Cont.)
	Sub spindle motor		kW (Hp)	15 / 11 (20.1 / 14.8)	-	7.5 / 5.5 (11 / 7)
	Rotary tool spindle motor		kW (Hp)	7.5 (10.1)	7.5 (10.1)	7.5 (10.1)
	Coolant pump motor		kW (Hp)	0.4 (0.5)	0.4 (0.5)	0.4 (0.5)
Power source	Electric power supply (Rated capacity)		kVA	57.08	46.40	46.40
Machine size	Machine height		mm (inch)	2163 (85.2)	2163 (85.2)	2163 (85.2)
	Machine dimension	length	mm (inch)	3560 / 4435 (140.2 / 174.6)	3873 / 4438 (152.5 / 174.7)	3873 / 4438 (152.5 / 174.7)
		width	mm (inch)	1945 / 2049 (76.6 / 80.7)	1945 / 2049 (76.6 / 80.7)	1945 / 2049 (76.6 / 80.7)
	Machine weight		kg (lb)	6550 / 7850 (14440.1 / 17306.0)	6200 / 7500 (13668.5 / 16534.4)	6650 / 7950 (14660.5 / 17526.5)
Control	CNC System		-	DN Solutions Fanuc i Plus / SIEMENS 828D		

*{ } : Option * Please contact to specification for SIEMENS 828D.

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		51	Technical centers Technical center, Sales support, Service support, Parts support
4	Corporations	200	Service posts
156	Dealer networks	3	Factories



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

dn-solutions.com

Head Office
22F T Tower, 30, Sowol-ro 2-gil
Jung-gu, Seoul, Korea, 04637
Tel +82-2-6972-0370/0350
Fax+82-2-6972-0400

DN Solutions America
19A Chapin Road, Pine Brook
New Jersey 07058, United States
Tel: +1-973-618-2500
Fax:+1-973-618-2501

DN Solutions Europe
Emdener Strasse 24, D-41540
Dormagen, Germany
Tel: +49-2133-5067-100
Fax:+49-2133-5067-111

DN Solutions India
No.82, Jakkuar Village
Yelahanka Hobil, Bangalore-560064
Tel: + 91-80-2205-6900
E-mail: india@dncompany.com

DN Solutions 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

Sales inquiry
sales@dncompany.com

* For more details, please contact DN Solutions.

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