

THE USER-FRIENDLY TURNING CENTER FAMILY

# **PUMA DNT 2100·2600**

**PUMA DNT 2100/M/B/MB**

**PUMA DNT 2600/L/M/LM**



# PUMA DNT 2100·2600

The PUMA DNT Series is an 8- and 10-inch turning center family that is equipped with the most powerful spindle in its class. Alongside that is an innovative tool post concept that guarantees powerful, precise machining and exceptional productivity. The machine's design allows for convenient operation and easy maintenance.

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## HIGH RIGIDITY



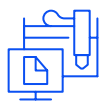
- With a box guideway structure and impressive spindle power, the PUMA DNT brings stability to its impressive cutting capabilities.

## IMPROVED USABILITY

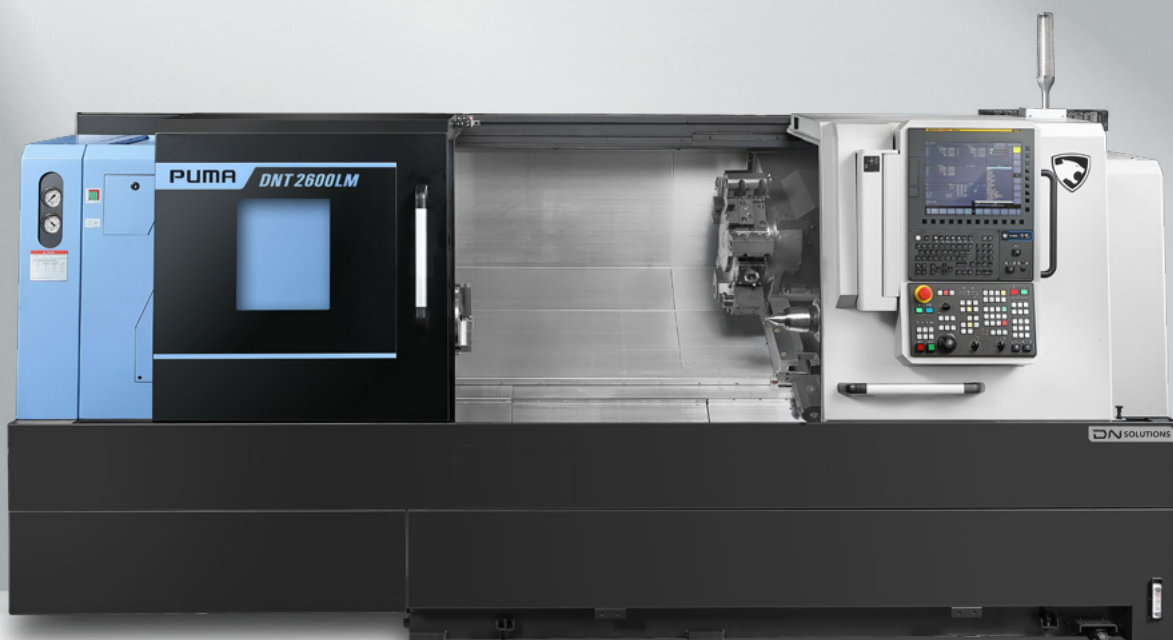


- An adjustable operator's panel, quill detection sensor and iHMI touch capability combine to give the PUMA DNT a top-of-the-line user experience.

## HIGH ACCURACY



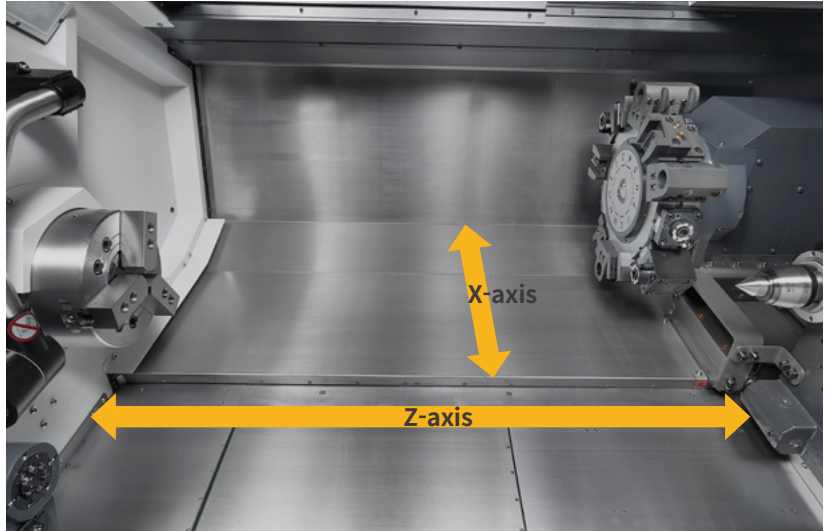
- An optimized spindle structure and optional thermal compensation gives the PUMA DNT pinpoint accuracy, allowing you to produce the right parts the first time.



# BASIC STRUCTURE

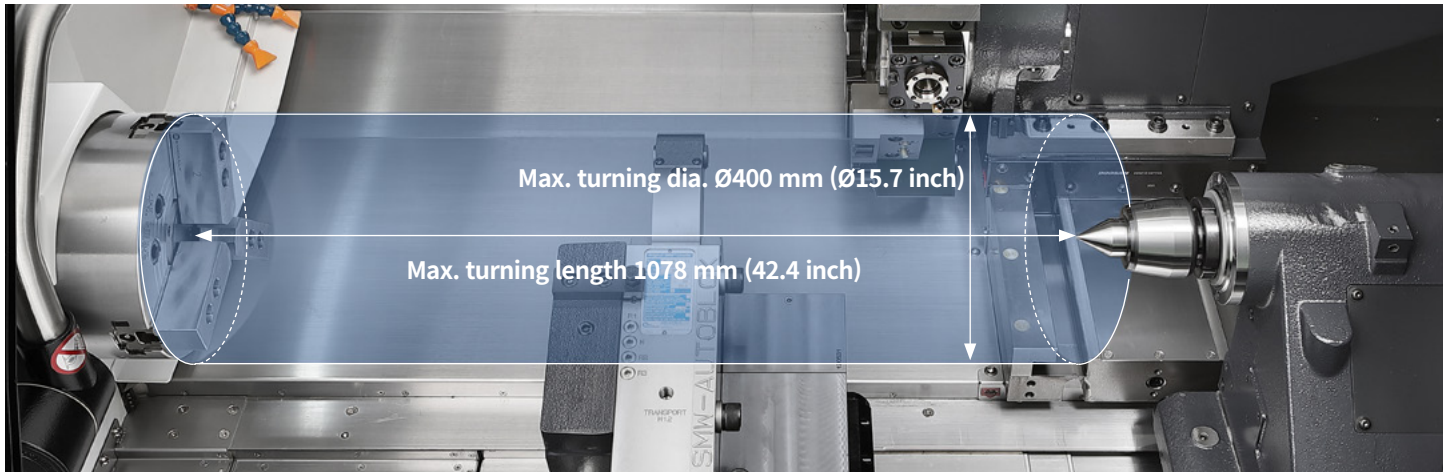
Box guideways are applied to all axes to prevent vibration, ensure dynamic rigidity and deliver powerful and precise machining.

Models	Standard chuck size (inch)	Travel (mm(inch))		Rapid traverse rate (m/min (ipm))	
		X-axis	Z-axis	X-axis	Z-axis
PUMA DNT2100/M	8"	230 (9.1)	580 (22.8)	24 (9944.9)	30 (1181.1)
PUMA DNT2100B/MB	10"	260 (10.2)	680 (26.8)		
PUMA DNT2600/M	10"		1100 (43.3)		
PUMA DNT2600L/LM	10"				



# MACHINING AREA

PUMA DNT Series machines have the largest machining areas in their class, delivering maximum productivity with minimal cost.



Units : mm (inch)

Models	Bar working diameter	Max. turning diameter	Max. turning length
PUMA DNT2100	Ø67 (Ø2.6)	400 (15.7)	562 (22.1)
PUMA DNT2100M		320 (12.6)	513 (20.2)
PUMA DNT2100B		400 (15.7)	550 (21.7)
PUMA DNT2100MB		320 (12.6)	501 (19.7)
PUMA DNT2600	Ø81 (Ø3.2)	460 (18.1)	658 (25.9)
PUMA DNT2600M		380 (15.0)	610 (24.0)
PUMA DNT2600L		460 (18.1)	1078 (42.4)
PUMA DNT2600LM		380 (15.0)	1030 (40.6)

\* If you select the other turret type, Max. turning dia. and length is changed. Please contact the salesperson.



# SPINDLE

A low inertia spindle improves acceleration/deceleration rates while increasing productivity and delivering powerful cutting performance.

## Max. spindle speed

PUMA DNT2100

**4500**{Built-in 5000 **OPTION**} r/min

## Max. spindle power

PUMA DNT2600

**26** kW (34.9 Hp)

## Max. spindle torque

PUMA DNT2600

**735** N·m (542.4 ft-lbs)

Models	Spindle speed (r/min)	Power (kW(Hp))	Torque (N·m (ft-lbs))
PUMA DNT2100/M	4500	18.5/15 (24.8/20.1)	328 (242.1)
PUMA DNT2100/M	4000	18.5/15 (24.8/20.1)	378 (279.0)
PUMA DNT2100B/MB	3500	18.5/15 (24.8/20.1)	403 (297.4)
PUMA DNT2600/M	3500	26/18.5 (20.1/34.9)	735 (542.4)
PUMA DNT2600L/LM			



# Tailstock

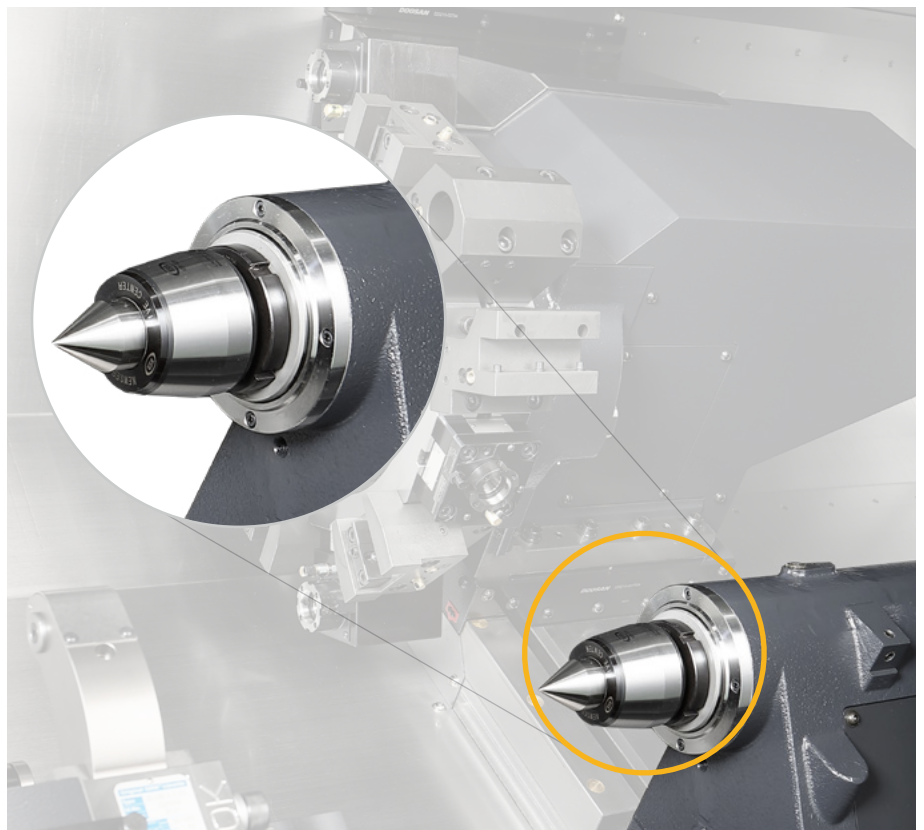
A highly-rigid tailstock is used to support the machining of long and thin workpieces.

## Manual

Programmable **OPTION**

Servo driven **OPTION**

Models	Tailstock center (Live)	Tailstock travel mm (inch)	Servo Tailstock travel mm (inch)
PUMA DNT2100/M	MT #4	580 (22.8)	600 (23.6)
PUMA DNT2100B/MB			
PUMA DNT2600/M	MT #5	680 (26.8)	700 (27.6)
PUMA DNT2600L/LM			

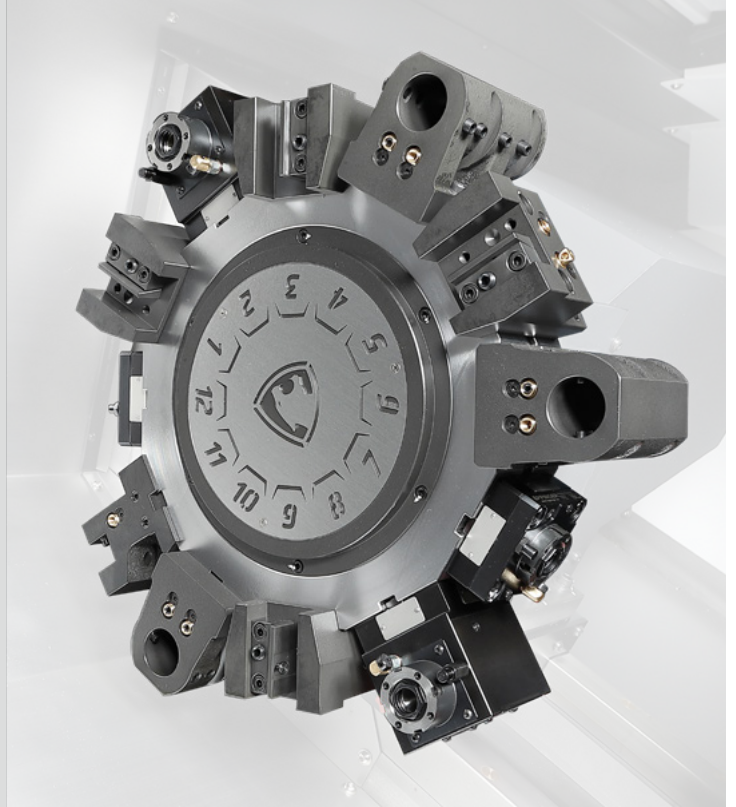
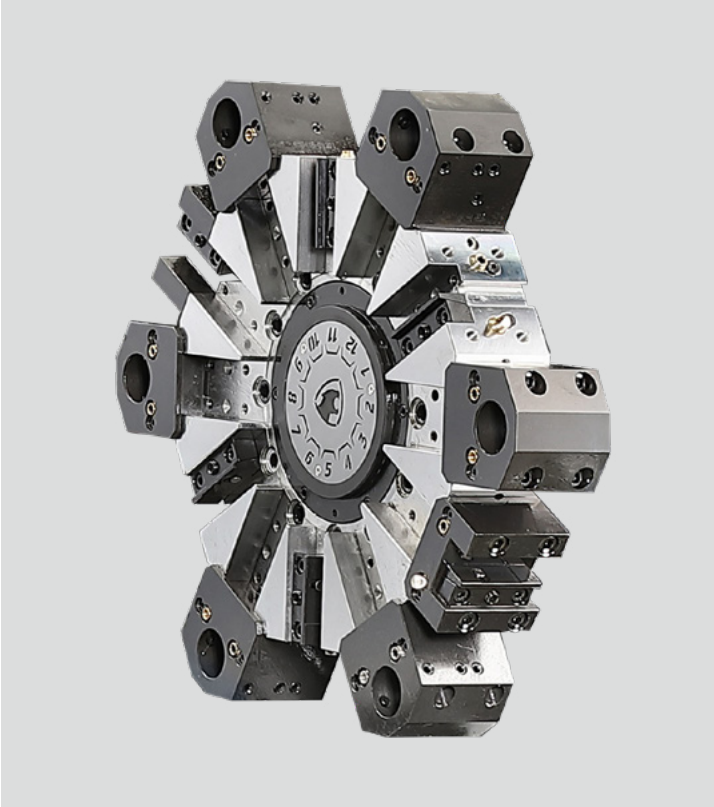


# TURRET

Turret rotation is controlled by a servo motor for prompt and correct selection of tools. The milling turret, including rotary tools, features remove BMT design for higher rigidity. DN Solutions ensures best-in-class milling, drilling and tapping.

2 axis turret

BMT55P



**Number of tool stations**

PUMA DNT2100/DNT2600

**10/12** st.

		PUMA DNT2100	PUMA DNT2100B	PUMA DNT2600/L	Notes
Number of tool station	12 st.	●	○	○	-
	10 st.	○	●	●	-

**BMT milling turret**

**BMT55P**

**BMT65P** OPTION

**Rotary tool motor power**

BMT55P/BMT65P

**5.5** kW (7.4 Hp)

		PUMA DNT2100M	PUMA DNT2100MB	PUMA DNT2600M/LM	Notes
Number of tool station	12 st.	●	●	●	-
	12 st.(24 position)	○	○	○	-
BMT	BMT55P	●	●	●	12 st./12 st. (24 position) selectable
	BMT65P	○	○	○	12 st.
Rotary tool	6000 r/min/5.5kW (BMT55P)	●	●	●	12 st./12 st. (24 position) selectable
	10000 r/min/7.5kW (BMT55P)	○	○	○	12 st./12 st. (24 position) selectable
	5000 r/min/5.5kW (BMT65P)	○	○	○	12 st.

**Rotary tool speed**

BMT55P

**6000** r/min

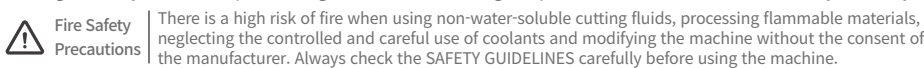
**10000** r/min OPTION

# STANDARD | OPTIONAL SPECIFICATIONS

A range of options is available to suit individual requirements.

Description	Feature	PUMA DNT2100	PUMA DNT2100M	PUMA DNT2100B	PUMA DNT2100MB	PUMA DNT2600/L	PUMA DNT2600M/LM
Chuck	8 inch	●	●	-	-	-	-
	10 inch	○	○	●	●	●	●
	12 inch	-	-	-	-	○	○
	Non-chuck	○	○	○	○	○	○
Jaw	Soft jaw	●	●	●	●	●	●
	Hard jaw	○	○	○	○	○	○
Spindle	Standard	●	●	●	●	●	●
	High torque	○	○	-	-	-	-
	Built-in	○	○	-	-	-	-
Turret	10ST	○	-	●	-	●	-
	12ST	●	-	○	-	○	-
	12ST_BMT55P_6,000 r/min	-	●	-	●	-	●
	12ST_BMT55P_10,000 r/min	-	○	-	○	-	○
	12ST(24 POSITION)_BMT55P_6,000 r/min	-	○	-	○	-	○
	12ST(24 POSITION)_BMT55P_10,000 r/min	-	○	-	○	-	○
Chucking option	12ST_BMT65P_5,000 r/min	-	○	-	-	-	○
	DUAL PRESSURE CHUCKING	○	○	○	○	○	○
Steady rest	CHUCK CLAMP CONFIRMATION	○	○	○	○	○	○
	PRESSURE SWITCH FOR CHUCKING PRESSURE CHECK	○	○	○	○	○	○
	Programmable	○	○	○	○	○	○
	Manual	○	○	○	○	○	○
	V stand V stand for shaft workpiece	○	○	○	○	○	○
	SLU-1 (Ø8 ~ Ø64)	○	○	○	○	○	○
	SLU-2 (Ø12 ~ Ø101)	○	○	○	○	○	○
	SLU-3.1 (Ø20 ~ Ø165)	X	X	X	X	○	○
	STA-1 (Ø4 ~ Ø64)	○	○	○	○	○	○
	STA-2 (Ø8 ~ Ø101)	○	○	○	○	○	○
Tailstock	AX1E (Ø6 ~ Ø70)	○	○	○	○	○	○
	AX2E (Ø8 ~ Ø105)	○	○	○	○	○	○
	AX5I (Ø20 ~ Ø200)	X	X	X	X	○	○
	Manual (Ø25 ~ Ø200)	○	○	○	○	○	○
	Programmable	○	○	○	○	○	○
Coolant pump	Servo driven	○	○	○	○	○	○
	Non-tailstock	○	○	○	○	-	-
	Live center(MT#4)	●	●	●	●	●	●
	Live center(MT#5)	-	-	-	-	-	●
Coolant options	Dead center(MT#4)	○	○	○	○	○	○
	1.5 bar	●	●	●	●	●	●
	Increase power (4.5/7/10/14.5/20/70 bar)	○	○	○	○	○	○
	add coolant pump(for option) 4.5 bar	○	○	○	○	○	○
	Oil skimmer	○	○	○	○	○	○
	Coolant pressure switch	○	○	○	○	○	○
Chip disposal options	Coolant level switch	○	○	○	○	○	○
	Chuck coolant	○	○	○	○	○	○
	Coolant Chiller   for water-soluble coolant**	○	○	○	○	○	○
	Coolant gun	○	○	○	○	○	○
	Side type chip conveyer	○	○	○	○	○	○
Measuring & Automation	Rear type chip conveyer	○	○	○	○	-	-
	Chip bucket	○	○	○	○	○	○
	Chip aire blower	○	○	○	○	○	○
	Mist collector interface	○	○	○	○	○	○
	Integrated mist collector	○	○	○	○	○	○
	Tool setter (Manual)	○	○	○	○	○	○
	Tool setter (Automatic)	○	○	○	○	○	○
Others	Tool setter(Removable)	○	○	○	○	○	○
	Part catcher with parts box	○	○	○	○	○	○
	Part catcher with parts conveyer	○	○	○	○	○	○
	Auto door	○	○	○	○	○	○
	Bar feeder interface	○	○	○	○	○	○
	Tool load monitoring system	●	●	●	●	●	●
	Linear scale (X/Z)	○	○	○	○	○	○
	Signal tower	○	○	○	○	○	○
	Air gun	○	○	○	○	○	○
	Automatic Power off	○	○	○	○	○	○
Customized special options	Thermal compensation(sensor type)	○	○	○	○	○	○
	Sketch turn S/W	○	○	○	○	○	○
	Top protection cover	○	○	○	○	○	○
	Tool kit(l-lench/spanner)	○	○	○	○	○	○
	Tsc for main spindle_preparation	○	○	○	○	○	○
	Chuck pressure switch	○	○	○	○	○	○
Customized special options	Automatic top door	○	○	○	○	○	○
	Guide way wiper_for dry cutting	○	○	○	○	○	○
	Coolant shower	○	○	○	○	○	○
	Workpiece measuring system	○	○	○	○	○	○
	Quick change tooling (CAPTO)	○	○	○	○	○	○

\* Please contact your DN Solutions representative for detailed machine information. ● standard features ○ option △ Pre-discussion is required X Not available  
 \* When using a semi-synthetic type or synthetic type, contact our sales representative or service center in advance.  
 \*\* Coolant chiller unit is designed for machining conditions using water soluble coolant. In case of machining conditions using non-watersoluble coolant, its high viscosity can result in poor chilling effects or device damage, so prior technical consultation is absolutely necessary.





# PERIPHERAL EQUIPMENT

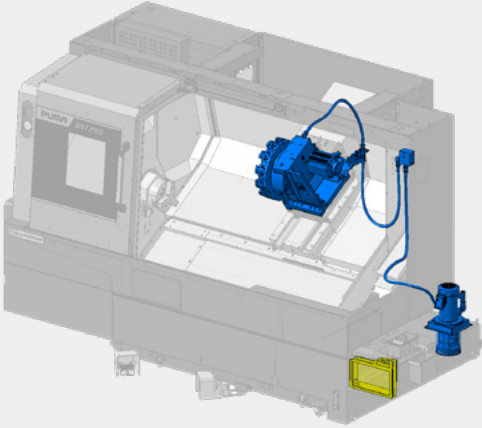
## Chip conveyor OPTION

DN Solutions provides the chip conveyor with an inverter that can be speed-adjusted. By selecting the correct type of conveyor, the efficiency of the machine is increased.



Chip conveyor type	Material	Description
Hinged belt	Steel	Most common type of chip conveyor. Appropriate for steel materials generating chips with a length of 30mm or more.
Magnetic scraper	Cast iron	Chip conveyor with magnetic scraper. Appropriate for cast iron workpieces generating fine chips

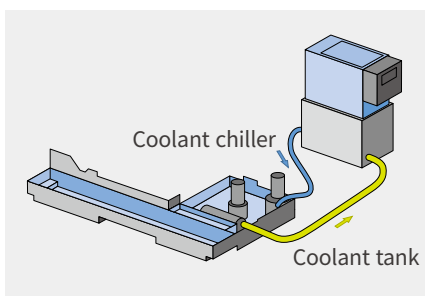
## Coolant system



Coolant pump	Output pressure (bar)		Filter	Std./Opt.
	60Hz	50Hz		
pump1	1.5	1.2	Screen filter	std.
pump2	4.5	3		
pump3	7	4.7		
pump4	10	7		
pump5	14.5	10		
pump6	20	20	Dual bag filter	opt.
pump7	70	70		

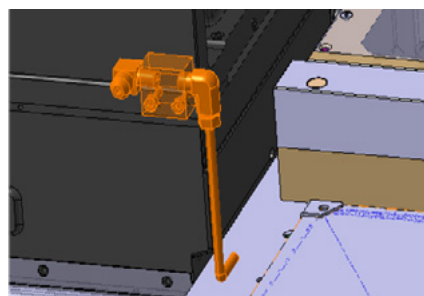
## Coolant chiller OPTION (recommended)

A coolant chiller is recommended to help prevent temperature rises and to reduce thermal deformation when using a water-insoluble coolant or high-pressure coolant system (i.e., power over 1.5kW).



## Tailstock chip flushing OPTION

Chip remover with coolant around the tailstock.



## Oil skimmer OPTION

The oil skimmer keeps coolant and lubricant separate from each other and extends the life cycle of the coolant.

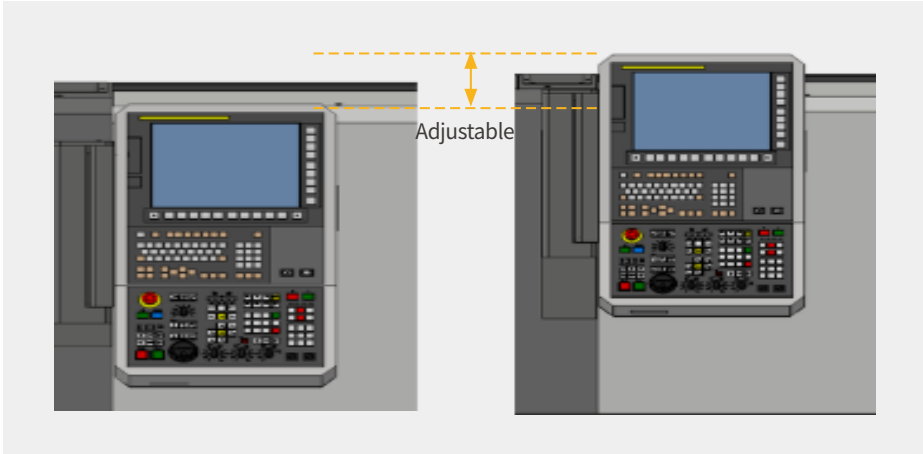




# PERIPHERAL EQUIPMENT

## Adjustable operation panel

Can be adjusted up and down in 3 steps. So anyone can operate conveniently, even if operators change frequently.



## Tool setter OPTION

The tool setter facilitates the setting of tools and the fast and precise measurement of abraded tools



## Quick change CAPTO OPTION

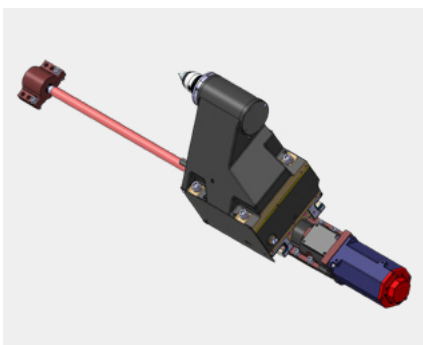
The CAPTO system simplifies tool change operations. It is recommended for users who need to change tools frequently or significantly reduce set-up times.



## Servo tailstock OPTION

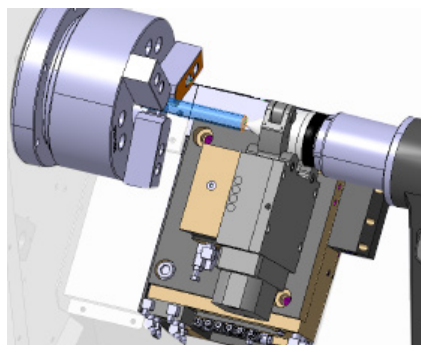
Moves independently from any other units, reducing cycle time. The servo type tailstock can drill\* the workpiece.

*\*Drill function is an optional extra.*



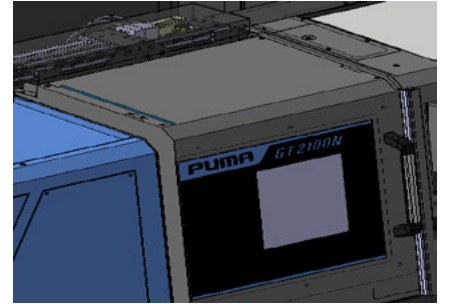
## Steadyrest OPTION

The user can machine the short length workpiece without removing the steadyrest.



## Servo motor type auto door OPTION

Reduce cycle times by setting the stop position and controlling the speed.



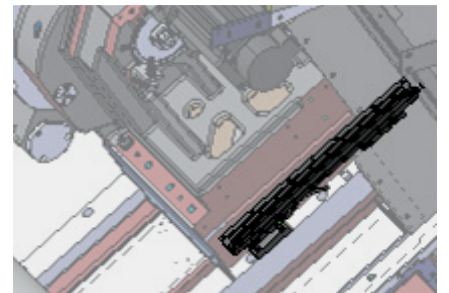
## Mist collector OPTION

The mist collector absorbs airborne oil vapor and fine dust particles in the system to improve the working environment.



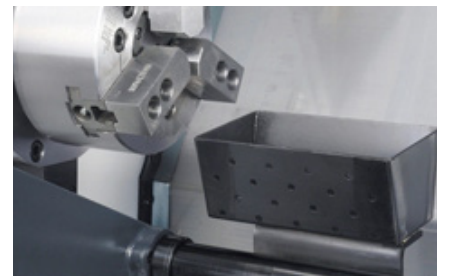
## Linear scale (X/Z-axis) OPTION

Linear scales are available for all axes and deliver increased accuracy.



## Parts catcher OPTION

Automatically catches finished parts and transfers them securely to downstream processes.



# DN SOLUTIONS FANUC i PLUS

DN Solutions Fanuc i Plus maximizes 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
- Ergonomic operator panel
- 2MB Memory
- Hot keys



## iHMI touchscreen

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

## Range of applications

Suitable for various applications related to planning, machining, improvement and utility.



## SKETCH-TURN OPTION

### DN Solutions conversational programming software for PC

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



Division	Item	Specifications	2-Axis	M
			DN Solutions Fanuc i Plus	DN Solutions Fanuc i Plus
Controlled axis	Controlled axes		2(X,Z)	3(X,Z,C)
	Simultaneously controlled axes		2 axes	3 axes
Data input/output	Fast data server		○	○
	Memory card input/output		●	●
	USB memory input/output		●	●
	Larger capacity memory_2GB		○	○
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		●	●
	EZ WORK		●	●
Setting and display	CNC screen dual display function		●	●
Network	FANUC MTConnect		✳	✳
	FANUC OPC UA		✳	✳
Others	Display unit	15" color LCD	X	X
		15" color LCD with Touch Panel	●	●
	Part program storage size & Number of registerable programs	640M(256KB)_500 programs	X	X
	5120M(2MB)_1000 programs	●	●	

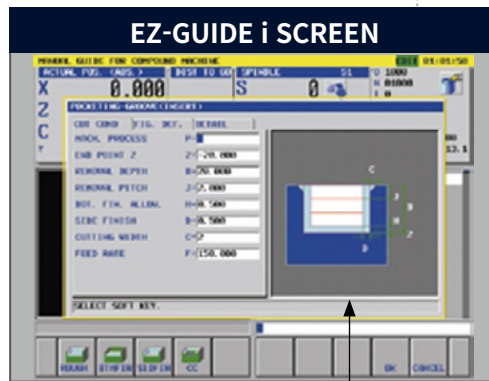
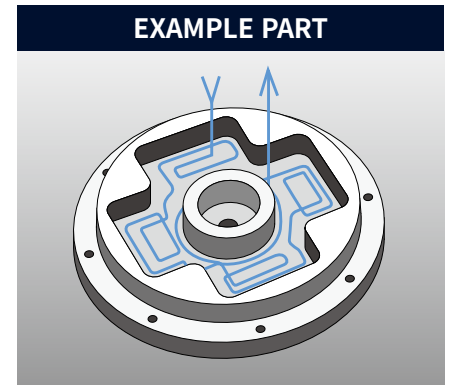
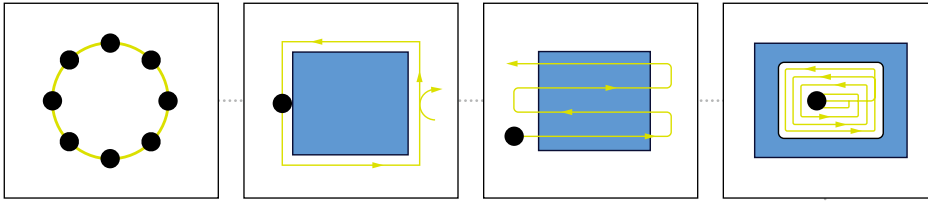
Network: FANUC MTConnect and FANUC OPC UA available.

● 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



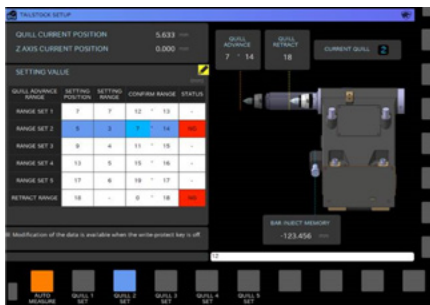
#### Automatic creation of cutting program

```
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 ;
```

Enter the dimensions of the shape

A cutting program is automatically created with the entered values.

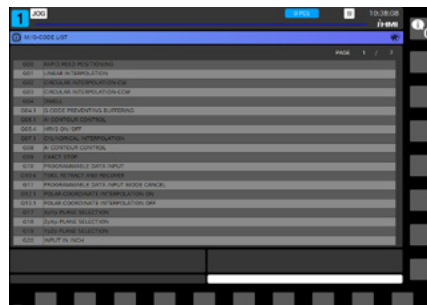
### EZ Work



#### Tailstock quill position detection function

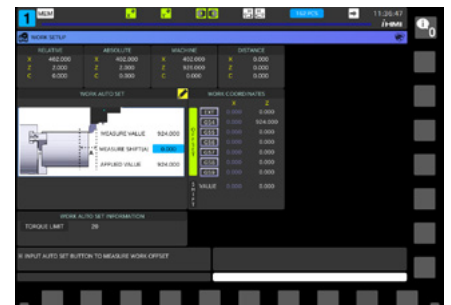
The user can set the tailstock position minutely with sensor. This function is able to recall the positions that the user had set. It can reduce the setting time.

### Programming



#### G code / M code

The user can check the explanation of G code and M code in EZ Work.



#### Workpiece setting OPTION

By measuring the position of the workpiece, the user sets the offset manually or automatically.

### Operation / Maintenance



#### Tool load monitoring

During cutting, abnormal load caused by wear or damage of the tool is detected and an alarm is triggered to prevent further damage.



#### Thermal compensation OPTION

Sensors check and calculate the displacements and compensate it beforehand.



#### Work management

Capability of checking operation hours of the system, and quantity of finished workpieces.



# SIEMENS S828D

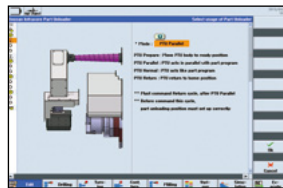
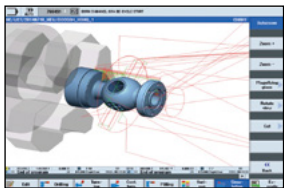


## 15.inch display + New OP

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

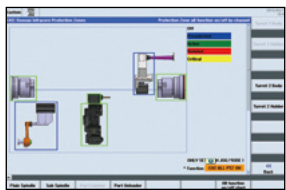


Shop-turn mode  
[various]  
[attachments]

## Cutting and operation support function

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

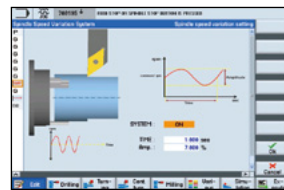
The automation elements (parts catcher, parts unloader etc.), can be easily controlled via interactive screens.



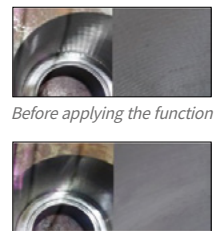
[Custom]  
[Protection zones]



[offset]  
[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 the spindle speed at an optimal level for precision threading and turning, making it possible to automatically improve surface finishes.

## NUMERIC CONTROL SPECIFICATIONS

SIEMENS

Division	Item	Specifications	2-Axis	M	S	MS	Y	SY
			S828D	S828D	S828D	S828D	S828D	S828D
Controlled axis	Controlled axes		X,Z,C1	X,Z,C1,C2	X,Z,C1,C3,B	X,Z,C1,C2,C3,B	X,Z,C1,C2,Y	X,Z,C1,C2,Y,C3,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)		●	●	●	●	●	●
	On network drive (without EES option, Extcall)		●	●	●	●	●	●
Operation	On USB storage medium, e.g. memory stick	(without EES option, Extcall)	●	●	●	●	●	●
	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
	3D simulation, finished part		●	●	●	●	●	●
Programming & Editing function	Simultaneous recording		●	●	●	●	●	●
	DXF Reader for PC integrated in SINUMERIK Operate		○	○	○	○	○	○
Operation Guidance Function	Shopturn		●	●	●	●	●	●
	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 5MB		●	●	●	●	●
		CNC user memory 100 MB		○	○	○	○	○
		CNC user memory 6GB		X	X	X	X	X
		CNC user memory 40GB (with PCU or IPC)		X	X	X	X	X
		CNC user memory without limit(Execution from external storage devices)(EES / Using by USB or Network)		○	○	○	○	○
		HMI user memory for CNC part program 6GB		X	X	X	X	X

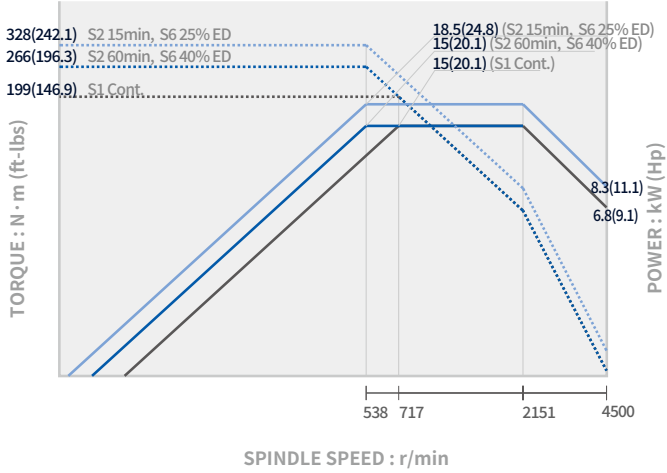
● Standard ○ Optional X N/A ⊗ Available



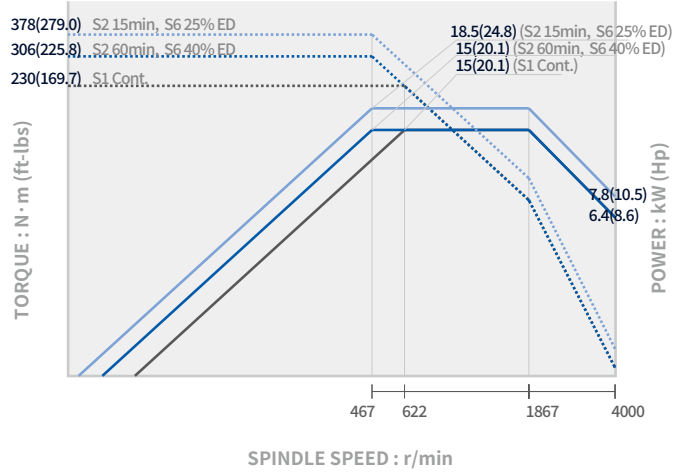
# POWER | TORQUE

## Main spindle

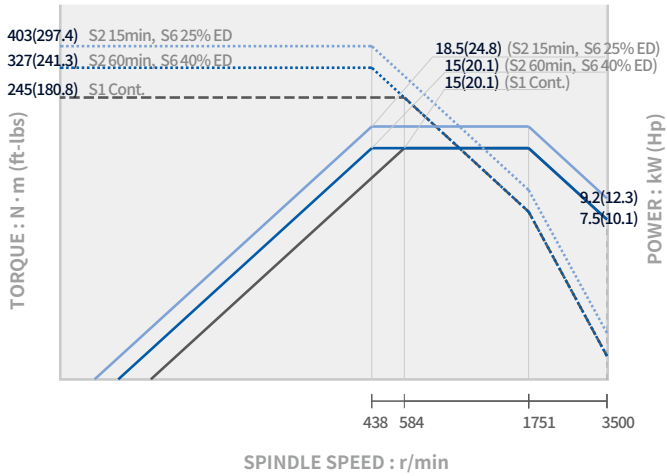
**PUMA DNT2100/M**



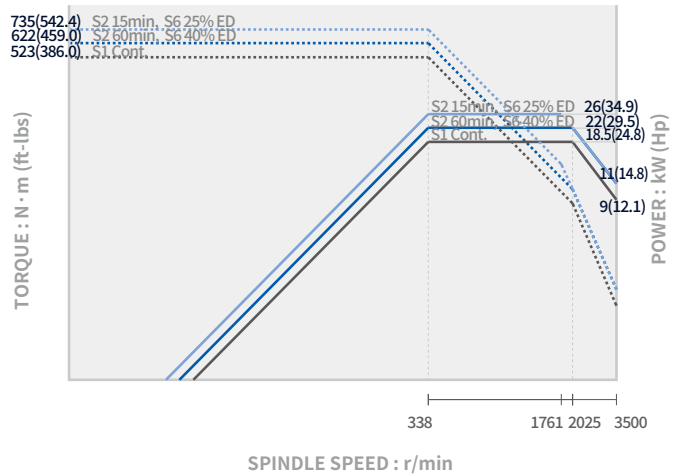
**PUMA DNT2100/M (High Torque) OPTION**



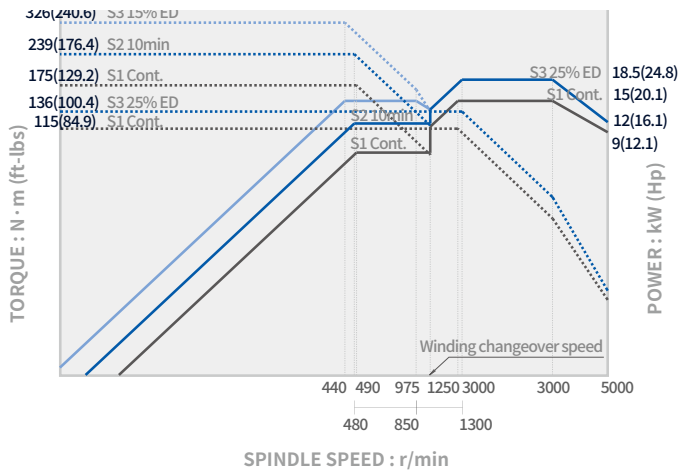
**PUMA DNT2100B/MB**



**PUMA DNT2600/M/L/LM**



**PUMA DNT2100/M (Built-in) OPTION**



# POWER | TORQUE

ROTARY TOOL\_PUMA DNT2100M/2100MB/2600M/2600LM

## BMT55P / 6000 r/min

Max. spindle speed

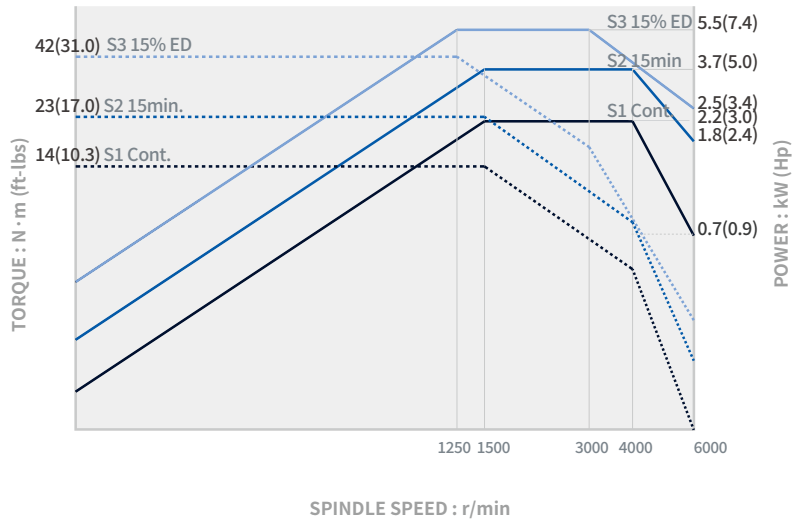
**6000** r/min

Max. spindle power

**5.5** kw (7.4 Hp)

Max. spindle torque

**42** N·m (31.0 inch)



## BMT55P / 10000 r/min

Max. spindle speed

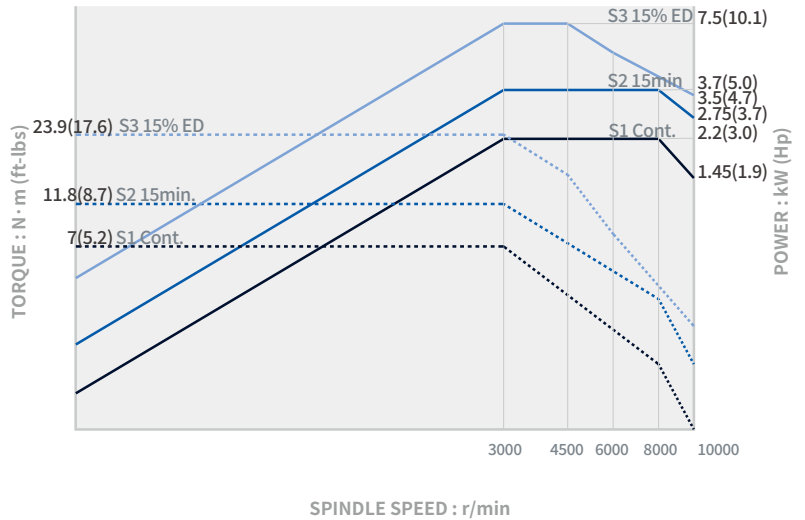
**10000** r/min

Max. spindle power

**7.5** kw (10.1 Hp)

Max. spindle torque

**23.9** N·m (17.6 inch)



## BMT65P / 5000 r/min

Max. spindle speed

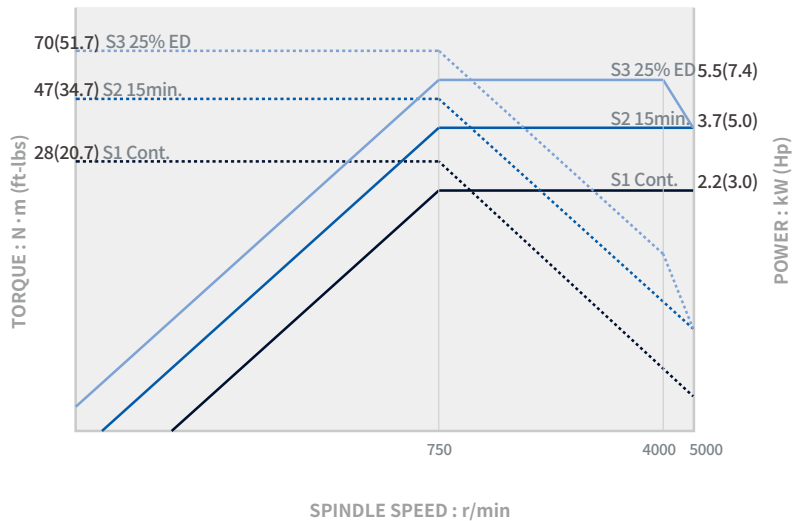
**5000** mm

Max. spindle power

**5.5** kw (7.4 Hp)

Max. spindle torque

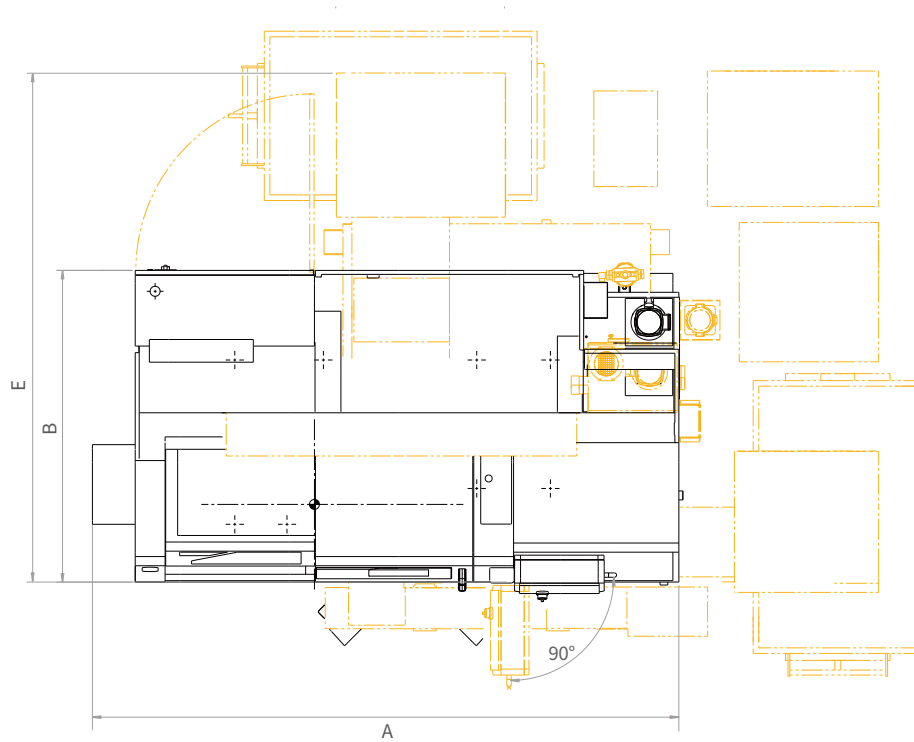
**70** N·m (51.7 inch)



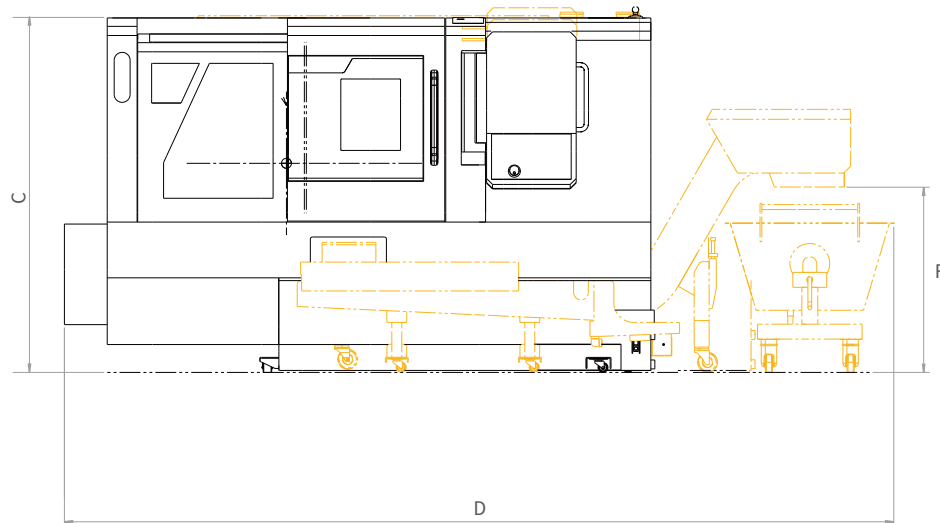
# EXTERNAL DIMENSIONS

PUMA DNT2100/2600/2600L series

TOP



FRONT



Units : mm (inch)

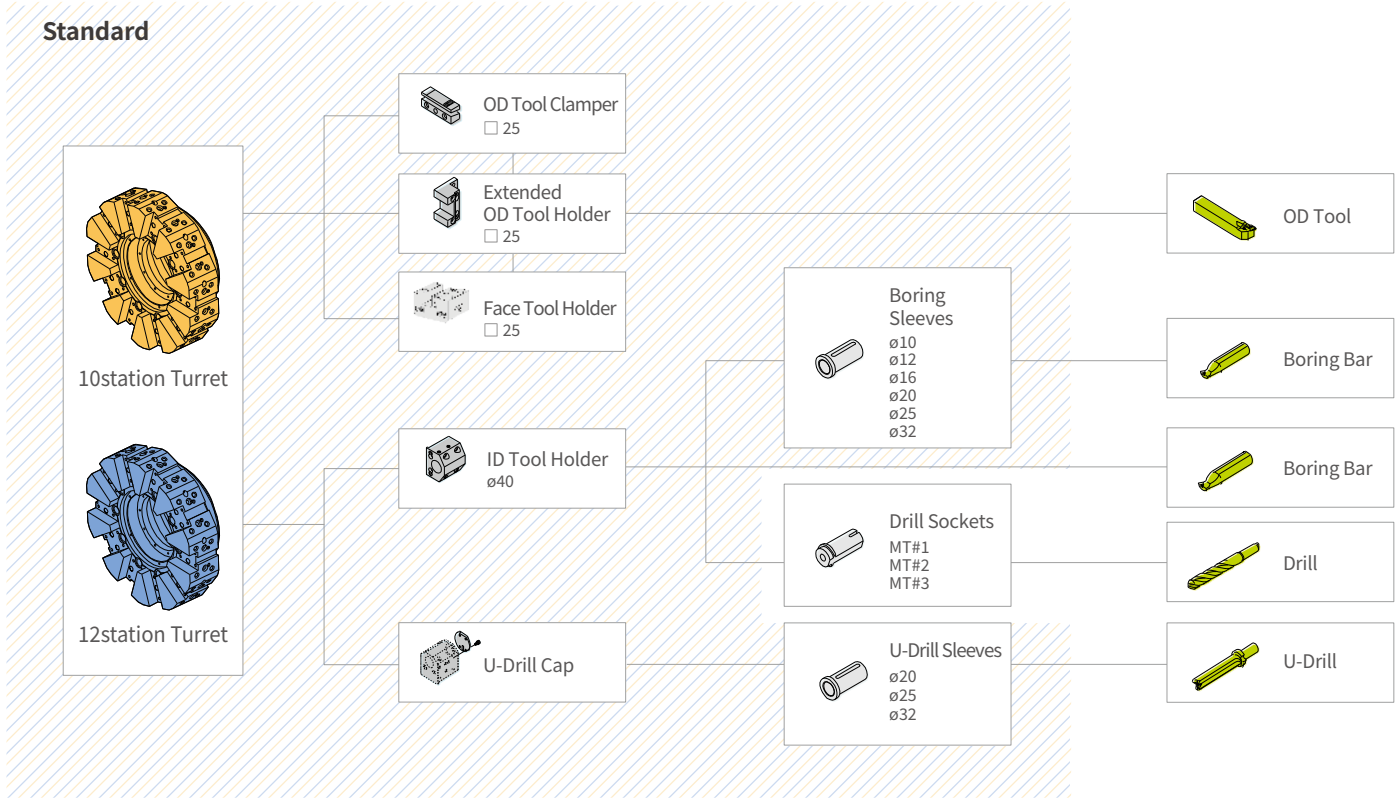
Model	A (Length)	B (Width)	C (Height)	D (Length with side type chip conveyor)	E (Width with rear type chip conveyor)	F (Height of chip outlet)**
PUMA DNT2100/B	2945 (115.9)	1664 (65.5)	1780 (70.1)	4165 (164.0)	2654 (104.5)	918 (36.1)
PUMA DNT2600	3355 (132.1)	1729 (68.1)	1780 (70.1)	4580 (180.3)	2910 (114.6)	918 (36.1)
PUMA DNT2600L	3800 (149.6)	1839 (72.4)	1780 (70.1)	5130 (202.0)	-	918 (36.1)

\* Some peripheral equipment can be placed in other places. \*\* HINGED BELT C/C

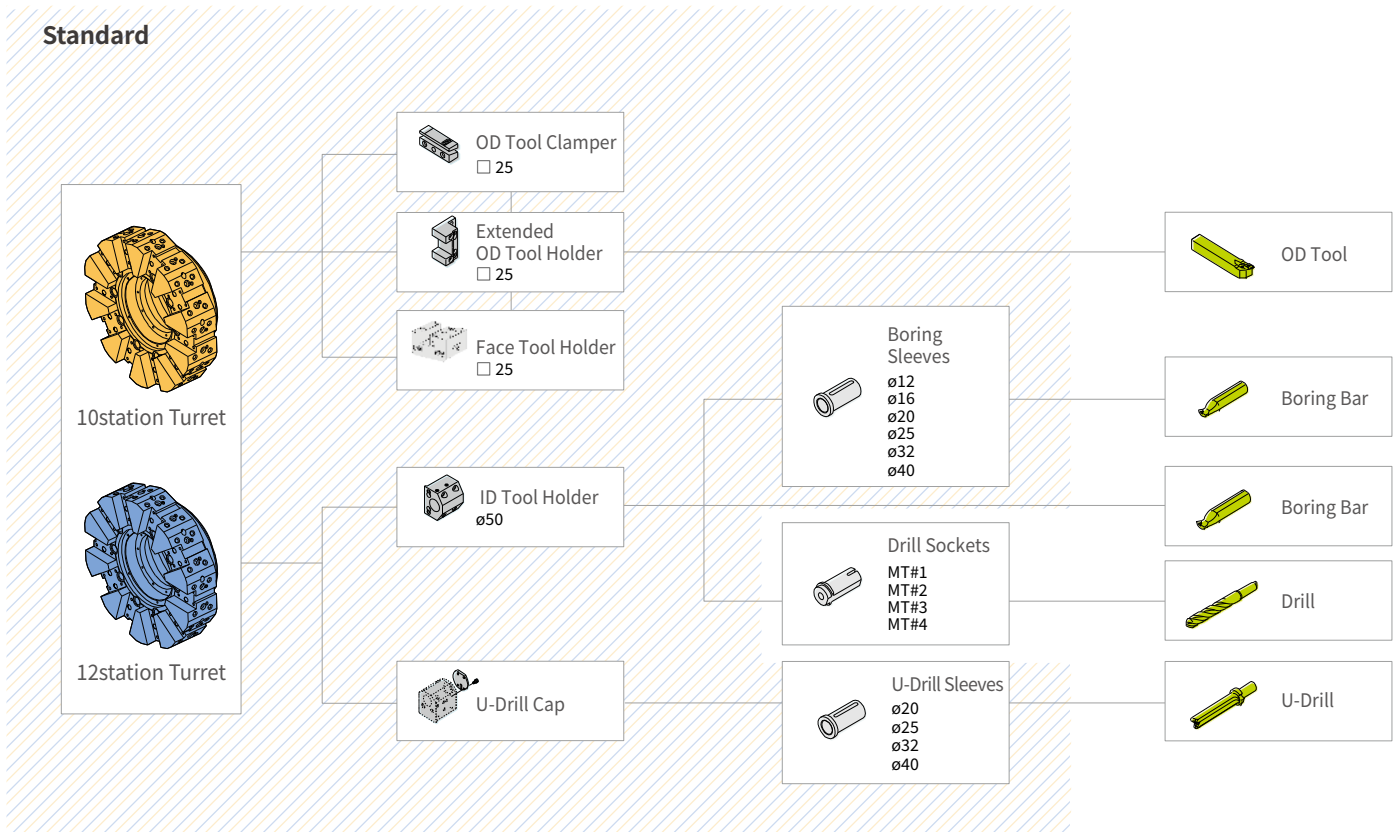
# TOOLING SYSTEM

Units : mm (inch)

## PUMA DNT2100/B\_2axis



## PUMA DNT2600/L\_2axis

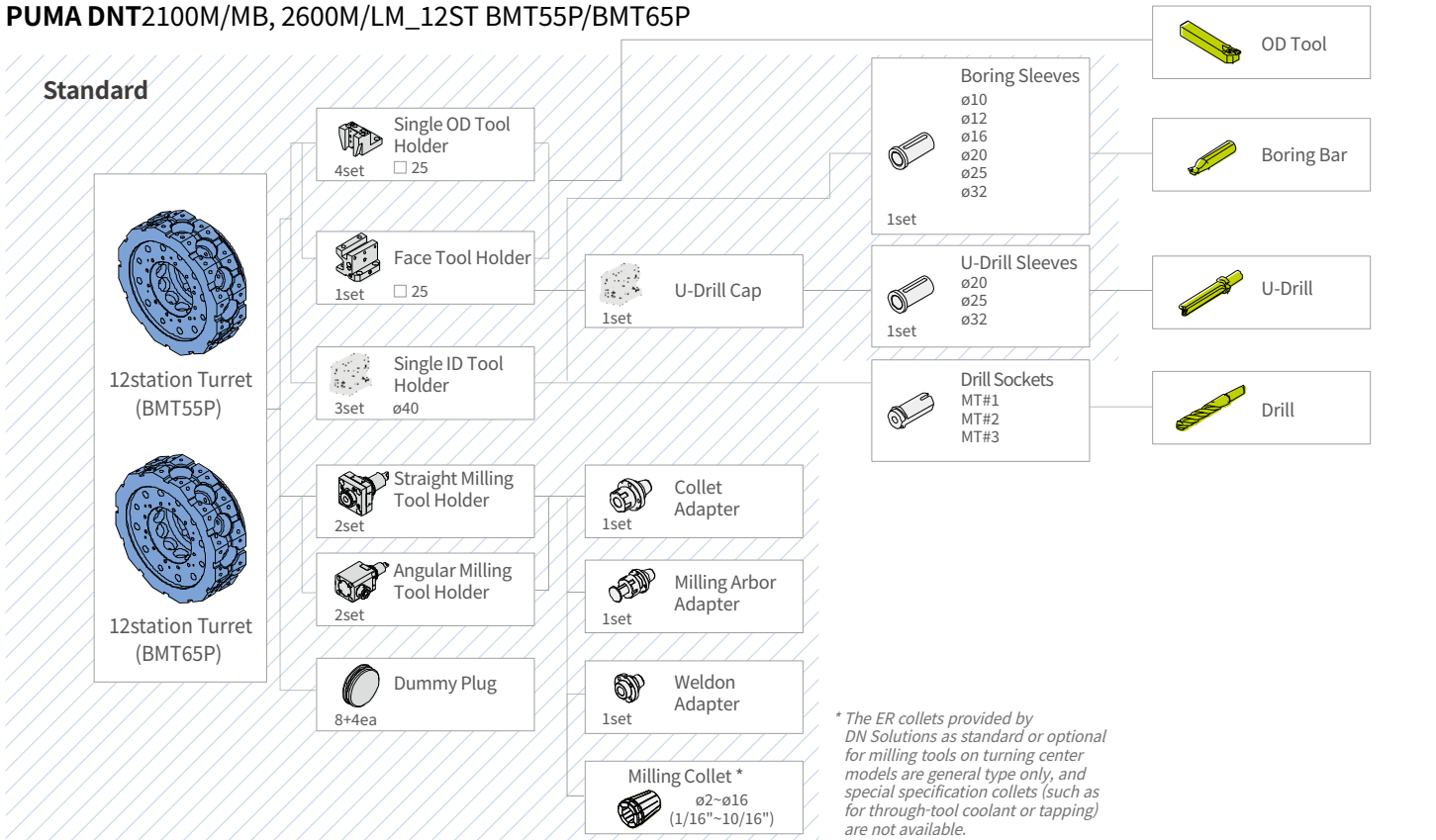




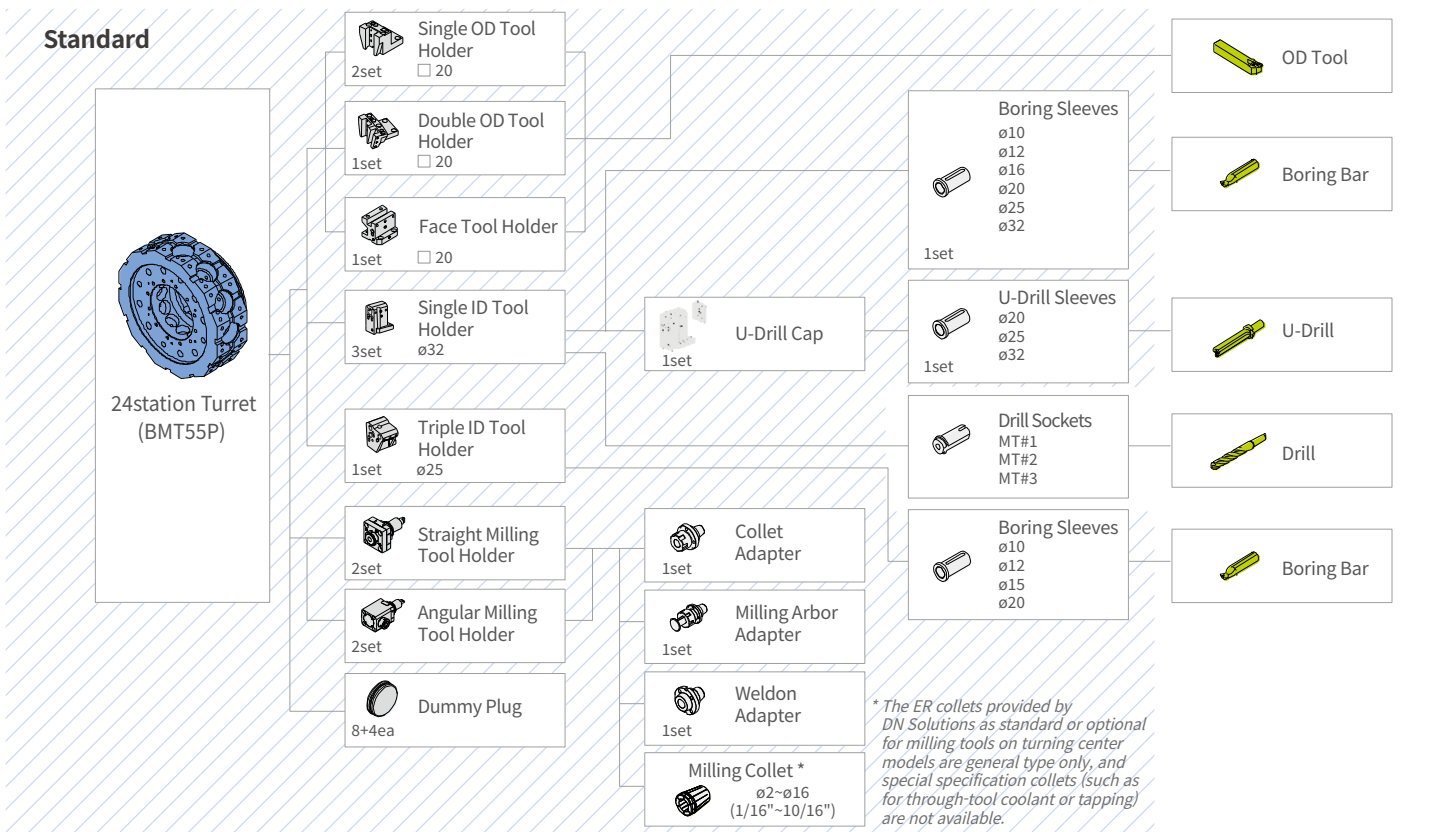
# TOOLING SYSTEM

## PUMA DNT2100M/MB, 2600M/LM\_12ST BMT55P/BMT65P

Units : mm (inch)



## PUMA DNT2100M/MB, 2600M/LM\_12ST(24 POSITION) BMT55P



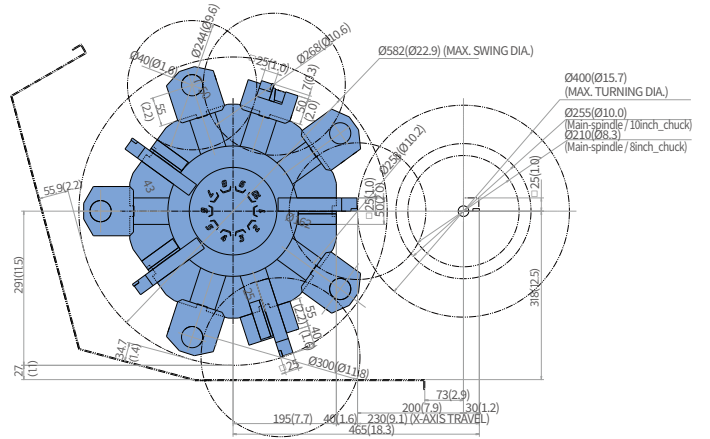
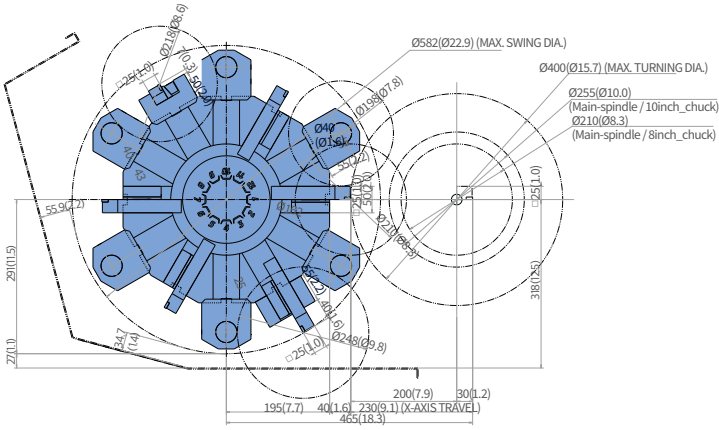
# TOOL INTERFACE

Units : mm (inch)

## PUMA DNT2100 / B

12 station

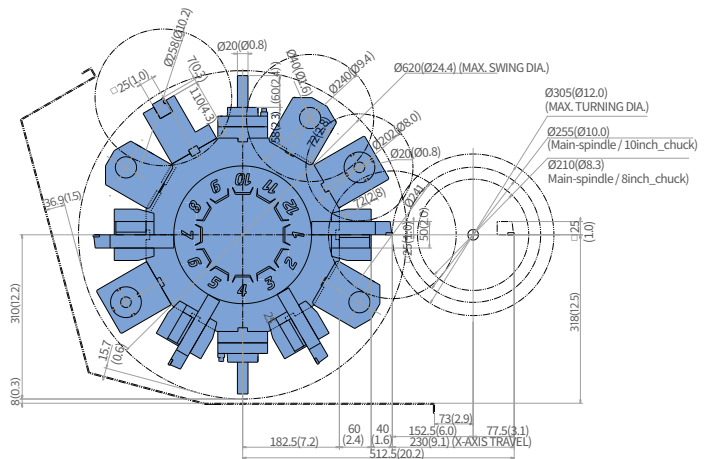
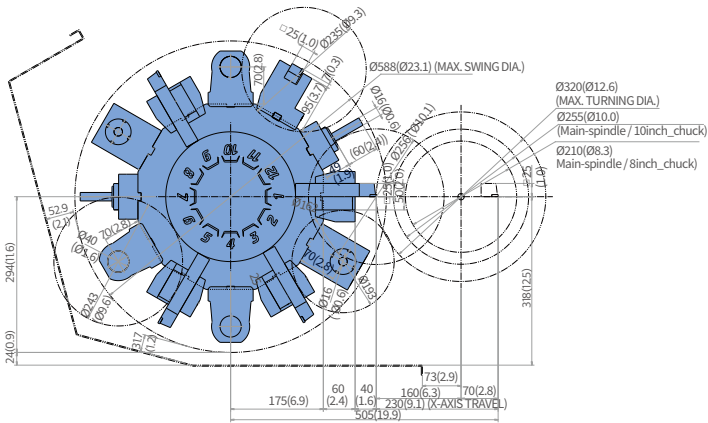
10 station



## PUMA DNT2100M/MB

12 station\_BMT55P

12 station\_BMT65P OPTION



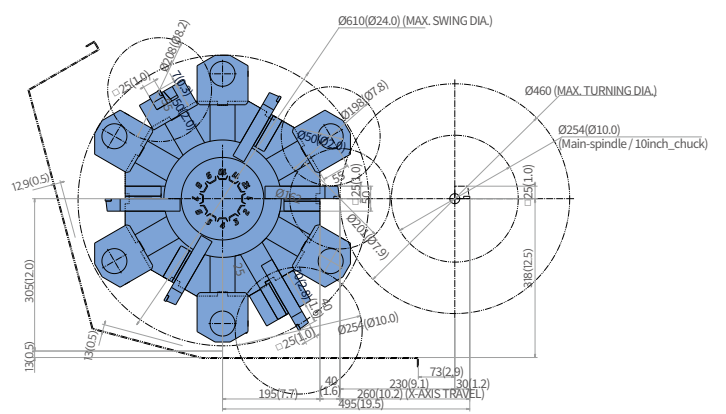
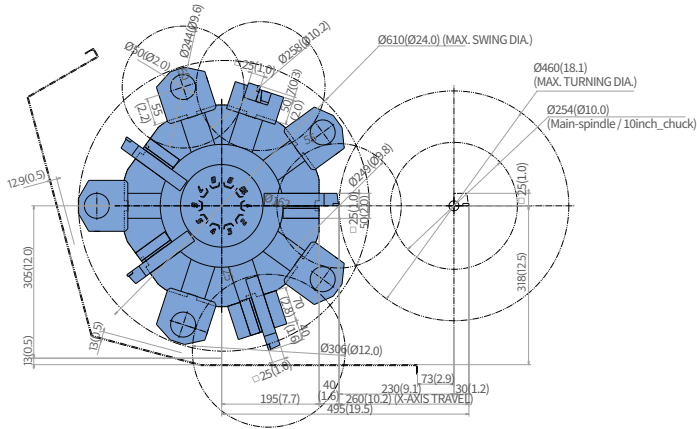
# TOOL INTERFACE

Units : mm (inch)

## PUMA DNT2600/L

10 station

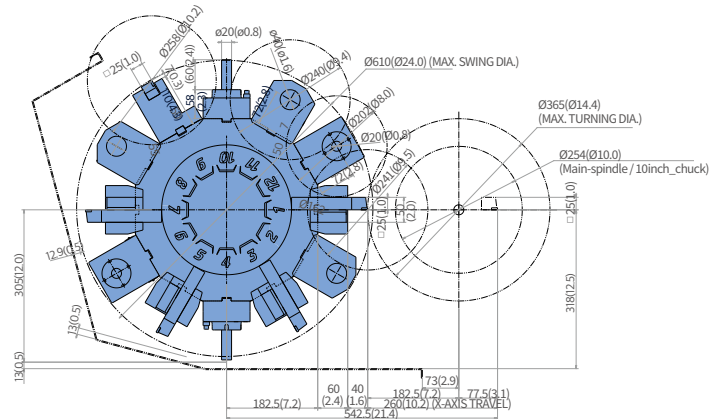
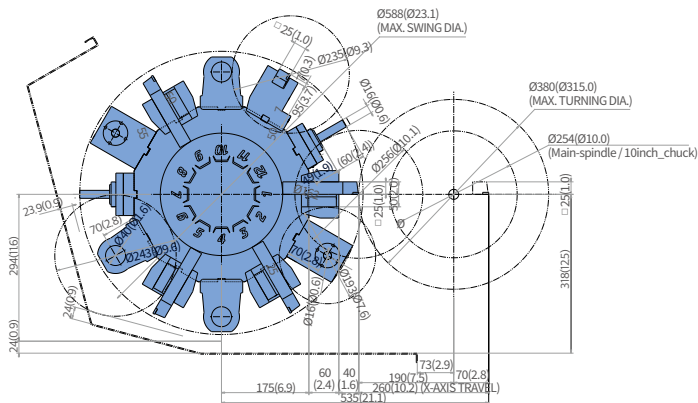
12 station **OPTION**



## PUMA DNT2600M/LM

12 station\_BMT55P

12 station\_BMT65P **OPTION**

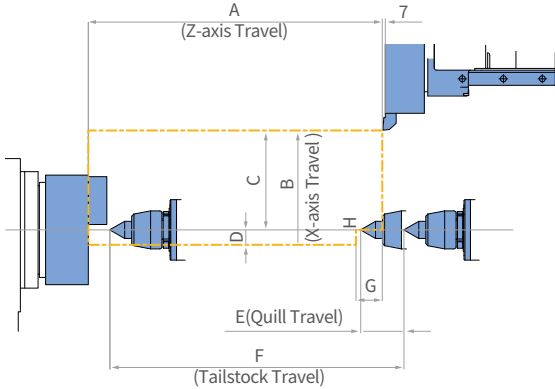


# WORKING RANGE

PUMA DNT2100/B·2600/L(2-axis)

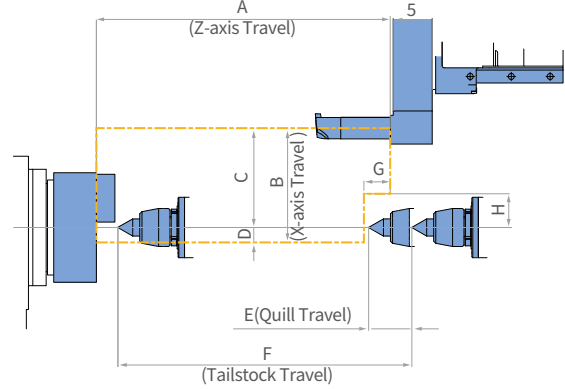
Units : mm (inch)

## OD CLAMPER



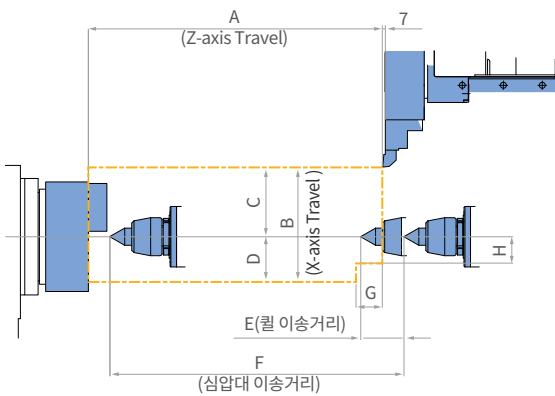
Model	A	B	C	D	E	F	G	H
PUMA DNT2100M	580 (22.8)	230 (9.1)	200 (7.9)	30 (1.2)	100 (3.9)	580(22.8) (STS 600(23.6))	40 (1.6)	-10 (-0.4)
PUMA DNT2100MB								
PUMA DNT2600M	680 (26.8)	260 (10.2)	230 (9.1)	30 (1.2)	100 (3.9)	680 (26.8) (STS700)	80 (3.1)	0
PUMA DNT2600ML	1100 (43.3)					1100 (43.3) (STS1120)		

## ID HOLDER



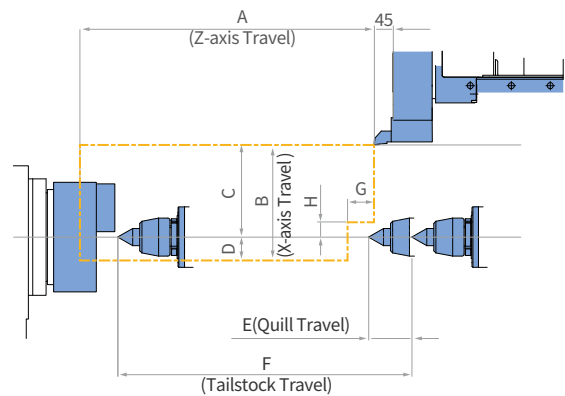
Model	A	B	C	D	E	F	G	H
PUMA DNT2100M	580 (22.8)	230 (9.1)	185 (7.3)	45 (1.8)	100 (3.9)	580 (STS 600)	45 (1.8)	35 (1.4)
PUMA DNT2100MB								
PUMA DNT2600M	680 (26.8)	260 (10.2)	215 (8.5)	45 (1.8)	100 (3.9)	680 (STS700)	75 (3.0)	75 (3.0)
PUMA DNT2600ML	1100 (43.3)					1100 (STS1120)		

## EXTENDED OD HOLDER



Model	A	B	C	D	E	F	G	H
PUMA DNT2100M	580 (22.8)	230 (9.1)	145 (5.7)	85 (3.3)	100 (3.9)	580(22.8) (STS 600(23.6))	40 (1.6)	-65 (-2.6)
PUMA DNT2100MB								
PUMA DNT2600M	680 (26.8)	260 (10.2)	160 (6.3)	100 (3.9)	100 (3.9)	680 (26.8) (STS700)	70 (2.8)	-30 (-1.2)
PUMA DNT2600ML	1100 (43.3)					1100 (43.3) (STS1120)		

## FACE TOOL HOLDER



Model	A	B	C	D	E	F	G	H
PUMA DNT2100M	580 (22.8)	230 (9.1)	183 (7.2)	47 (1.9)	100 (3.9)	580(22.8) (STS 600(23.6))	25 (1.0)	-47 (-1.9)
PUMA DNT2100MB								
PUMA DNT2600M	680 (26.8)	260 (10.2)	213 (8.4)	47 (1.9)	100 (3.9)	680 (26.8) (STS700)	70 (2.8)	35 (1.4)
PUMA DNT2600ML	1100 (43.3)					1100 (43.3) (STS1120)		

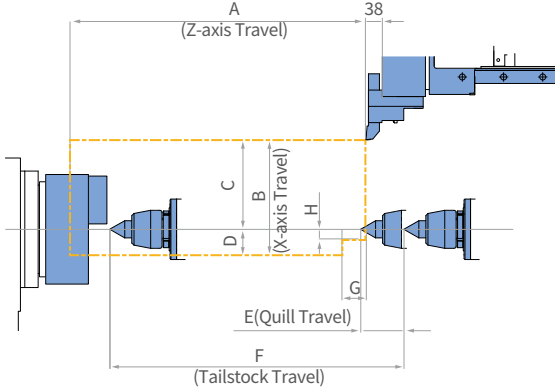


# WORKING RANGE

PUMA DNT2100M/2100MB·2600M/LM

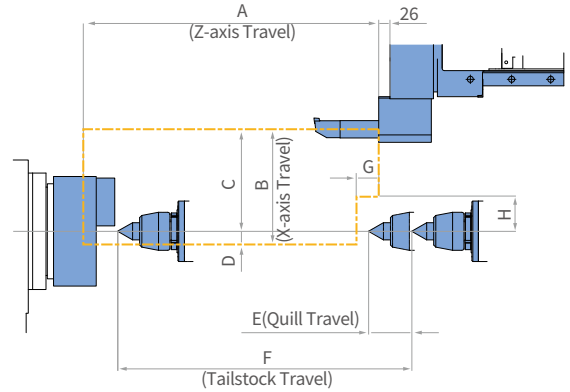
Units : mm (inch)

### OD HOLDER



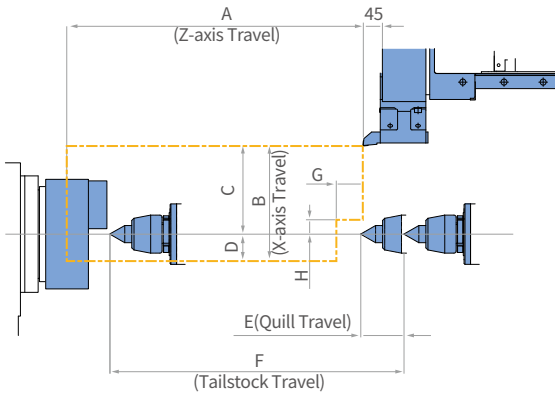
Model	A	B	C	D	E	F	G	H
<b>PUMA DNT2100M</b>	580	230	160	70	100	580(22.8)	0	0
<b>PUMA DNT2100MB</b>	(22.8)	(9.1)	(6.3)	(2.8)	(3.9)	(STS 600(23.6))		
<b>PUMA DNT2600M</b>	680	260	190	70	100	680	75	-40
	(26.8)	(10.2)	(7.5)	(2.8)	(3.9)	(26.8) (STS700)	(3.0)	(-1.6)
<b>PUMA DNT2600ML</b>	1100					1100		
	(43.3)					(43.3) (STS1120)		

### ID HOLDER



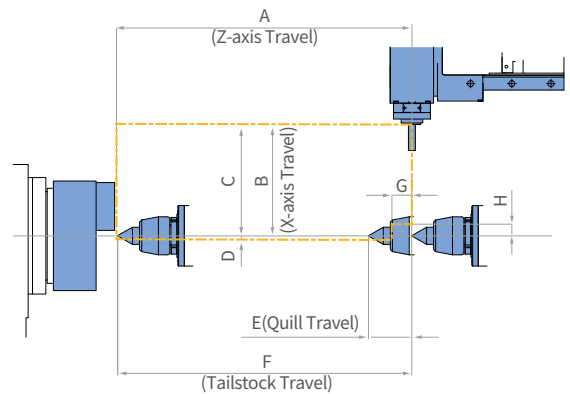
Model	A	B	C	D	E	F	G	H
<b>PUMA DNT2100M</b>	580	230	190	40	100	580(22.8)	15	40
<b>PUMA DNT2100MB</b>	(22.8)	(9.1)	(7.5)	(1.6)	(3.9)	(STS 600(23.6))	(0.6)	(1.6)
<b>PUMA DNT2600M</b>	680	260	220	40	100	680	55	60
	(26.8)	(10.2)	(8.7)	(1.6)	(3.9)	(26.8) (STS700)	(2.2)	(2.4)
<b>PUMA DNT2600ML</b>	1100					1100		
	(43.3)					(43.3) (STS1120)		

### FACE TOOL HOLDER



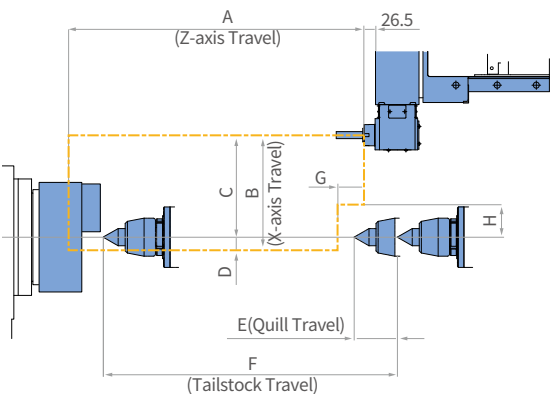
Model	A	B	C	D	E	F	G	H
<b>PUMA DNT2100M</b>	580	230	158	72	100	580(22.8)	10	5
<b>PUMA DNT2100MB</b>	(22.8)	(9.1)	(6.2)	(2.8)	(3.9)	(STS 600(23.6))	(0.4)	(0.2)
<b>PUMA DNT2600M</b>	680	260	188	72	100	680	70	20
	(26.8)	(10.2)	(7.4)	(2.8)	(3.9)	(26.8) (STS700)	(2.8)	(0.8)
<b>PUMA DNT2600ML</b>	1100					1100		
	(43.3)					(43.3) (STS1120)		

### STRAIGHT MILLING HOLDER



Model	A	B	C	D	E	F	G	H
<b>PUMA DNT2100M</b>	580	230	214	16	100	580(22.8)	0	0
<b>PUMA DNT2100MB</b>	(22.8)	(9.1)	(8.4)	(0.6)	(3.9)	(STS 600(23.6))		
<b>PUMA DNT2600M</b>	680	260	244	16	100	680	40	15
	(26.8)	(10.2)	(9.6)	(0.6)	(3.9)	(26.8) (STS700)	(1.6)	(0.6)
<b>PUMA DNT2600ML</b>	1100					1100		
	(43.3)					(43.3) (STS1120)		

### ANGULAR MILLING HOLDER



Model	A	B	C	D	E	F	G	H
<b>PUMA DNT2100M</b>	580	230	190	40	100	580(22.8)	5	40
<b>PUMA DNT2100MB</b>	(22.8)	(9.1)	(7.5)	(1.6)	(3.9)	(STS 600(23.6))	(0.2)	(1.6)
<b>PUMA DNT2600M</b>	680	260	220	40	100	680	70	60
	(26.8)	(10.2)	(8.7)	(1.6)	(3.9)	(26.8) (STS700)	(2.8)	(2.4)
<b>PUMA DNT2600ML</b>	1100					1100		
	(43.3)					(43.3) (STS1120)		

\* for H: (-) Downward direction of spindle center line / (+) Upward direction of spindle center line

\* This working range is based on BMT55P/12ST. For more the detailed information of 12ST(24 position)/BMT55P, 12ST/BMT65P, please contact sales person

# MACHINE SPECIFICATIONS

Description		Unit	PUMA DNT 2100	PUMA DNT 2100M	PUMA DNT 2100B	PUMA DNT 2100MB	PUMA DNT 2600 [L]	PUMA DNT 2600M [LM]
Capacity	Swing over bed	mm (inch)	650 (25.6)		650 (25.6)		650 (25.6)	
	Swing over saddle	mm (inch)	460 (18.1)		460 (18.1)		460 (18.1)	
	Recommended turning dia.	mm (inch)	210 (8.3)		255 (10.0)		255 (10.0)	
	Max. turning dia.	mm (inch)	400 (15.7)	320 (12.6) (BMT55P) 305 (12.0) (BMT65P)	400 (15.7)	320 (12.6) (BMT55P) 305 (12.0) (BMT65P)	460 (18.1)	380 (15.0) (BMT55P) 365 (14.4) (BMT65P)
	Max turning length	mm (inch)	562 (22.1)	513 (20.2) (BMT55P) 506 (188.0) (BMT65P)	550 (21.7)	501 (19.7) (BMT55P) 494 (19.4) (BMT65P)	658 (25.9) [1078 (42.4)]	610 (24.0) [1030 (188.0)] (BMT55P) 603 (188.0) [1023 (40.3)] (BMT65P)
	Chuck size	inch	8 {10}		10		10 {12}	
	Bar working dia.	mm (inch)	67 (2.6)		81 (3.2)		81 (3.2)	
Travels	Travel distance	X-axis	230 (9.1)		230 (9.1)		260 (10.2)	
		Z-axis	580 (22.8)		580 (22.8)		680 (26.8) [1100 (43.3)]	
Feedrates	Rapid traverse rate	X-axis	24 (944.9)		24 (944.9)		24 (944.9)	
		Z-axis	30 (1181.1)		30 (1181.1)		30 (1181.1)	
Main spindle	Max. spindle speed	r/min	4500 {High torque 4000, Built-in 5000}		3500		3500	
	Main spindle motor power	kW (Hp)	18.5 / 15 / 15 (24.8 / 20.1 / 20.1) (S6 25% / S6 40% / S1 Cont.)		18.5 / 15 / 15 (24.8 / 20.1 / 20.1) (S6 25% / S6 40% / S1 Cont.)		26 / 22 / 18.5 (34.9 / 29.5 / 24.8) (S6 25% / S6 60% / S1 Cont.)	
	Max. spindle torque	N·m (lbf-ft)	328 (242.1) {High torque 378(279.0), Built-in 326(240.6)}		403 (297.4)		735 (542.4)	
	Spindle nose	ASA	A2-6		A2-8		A2-8	
	Spindle bearing diameter (Front)	mm (inch)	110 (4.3)		130 (5.1)		130 (5.1)	
	Spindle through hole	mm (inch)	76 (188.0)		91 (3.6)		91 (3.6)	
	Min. spindle Indexing angle (C-axis)	deg	-	0.001	-	0.001	-	0.001
Turret	No. of tool stations	ea	12		10 {12}	12	10 {12}*	12
	OD tool size	mm (inch)	25 x 25 (1.0 x 1.0)		25 x 25 (1.0 x 1.0)		25 x 25 (1.0 x 1.0)	
	Max. boring bar size	mm (inch)	Ø40 (Ø1.6)		Ø40 (Ø1.6)		Ø50 (Ø2.0)	Ø40 (Ø1.6)
	Turret Indexing time (1 station swivel)	s	0.15		0.15		0.15	
	BMT55P	-	-	6000 r/min 5.5 kW (7.4 Hp)	-	6000 r/min 5.5 kW (7.4 Hp)	-	6000 r/min 5.5 kW (7.4 Hp)
	BMT55P	-	-	10000 r/min 7.5 kW (10.1 Hp)	-	10000 r/min 7.5 kW (10.1 Hp)	-	10000 r/min 7.5 kW (10.1 Hp)
	BMT65P	-	-	5000 r/min 5.5 kW (7.4 Hp)	-	5000 r/min 5.5 kW (7.4 Hp)	-	5000 r/min 5.5 kW (7.4 Hp)
Tailstock	Tailstock travel	mm (inch)	580 (22.8)		580 (22.8)		680 (26.8) [1100 (43.3)]	
	Quill diameter	mm (inch)	80 (3.1)		80 (3.1)		100 (3.9)	
	Quill travel	mm (inch)	100 (3.9)		100 (3.9)		100 (3.9)	
	Quill bore taper	MT	MT#4 {#3(Dead)}*		MT#4 {#3(Dead)}*		MT#5 {#4(Dead)}*	
Power source	Electric power supply (rated capacity)	kVA	31.14		31.14		34.53	
Machine dimensions	Length	mm (inch)	2945 (115.9) {Built-in 2760(108.7)}		2945 (115.9)		3355 (132.1) [3800 (149.6)]	
	Width	mm (inch)	1664 (65.5)		1664 (65.5)		1729 (68.1) [1839 (72.4)]	
	Height	mm (inch)	1780 (70.1)		1780 (70.1)		1780 (70.1)	
	Weight	kg (lbf)	3700 (8157.0)	3800 (8377.4)	3800 (8377.4)	3900 (8597.9)	4300 [4900] (9479.7 [10802.5])	4350 [4950] (9590.0 [10912.7])
Control	NC system	DN Solutions Fanuc i Plus						

\* BMT55P's specification. (BMT65P : 12ST / 5,000r/min / 5.5kW) \* {} : option

# RESPONDING TO CUSTOMERS **ANYTIME, ANYWHERE**

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- Scheduled preventive maintenance
- Machine repair service



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- Provides technical consultancy

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