

# BBT/BT SHANK

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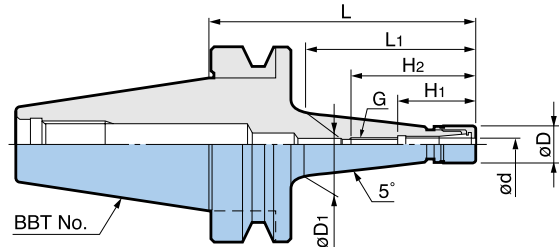


# MEGA MICRO CHUCK<sup>®</sup> PAT. Clamping Range : $\varnothing 0.45 - \varnothing 6.05$

Type T

Taper-off design minimizes interference and maximizes rigidity.

MAX.  
40,000  
min<sup>-1</sup>



BIG-PLUS tools can be used in machining centers with conventional spindles.

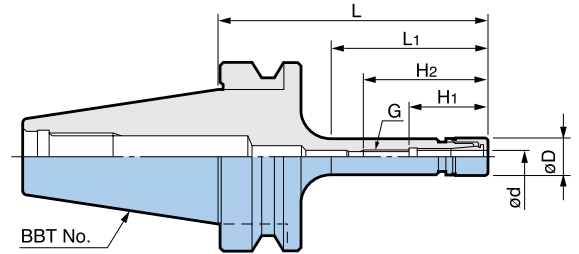
Model	Clamping Range $\varnothing d$	$\varnothing D$	$\varnothing D_1$	L	L1	H1	H2	G	MAX. min <sup>-1</sup>	Collet Model	Nut Model	Weight (kg)
<b>BBT30-MEGA3S- 45T</b>	0.45 – 3.25	10	11.5	45	20	22	38	M4 P0.7	40,000	NBC3S-□	MGN3S	0.38
- 75T			15.7	75	47				40,000			0.42
- 90T			18.3	90	62				35,000			0.45
-105T			21.0	105	77				30,000			0.49
<b>-MEGA4S- 60T</b>	0.45 – 4.05	12	14.8	60	32	26.5	47	M5 P0.8	40,000	NBC4S-□	MGN4S	0.40
- 75T			17.4	75	47				40,000			0.43
- 90T			20.0	90	62				35,000			0.46
-105T			22.6	105	77				30,000			0.50
<b>-MEGA6S- 60T</b>	0.45 – 6.05	14	16.3	60	32	28.5	49	M7 P0.75	40,000	NBC6S-□	MGN6S	0.41
- 75T			18.9	75	47				40,000			0.44
- 90T			21.6	90	62				35,000			0.47
-105T			24.2	105	77				30,000			0.52
<b>-120T</b>			26.8	120	92			25,000			0.58	
<b>BBT40-MEGA3S- 60T</b>	0.45 – 3.25	10	12.2	60	27	22	38	M4 P0.7	35,000	NBC3S-□	MGN3S	0.99
- 90T			17.5	90	57				28,000			1.04
-120T			22.7	120	87				22,000			1.12
<b>-MEGA4S- 60T</b>	0.45 – 4.05	12	13.9	60	27	26.5	47	M5 P0.8	35,000	NBC4S-□	MGN4S	1.00
- 75T			16.5	75	42				32,000			1.02
- 90T			19.1	90	57				28,000			1.05
-105T			21.8	105	72				25,000			1.08
<b>-120T</b>			24.4	120	87			22,000			1.13	
<b>-135T</b>			27.0	135	102			20,000			1.20	
<b>-MEGA6S- 60T</b>	0.45 – 6.05	14	15.4	60	27	28.5	49	M7 P0.75	35,000	NBC6S-□	MGN6S	1.01
- 75T			18.0	75	42				32,000			1.03
- 90T			20.7	90	57				28,000			1.06
-105T			23.3	105	72				25,000			1.10
-120T			25.9	120	87				22,000			1.15
-135T			28.6	135	102				20,000			1.22

1. MEGA NUT is included.

**Type S**

Micro diameter design is ideal for high speed applications in tight areas with small diameter cutting tools.






**MAX. 40,000 min<sup>-1</sup>**



**BIG-PLUS tools can be used in machining centers with conventional spindles.**

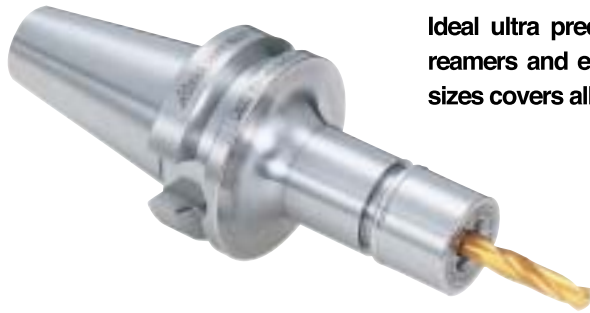
Model	Clamping Range ød	øD	L	L1	H1	H2	G	MAX. min <sup>-1</sup>	Collet Model	Nut Model	Weight (kg)
<b>BBT30-MEGA4S- 60</b>	0.45 – 4.05	12	60	32	26.5	47	M5 P0.8	40,000	NBC4S-□	MGN4S	0.40
<b>- 90</b>			90	62							0.43
<b>-MEGA6S- 60</b>	0.45 – 6.05	14	60	32	28.5	49	M7 P0.75		NBC6S-□	MGN6S	0.42
<b>- 90</b>			90	62							0.45
<b>-105</b>			105	77							0.47
<b>BBT40-MEGA4S- 60</b>	0.45 – 4.05	12	60	23	26.5	47	M5 P0.8		35,000	NBC4S-□	MGN4S
<b>- 90</b>			90	53				1.0			
<b>-MEGA6S- 60</b>	0.45 – 6.05	14	60	23	28.5	49	M7 P0.75	NBC6S-□		MGN6S	1.0
<b>- 90</b>			90	53							1.0

1. MEGA NUT is included.

	Spare Parts	Accessories			
	MEGA NUT 	MEGA WRENCH 	MICRO COLLET 	MICRO COLLET PROTECTIVE CASE 	α TAPER CLEANER 
MEGA MICRO CHUCK	Model	Model	Model	Model	Model
MEGA3S	<b>MGN3S</b>	<b>MGR10</b>	<b>NBC3S-□</b>	<b>NBB3S</b>	<b>SC-NBC3S</b>
MEGA4S	<b>MGN4S</b>	<b>MGR12</b>	<b>NBC4S-□</b>	<b>NBB4S</b>	<b>SC-NBC4S</b>
MEGA6S	<b>MGN6S</b>	<b>MGR14</b>	<b>NBC6S-□</b>	<b>NBB6S</b>	<b>SC-NBC6S</b>

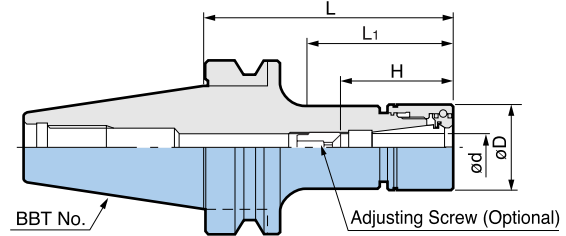
# MEGA NEW BABY CHUCK<sup>®</sup> PAT. Clamping Range : $\phi 0.25 - \phi 20$

Coolant-through hole



Ideal ultra precision holders for high speed machining with carbide drills, reamers and endmills. Wide range of lengths and a variety of collet series sizes covers all machining applications.

MAX.  
40,000  
min<sup>-1</sup>



BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Clamping Range $\phi d$	$\phi D$	L	L <sub>1</sub>	H	MAX. min <sup>-1</sup>	Collet Model	Nut Model	Weight (kg)
<b>BBT30-MEGA 6N- 60</b>	0.25 - 6	20	60	32	23 - 43	40,000	NBC 6-□	MGN 6	0.47
- 75			75	47		35,000			0.5
- 90			90	62		30,000			0.53
-105			105	77		20,000			0.56
-120			120	92		18,000			0.59
<b>-MEGA 8N- 60</b>	0.5 - 8	25	60	34	26 - 45	40,000	NBC 8-□	MGN 8	0.51
- 75			75	49		35,000			0.56
- 90			90	64		30,000			0.61
-105			105	79		20,000			0.67
-120			120	94		18,000			0.72
<b>-MEGA10N- 60</b>	1.5 - 10	30	60	34	38 - 48	40,000	NBC10-□	MGN10	0.54
- 75			75	49		30,000			0.61
- 90			90	64		25,000			0.68
-105			105	79		18,000			0.75
-120			120	94		15,000			0.82
<b>-MEGA13N- 60</b>	2.5 - 13	35	60	34	44 - 63	40,000	NBC13-□	MGN13	0.54
- 75			75	49		30,000			0.63
- 90			90	64		25,000			0.72
-105			105	79		18,000			0.82
-120			120	94		15,000			0.91
<b>-MEGA16N- 60</b>	2.5 - 16	42	60	36	48 - 63	35,000	NBC16-□	MGN16	0.66
- 75			75	51	25,000	0.81			
- 90			90	66	20,000	0.95			
-105			105	81	18,000	1.1			
<b>-MEGA20N- 60</b> ※			2.5 - 20	46	60	-			51
- 75	75	-			20,000	0.86			
- 90	90	-			15,000	1.0			
-105	105	-			13,000	1.15			

1. MEGA NUT is included.

2. "H" indicates the adjustment length with an Adjusting Screw.

※ Adjusting screw cannot be used with BBT30-MEGA20N-60. "H" is the max. tool shank length that can be inserted into the holder.

Spare Parts		Accessories						
	MEGA NUT 	MEGA WRENCH 	NBC COLLET P92 FOR ENDMILL COLLET P93 	SEALING NUT MEGA PERFECT SEAL P96 	ADJUSTING SCREW Rubber 			
MEGA NEW BABY CHUCK	Model	Model	Model	Model	Model	G	L	B
MEGA 6N	MGN 6	MGR20	NBC 6-□	MPS 6-□	NBA 6B	M 7	12	2
MEGA 8N	MGN 8	MGR25	NBC 8-□	MPS 8-□	NBA 8B	M 9	13	2.5
MEGA10N	MGN10	MGR30	NBC10-□	MPS10-□	NBA10B	M11	16	3
MEGA13N	MGN13	MGR35	NBC13-□	MPS13-□	NBA13B	M14	20	4
MEGA16N	MGN16	MGR42	NBC16-□	MPS16-□	NBA16B	M18	20	4
MEGA20N	MGN20	MGR46	NBC20-□	MPS20-□	NBA20B	M21	20	4

1. Please be aware that the rubber seal in the Adjusting Screw may be stripped off due to high pressure coolant.

BIG-PLUS tools can be used in machining centers with conventional spindles.

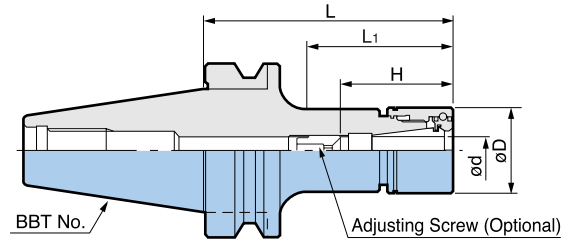
 For BBT50, refer to the following page.

Model	Clamping Range ød	øD	L	L1	H	MAX. min <sup>-1</sup>	Collet Model	Nut Model	Weight (kg)
<b>BBT40-MEGA 6N- 60</b>	0.25 – 6	20	60	23	23 – 43	35,000	NBC 6-□	MGN 6	1.0
- 75			75	38		35,000			1.05
- 90			90	53		35,000			1.1
-105			105	68		20,000			1.14
-120			120	83		20,000			1.18
-135			135	98		20,000			1.2
-165			165	128		14,000			1.2
-200			200	163		9,000			1.3
<b>-MEGA 8N- 60</b>			0.5 – 8	25		60			27
- 75	75	42			35,000	1.05			
- 90	90	57			35,000	1.1			
-105	105	72			20,000	1.14			
-120	120	87			20,000	1.18			
-135	135	102			20,000	1.3			
-165	165	132			14,000	1.3			
-200	200	167			9,000	1.4			
<b>-MEGA10N- 60</b>	1.5 – 10	30			60	26	38 – 48	35,000	NBC10-□
- 75			75	42	35,000	1.15			
- 90			90	57	35,000	1.2			
-105			105	72	20,000	1.27			
-120			120	87	20,000	1.34			
-135			135	102	20,000	1.4			
-165			165	132	15,000	1.5			
-200			200	167	10,000	1.7			
<b>-MEGA13N- 60</b>			2.5 – 13	35	60	31		44 – 63	
- 75	75	40			35,000	1.2			
- 90	90	55			35,000	1.3			
-105	105	70			20,000	1.4			
-120	120	85			20,000	1.5			
-135	135	100			20,000	1.6			
-165	165	130			15,000	1.8			
-200	200	165			10,000	2.0			
<b>-MEGA16N- 60</b>	2.5 – 16	42			60	31	48 – 68		30,000
- 75			75	40	30,000	1.3			
- 90			90	55	30,000	1.4			
-105			105	70	20,000	1.6			
-120			120	85	20,000	1.7			
-135			135	100	20,000	1.8			
-165			165	130	15,000	2.0			
-200			200	165	10,000	2.3			
<b>-MEGA20N- 60</b>			2.5 – 20	46	60	30		51 – 68	30,000
- 75	75	42			30,000	1.25			
- 90	90	57			30,000	1.4			
-105	105	72			20,000	1.6			
-120	120	87			20,000	1.8			
-135	135	102			20,000	1.9			
-165	165	132			15,000	2.1			
-200	200	167			10,000	2.5			

1. MEGA NUT is included.  
2. "H" indicates the adjustment length with an Adjusting Screw.

# MEGA NEW BABY CHUCK<sup>®</sup> PAT. Clamping Range : $\phi$ 0.25 - $\phi$ 20

Coolant-through hole



BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Clamping Range $\phi$ d	$\phi$ D	L	L <sub>1</sub>	H	MAX. min <sup>-1</sup>	Collet Model	Nut Model	Weight (kg)
<b>BBT50-MEGA 6N- 90</b>	0.25- 6	20	90	37	23 - 43	20,000	NBC 6-□	MGN 6	3.7
-120			120	67		20,000			3.8
-165			165	112		14,000			3.9
-200			200	147		9,000			4.0
<b>-MEGA 8N- 90</b>			0.5 - 8	25		90			37
-120	120	67			20,000	3.9			
-165	165	112			16,000	4.1			
-200	200	147			11,000	4.2			
<b>-MEGA10N- 90</b>	1.5 - 10	30			90	37	38 - 48	20,000	NBC10-□
-120			120	67	20,000	4.0			
-165			165	112	16,000	4.3			
-200			200	147	13,000	4.7			
-250			250	197	8,000	4.7			
<b>-300</b>			300	247		5,500		4.9	
<b>-MEGA13N- 90</b>	2.5 - 13	35	90	37	44 - 63	18,000	NBC13-□	MGN13	4.0
-120			120	67		18,000			4.2
-165			165	112		16,000			4.5
-200			200	147		12,000			4.7
-250			250	197		8,000			5.0
<b>-300</b>			300	247		5,500		5.3	
<b>-MEGA16N- 75</b>	2.5 - 16	42	75	31	48 - 68	17,000	NBC16-□	MGN16	4.0
- 90			90	42		17,000			4.2
-120			120	72		17,000			4.4
-165			165	117		16,000			4.8
-200			200	152		13,000			5.1
<b>-250</b>			250	202		10,000		5.5	
<b>-MEGA20N- 75</b>	2.5 - 20	46	75	31	51 - 68	16,000	NBC20-□	MGN20	4.1
- 90			90	46		16,000			4.2
-120			120	76		16,000			4.5
-165			165	121		15,000			4.9
-200			200	156		13,000			5.3
<b>-250</b>			250	206		10,000		5.7	

1. MEGA NUT is included.

2. "H" indicates the adjustment length with an Adjusting Screw.

Spare Parts		Accessories						
	MEGA NUT 	MEGA WRENCH 	NBC COLLET P92 FOR ENDMILL COLLET P93 	SEALING NUT MEGA PERFECT SEAL P96 	ADJUSTING SCREW Rubber 			
MEGA NEW BABY CHUCK	Model	Model	Model	Model	Model	G	L	B
MEGA 6N	MGN 6	MGR20	NBC 6-□	MPS 6-□	NBA 6B	M 7	12	2
MEGA 8N	MGN 8	MGR25	NBC 8-□	MPS 8-□	NBA 8B	M 9	13	2.5
MEGA10N	MGN10	MGR30	NBC10-□	MPS10-□	NBA10B	M11	16	3
MEGA13N	MGN13	MGR35	NBC13-□	MPS13-□	NBA13B	M14	20	4
MEGA16N	MGN16	MGR42	NBC16-□	MPS16-□	NBA16B	M18	20	4
MEGA20N	MGN20	MGR46	NBC20-□	MPS20-□	NBA20B	M21	20	4

1. Please be aware that the rubber seal in the Adjusting Screw may be stripped off due to high pressure coolant.

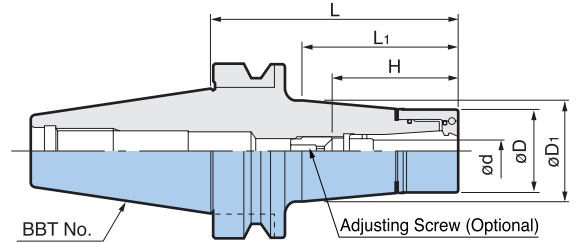
# MEGA E CHUCK<sup>®</sup> PAT. Clamping Range : $\phi$ 3.0 - $\phi$ 12

Coolant-through hole



Exclusively designed with the advanced technology for high speed endmilling. The long gripping length of the collet provides a powerful gripping force.

MAX.  
40,000  
min<sup>-1</sup>





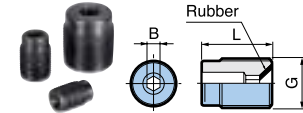


BIG-PLUS tools can be used in machining centers with conventional spindles.

For BBT40 & BBT50, refer to the following page.

Model	Clamping Range $\phi d$	$\phi D$	$\phi D_1$	L	L <sub>1</sub>	H	MAX. min <sup>-1</sup>	Collet Model	Nut Model	Weight (kg)
<b>BBT30-MEGA 6E- 50</b>	3 - 6	25	25.7	50	25	37 - 45	40,000	MEC 6-□	MEN 6	0.53
- 75			29.9	75	49		35,000			0.64
- 90			32.5	90	64		25,000			0.72
-105			35.1	105	79		25,000			0.82
<b>-MEGA 8E- 50</b>	3 - 8	30	30.4	50	25	42 - 51	40,000	MEC 8-□	MEN 8	0.56
- 75			34.6	75	49		35,000			0.71
- 90			37.4	90	65		25,000			0.83
-105			40.1	105	80		25,000			0.96
<b>-MEGA 10E- 50</b>	3 - 10	35	35.3	50	25	48 - 58	39,000	MEC10-□	MEN10	0.60
- 75			39.7	75	50		35,000			0.80
- 90			41	90	65.5		25,000			0.93
-105			41.1	105	81		25,000			1.06
<b>-MEGA 13E- 50</b>	3 - 12	42	42.5	50	27.5	50 - 58	38,000	MEC13-□	MEN13	0.65
- 75			42	75	51		34,000			0.90
- 90			42	90	66	50 - 60	25,000			1.05
-105			42	105	81		25,000			1.20

- MEGA E NUT is included.
- "H" indicates the adjustment length with an Adjusting Screw.

MEGA E CHUCK	Spare Parts	Accessories						
	MEGA E NUT 	MEGA WRENCH 	MEGA E COLLET 	SEALING NUT MEGA E PERFECT SEAL 	ADJUSTING SCREW 			
Model	Model	Model	Model	Model	G	L	B	
MEGA 6E	<b>MEN 6</b>	<b>MGR25</b>	<b>MEC 6-□</b>	<b>EPS 6-□</b>	<b>NBA 6B</b>	M 7	12	2
MEGA 8E	<b>MEN 8</b>	<b>MGR30</b>	<b>MEC 8-□</b>	<b>EPS 8-□</b>	<b>NBA 8B</b>	M 9	13	2.5
MEGA10E	<b>MEN10</b>	<b>MGR35</b>	<b>MEC10-□</b>	<b>EPS10-□</b>	<b>NBA10B</b>	M11	16	3
MEGA13E	<b>MEN13</b>	<b>MGR42</b>	<b>MEC13-□</b>	<b>EPS13-□</b>	<b>NBA13B</b>	M14	20	4

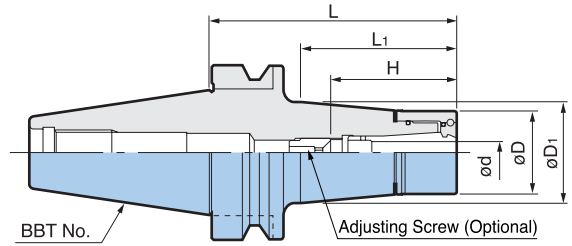
1. Please be aware that the rubber seal in the Adjusting Screw may be stripped off due to high pressure coolant.

# MEGA E CHUCK<sup>®</sup> PAT. Clamping Range : $\phi 3.0 - \phi 12$

Coolant-through hole



MAX.  
30,000  
min<sup>-1</sup>



BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Clamping Range $\phi d$	$\phi D$	$\phi D_1$	L	L <sub>1</sub>	H	MAX. min <sup>-1</sup>	Collet Model	Nut Model	Weight (kg)	
<b>BBT40-MEGA 6E- 60</b>	3 - 6	25	26.2	60	28	37 - 45	30,000	MEC 6-□	MEN 6	1.08	
- 75			28.7	75	42		30,000			1.14	
- 90			31.3	90	57		30,000			1.21	
-105			33.9	105	72		29,000			1.29	
-120			36.5	120	87		29,000			1.41	
-135			39	135	101		27,000			1.53	
-165			44.4	165	131		20,000			1.85	
-200			50.7	200	167		15,000			2.32	
<b>-MEGA 8E- 60</b>			3 - 8	30	31		60			28	42 - 48
- 75	33.4	75			42	42 - 51	30,000	1.21			
- 90	36	90			57		30,000	1.30			
-105	38.7	105			72		29,000	1.46			
-120	41.3	120			87		29,000	1.61			
-135	43.9	135			102		27,000	1.76			
-165	49.1	165			132		20,000	2.10			
-200	55.8	200			170		15,000	2.53			
<b>-MEGA 10E- 60</b>	3 - 10	35			36		60	29	48 - 58	30,000	MEC10-□
- 75			38.3	75	42		30,000	1.34			
- 90			40.9	90	57	30,000	1.46				
-105			43.6	105	72	29,000	1.61				
-120			46.2	120	87	29,000	1.78				
-135			48.8	135	102	27,000	1.98				
-165			54.4	165	134	22,000	2.37				
-200			55.5	200	170	16,000	3.07				
<b>-MEGA 13E- 60</b>			3 - 12	42	42.7	60	29	50 - 60		30,000	
- 75	45	75			42	30,000	1.45				
- 90	48	90			59	30,000	1.63				
-105	50.6	105			74	29,000	1.84				
-120	53.4	120			90	29,000	2.07				
-135	56	135			105	26,000	2.34				
-165	57.5	165			135	22,000	2.80				
-200	62.4	200			170	16,000	3.61				

1. MEGA E NUT is included.





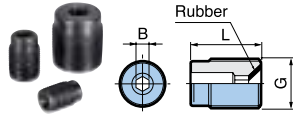
2. "H" indicates the adjustment length with an Adjusting Screw.

**BIG-PLUS tools can be used in machining centers with conventional spindles.**

Model	Clamping Range ød	øD	øD1	L	L1	H	MAX. min <sup>-1</sup>	Collet Model	Nut Model	Weight (kg)
<b>BBT50-MEGA 6E- 90</b>	3 – 6	25	30.4	90	47	37 – 45	20,000	MEC 6-□	MEN 6	3.8
<b>-120</b>			35.6	120	77		20,000			4.0
<b>-165</b>			43.5	165	122		14,000			4.4
<b>-200</b>			49.6	200	157		9,000			4.9
<b>-MEGA 8E- 90</b>	3 – 8	30	35.1	90	47	42 – 51	20,000	MEC 8-□	MEN 8	3.9
<b>-120</b>			40.4	120	77		20,000			4.1
<b>-165</b>			48.2	165	122		16,000			4.6
<b>-200</b>			54.4	200	157		11,000			5.2
<b>-MEGA 10E- 90</b>	3 – 10	35	40.0	90	47	48 – 58	20,000	MEC10-□	MEN10	4.0
<b>-120</b>			45.4	120	77		20,000			4.2
<b>-165</b>			53.0	165	122		16,000			4.9
<b>-200</b>			59.3	200	157		13,000			5.5
<b>-MEGA 13E- 90</b>	3 – 12	42	46.5	90	47	50 – 60	18,000	MEC13-□	MEN13	4.0
<b>-120</b>			52.0	120	77		18,000			4.4
<b>-165</b>			59.0	165	122		16,000			5.2
<b>-200</b>			64.7	200	157		12,000			6.0

1. MEGA E NUT is included.

2. "H" indicates the adjustment length with an Adjusting Screw.

Spare Parts		Accessories						
	MEGA E NUT 	MEGA WRENCH 	MEGA E COLLET 	SEALING NUT MEGA E PERFECT SEAL 	ADJUSTING SCREW 			
MEGA E CHUCK	Model	Model	Model	Model	Model	G	L	B
MEGA 6E	<b>MEN 6</b>	<b>MGR25</b>	<b>MEC 6-□</b>	<b>EPS 6-□</b>	<b>NBA 6B</b>	M 7	12	2
MEGA 8E	<b>MEN 8</b>	<b>MGR30</b>	<b>MEC 8-□</b>	<b>EPS 8-□</b>	<b>NBA 8B</b>	M 9	13	2.5
MEGA10E	<b>MEN10</b>	<b>MGR35</b>	<b>MEC10-□</b>	<b>EPS10-□</b>	<b>NBA10B</b>	M11	16	3
MEGA13E	<b>MEN13</b>	<b>MGR42</b>	<b>MEC13-□</b>	<b>EPS13-□</b>	<b>NBA13B</b>	M14	20	4

1. Please be aware that the rubber seal in the Adjusting Screw may be stripped off due to high pressure coolant.

# MEGA DOUBLE POWER CHUCK<sup>®</sup> PAT. Clamping Range : $\phi 16 - \phi 50$

Coolant-through hole

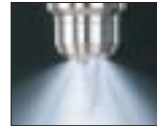
Type D

MAX.  
30,000  
min<sup>-1</sup>



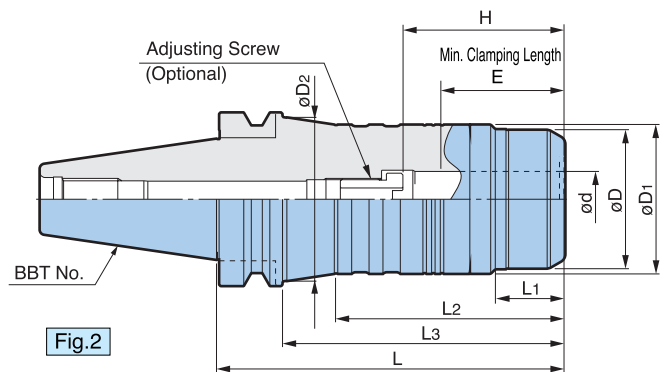
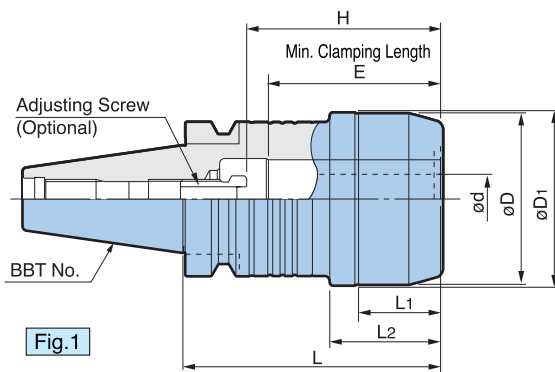
Close to integral rigidity and precision of a solid toolholder. Advanced technology for high speed and heavy duty endmilling.

Two types are available, Type D for use with/without coolant through the tool and Type DS to feed coolant to cutting tool periphery.



Type DS For coolant to cutting tool periphery

For TYPE DS P27



BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Fig.	$\phi d$	$\phi D$	$\phi D1$	$\phi D2$	L	L1	L2	L3	H	Min. Clamping Length E	MAX. min <sup>-1</sup>	Weight (kg)
<b>BBT30-MEGA16D- 60</b>	1	16	46	46.7	—	60	25.5	30	—	62	50	30,000	0.8
<b>-MEGA20D- 65</b>		20	50	50.7	—	65	30	35	—	60		25,000	0.9
<b>BBT40-MEGA16D- 75</b>	2	16	46	55	61	75	23.5	33.5	48	71	50	30,000	1.6
<b>-105</b>						105			78			2.2	
<b>-135</b>						135			108			25,000	2.8
<b>-165</b>						165			138			22,000	3.4
<b>-200</b>						200			173			20,000	4.2
<b>-MEGA20D- 75</b>						60			75			48	30,000
<b>-105</b>	105	78	27,000	2.1									
<b>-120</b>	120	93	25,000	2.4									
<b>-135</b>	135	108	22,000	2.7									
<b>-165</b>	165	138	20,000	3.3									
<b>-200</b>	200	173	20,000	4.2									
<b>-MEGA25D- 85</b>	1	25	62	62.7	—	85	33	—	—	71 - 81	56	27,000	2.0
<b>-105</b>						105				69 - 79		26,000	2.3
<b>-135</b>						135				24,000		3.0	
<b>-165</b>						165				21,000		3.7	
<b>-200</b>						200				18,000		4.7	
<b>-MEGA32D- 90</b>	1	32	70	70.7	—	90	33.5	45	—	71 - 76	65	26,000	2.1
<b>-105</b>						105				74 - 84		22,000	3.1
<b>-135</b>						135				22,000		3.7	
<b>-165</b>						165				20,000		3.7	
<b>-200</b>						200				16,000		4.5	

※ H-dimension of the model BBT30-MEGA20D-65 is the maximum tool shank length that can be inserted into the holder.



MEGA DOUBLE POWER CHUCK with slots for C-SPANNER is available. Please add "FK" after each model number when ordering.

**Example : BBT40-MEGA16D-75FK**

(Available for BBT40 and BBT50 models only.)

BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Fig.	ød	øD	øD1	øD2	L	L1	L2	L3	H	Min. Clamping Length E	MAX. min <sup>-1</sup>	Weight (kg)	
<b>BBT50-MEGA16D-105</b>	2	16	46	55	63	105	23.5	33.5	67	71	50	21,000	4.6	
-135						135			97				5.2	
-165						165			127				5.7	
-200						200			162				6.6	
-250						250			212				7.0	
<b>-MEGA20D-105</b>	2	20	60	69	74	105	25.5	36	67	69 - 79	56	20,000	5.1	
-135						135			97				6.0	
-165						165			127				6.8	
-200						200		113.5	162				7.7	
-250						77		250	142.5				212	12,000
<b>-MEGA25D-105</b>	2	25	70	77	82	105	32	45	67	74 - 84	65	20,000	5.4	
-135						135			97				6.5	
-165						165			127				7.6	
-200						200		122.5	162				12,000	8.9
-250						85		250	142.5				212	10,000
<b>-MEGA32D-90</b>	2	32	80	86	95	90	39.5	54	54.2	78 - 95	71	20,000	4.8	
-105						105			67				5.4	
-135						135			97				7.0	
-165						165		127	8.5					
-200						200		130	162				12,000	9.9
-250						250		181.5	212				10,000	12.1
-300						300		182	262				5,000	14.3
<b>-MEGA42D-105</b>	1	42	99	99.7	-	105	40	-	-	88 - 105	71	15,000	6.0	
-135						135							7.8	
-165						165							14,000	9.6
<b>-MEGA50D-120</b>	1	50	105	117	-	120	47	71	-	94 - 110	75	13,000	7.3	

- Wrench is ordered separately.
- "H" indicates the adjustment length with an Adjusting Screw.



※ As a back stop for cutting tools for the MEGA16D models, a commercially available hex socket head screw can be used. However, please contact an agent from BIG when the screw needs to be used with coolant through the body. "H" is the max. tool shank length that can be inserted into the holder.

Accessories									
	MEGA WRENCH		C-SPANNER		ADJUSTING SCREW				
	※ For FK models only.								
MEGA DOUBLE POWER CHUCK	Model	Model	Model	øD	L	L1	G	W	
BBT30-MEGA16D	<b>MGR46</b>	-	-	-	-	-	-	-	
-MEGA20D	<b>MGR50</b>	-	<b>HMA-M16</b>	19	27	6	M16P1.5	8	
BBT40-MEGA16D,16D/FK	<b>MGR46</b>	<b>NBK20</b>	-	-	-	-	-	-	
-MEGA20D,20D/FK	<b>MGR55</b>	<b>FK52-55</b>	<b>HMA-M16</b>	19	27	6	M16P1.5	8	
-MEGA25D,25D/FK	<b>MGR62</b>	<b>FK58-62</b>						10	
-MEGA32D,32D/FK	<b>MGR70</b>	<b>FK68-75</b>	<b>HMA-M16S</b>	-	-	-	-	-	
BBT50-MEGA16D,16D/FK	<b>MGR46</b>	<b>NBK20</b>	-	-	-	-	-	-	
-MEGA20D,20D/FK	<b>MGR60</b>	<b>FK58-62</b>	<b>HMA-M16</b>	19	27	6	M16P1.5	8	
-MEGA25D,25D/FK	<b>MGR70</b>	<b>FK68-75</b>						8	
-MEGA32D,32D/FK	<b>MGR80</b>	<b>FK80-90</b>	<b>HMA-M24</b>	30	36	9.5	M24P1.5	10	
-MEGA42D,42D/FK	<b>MGR99</b>	<b>FK92-100</b>						10	
-MEGA50D,50D/FK	<b>MGR105</b>	<b>FK110-115</b>	-	-	-	-	-	-	

※ Refer to bottom right of the previous page for the FK model.

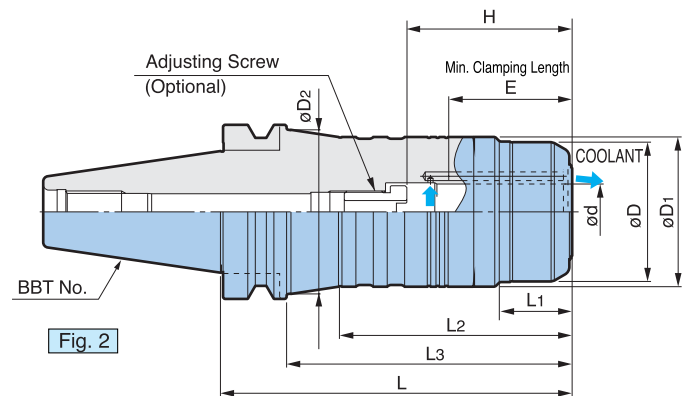
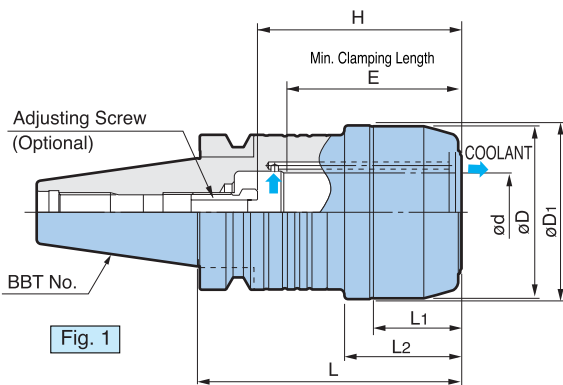
# MEGA DOUBLE POWER CHUCK<sup>®</sup> PAT. Clamping Range : $\phi 16 - \phi 50$

Coolant-through hole

**Type DS** For coolant to cutting tool periphery



**MAX**  
**30,000**  
**min<sup>-1</sup>**



BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Fig.	$\phi d$	$\phi D$	$\phi D1$	$\phi D2$	L	L1	L2	L3	H	Min. Clamping Length E	MAX. min <sup>-1</sup>	Weight (kg)
BBT30-MEGA16DS- 60	1	16	46	46.7	—	60	28	32.5	—	62	52	30,000	0.8
-MEGA20DS- 65		20	50	50.7	—	65	33	37.5	—	60		25,000	0.9
BBT40-MEGA16DS- 75	2	16	46	55	61	77.4	26	36	50.4	73	52	30,000	1.6
-105						107.4			80.4			2.2	
-135						137.4			110.4			25,000	2.8
-165						167.4			140.4			22,000	3.4
-200						202.4			175.4			20,000	4.2
-MEGA20DS- 75	2	20	55	55.7	61	77.4	35.5	47	50.4	71 - 81	58	30,000	1.7
-105						107.4			80.4			2.1	
-120						122.4			95.4			27,000	2.4
-135						137.4			110.4			25,000	2.7
-165						167.4			140.4			22,000	3.3
-200	202.4	175.4	20,000	4.2									
-MEGA25DS- 85	1	25	62	62.7	—	87.4	35	—	—	71 - 81	58	27,000	2.0
-105						107.4			—			26,000	2.3
-135						137.4			—			24,000	3.0
-165						167.4			—			21,000	3.7
-200						202.4			—			18,000	4.7
-MEGA32DS- 90	1	32	70	70.7	—	92.4	36	47.5	—	71 - 78	67	26,000	2.1
-105						107.4			—			22,000	2.4
-135						137.4			—			20,000	3.1
-165						167.4			—			20,000	3.7
-200						202.4			—			16,000	4.5

※ H-dimension of the model BBT30-MEGA20DS-65 is the maximum tool shank length that can be inserted into the holder.



MEGA DOUBLE POWER CHUCK with slots for C-SPANNER is available. Please add "FK" after each model number when ordering.

**Example : BBT40-MEGA16DS-75FK**

(Available for BBT40 and BBT50 models only.)



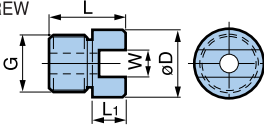
**BIG-PLUS tools can be used in machining centers with conventional spindles.**

Model	Fig	ød	øD	øD1	øD2	L	L1	L2	L3	H	Min. Clamping Length E	MAX. min <sup>-1</sup>	Weight (kg)
<b>BBT50-MEGA16DS-105</b>	2	16	46	55	63	107.4	26	36	69.4	73	52	21,000	4.6
<b>-135</b>						137.4			99.4				5.2
<b>-165</b>						167.4			129.4				5.7
<b>-200</b>						202.4			164.4				6.6
<b>-250</b>						252.4			214.4				7.0
<b>-MEGA20DS-105</b>	2	20	60	69	74	107.4	28	38.5	69.4	71 - 81	58	20,000	5.1
<b>-135</b>						137.4			99.4				6.0
<b>-165</b>						167.4			129.4				6.8
<b>-200</b>						202.4		116 164.4	7.7				
<b>-250</b>						252.4		145 214.4	9.1				
<b>-MEGA25DS-105</b>	2	25	70	77	85	107.4	34	47.5	69.4	76 - 86	67	20,000	5.4
<b>-135</b>						137.4			99.4				6.5
<b>-165</b>						167.4			129.4				7.6
<b>-200</b>					202.4	125 164.4		8.9					
<b>-250</b>					252.4	145 214.4		10.8					
<b>-MEGA32DS- 90</b>	2	32	80	86	—	95	42	56.5	56.7	80 - 97	73	20,000	4.8
<b>-105</b>					94.4				69.4				5.4
<b>-135</b>					107.4				99.4				7.0
<b>-165</b>					137.4				129.4				8.5
<b>-200</b>					167.4				164.4				9.9
<b>-250</b>					202.4				184 214.4				12.1
<b>-300</b>					252.4				184.5 264.4				14.3
<b>-MEGA42DS-105</b>	1	42	99	99.7	—	—	—	—	—	90 - 107	73	15,000	6.0
<b>-135</b>					107							137	7.8
<b>-165</b>					167							167	9.6
<b>-MEGA50DS-120</b>	1	50	105	117	—	122	49	73.5	—	96 - 112	77	13,000	7.3

1. Wrench is ordered separately.
2. "H" indicates the adjustment length with an Adjusting Screw.



※ As a back stop for cutting tools for the MEGA16DS models, a commercially available hex socket head screw can be used. However, please contact an agent from BIG when the screw needs to be used with coolant through the body. "H" is the max. tool shank length that can be inserted into the holder.

Accessories									
	MEGA WRENCH		C-SPANNER		ADJUSTING SCREW				
									
			※ For FK models only.						
MEGA DOUBLE POWER CHUCK	Model	Model	Model	øD	L	L1	G	W	
BBT30-MEGA16DS	<b>MGR46</b>	—	—	—	—	—	—	—	—
-MEGA20DS	<b>MGR50</b>	—	<b>HMA-M16</b>	19	27	6	M16P1.5	8	
BBT40-MEGA16DS,16DS/FK	<b>MGR46</b>	<b>NBK20</b>	—	—	—	—	—	—	—
-MEGA20DS,20DS/FK	<b>MGR55</b>	<b>FK52-55</b>	<b>HMA-M16</b>	19	27	6	M16P1.5	8	
-MEGA25DS,25DS/FK	<b>MGR62</b>	<b>FK58-62</b>						10	
-MEGA32DS,32DS/FK	<b>MGR70</b>	<b>FK68-75</b>						10	
BBT50-MEGA16DS,16DS/FK	<b>MGR46</b>	<b>NBK20</b>	—	—	—	—	—	—	—
-MEGA20DS,20DS/FK	<b>MGR60</b>	<b>FK58-62</b>	<b>HMA-M16</b>	19	27	6	M16P1.5	8	
-MEGA25DS,25DS/FK	<b>MGR70</b>	<b>FK68-75</b>						8	
-MEGA32DS,32DS/FK	<b>MGR80</b>	<b>FK80-90</b>							
-MEGA42DS,42DS/FK	<b>MGR99</b>	<b>FK92-100</b>	<b>HMA-M24</b>	30	36	9.5	M24P1.5	10	
-MEGA50DS,50DS/FK	<b>MGR105</b>	<b>FK110-115</b>							

※ Refer to bottom right of the previous page for the FK model.

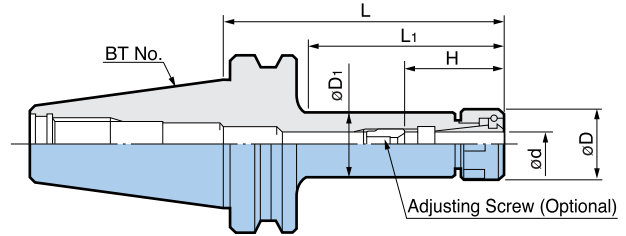
Coolant-through hole

# NEW BABY CHUCK PAT. Clamping Range : $\varnothing 0.25 - \varnothing 20$

Great variety in length in order to support high precision machining.



**MAX**  
**20,000**  
**min<sup>-1</sup>**



Model	Clamping Range $\varnothing d$	$\varnothing D$	$\varnothing D_1$	L	L <sub>1</sub>	H	Collet Model	Nut Model	Weight (kg)
<b>BT30-NBS 6-</b> 45	0.25 – 6	20	19.5	45	20	20 – 40	NBC 6-□	NBN 6	0.41
- 60				60	32				0.44
- 75				75	47				0.47
- 90				90	62				0.51
-105				105	77				0.54
-120				120	90				0.57
-135				135	105				0.60
<b>-NBS 8-</b> 45				0.5 – 8	25				24.5
- 60	60	33	0.46						
- 75	75	48	0.5						
- 90	90	63	0.55						
-105	105	78	0.61						
-120	120	92	0.66						
<b>-NBS10-</b> 45	1.5 – 10	30	29.5	45	20	35 – 45	NBC10-□	NBN10	0.44
- 60				60	34				0.51
- 75				75	49				0.58
- 90				90	64				0.66
-105				105	79				0.74
-120				120	94				0.81
<b>-NBS13-</b> 45	2.5 – 13	35	34.5	45	21	41 – 53	NBC13-□	NBN13	0.39
- 60				60	34	41 – 60			0.5
- 75				75	49	0.61			
- 90				90	64	0.72			
-105				105	79	0.83			
-120				120	94	0.93			
<b>-NBS16-</b> 45	2.5 – 16	42	41.5	45	21	45 – 53	NBC16-□	NBN16	0.39
- 60				60	37	45 – 65			0.53
- 75				75	52	0.67			
- 90				90	67	0.81			
-105				105	82	0.95			
-120				120	97	1.10			
<b>-NBS20-</b> 60	2.5 – 20	46	45.5	60	38	48 – 58	NBC20-□	NBN20	0.55
- 75				75	53	48 – 65			0.73
- 90				90	68	0.9			
-105				105	83	1.08			
-120				120	98	1.26			
-135				135	113	1.45			

1. NEW BABY NUT is included.  
 2. Max. 20,000 min<sup>-1</sup> is valid for BT30 with L = 45, 60 or 75mm and BT40 with L = 60, 75 or 90mm.  
 3. "H" indicates the adjustment length with an Adjusting Screw.

 For BT50, refer to the following page.

Model	Clamping Range ød	øD	øD1	L	L1	H	Collet Model	Nut Model	Weight (kg)
<b>BT40-NBS 6- 60</b>	0.25 – 6	20	19.5	60	23	20 – 40	NBC 6-□	NBN 6	1.1
- 75				75	38				1.15
- 90				90	53				1.2
-105				105	68				1.24
-120				120	83				1.28
-135				135	98				1.3
-165				165	128				1.4
-200				200	158				1.5
<b>-NBS 8- 60</b>				0.5 – 8	25				24.5
- 75	75	38	1.15						
- 90	90	53	1.2						
-105	105	68	1.24						
-120	120	83	1.28						
-135	135	98	1.3						
-165	165	128	1.4						
-200	200	158	1.5						
<b>-NBS10- 60</b>	1.5 – 10	30	29.5			60	23	35 – 45	
- 75				75	38	1.15			
- 90				90	53	1.2			
-105				105	68	1.3			
-120				120	83	1.4			
-135				135	98	1.5			
-165				165	128	1.7			
-200				200	158	1.9			
<b>-NBS13- 60</b>				2.5 – 13	35	34.5	60		28
- 75	75	40	1.3						
- 90	90	55	1.4						
-105	105	70	1.5						
-120	120	85	1.6						
-135	135	100	1.7						
-165	165	128	1.9						
-200	200	163	2.2						
<b>-NBS16- 60</b>	2.5 – 16	42	41.5				60	27	45 – 65
- 75				75	40	1.35			
- 90				90	55	1.5			
-105				105	70	1.65			
-120				120	85	1.8			
-135				135	100	1.9			
-165				165	130	2.2			
-200				200	165	2.6			
<b>-NBS20- 60</b>				2.5 – 20	46	45.5	60	28	
- 75	75	42	1.35						
- 90	90	57	1.5						
-105	105	72	1.7						
-120	120	87	1.9						
-135	135	102	2.1						
-165	165	132	2.5						
-200	200	167	3.0						

1. NEW BABY NUT is included.
2. Max. 20,000 min<sup>-1</sup> is valid for BT40 with L = 60, 75 or 90mm.
3. "H" indicates the adjustment length with an Adjusting Screw.

 For NEW BABY COLLET for ENDMILL P93

 For NEW BABY COLLET P92

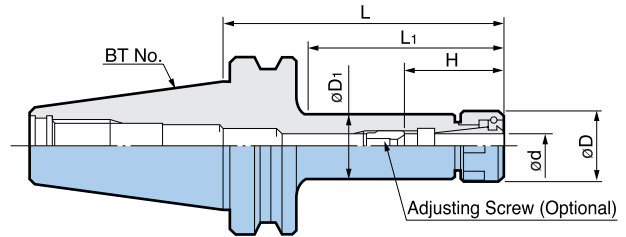
 For WRENCH P31

 For ADJUSTING SCREW P31

 For TAP DRIVING BACK STOP P94

Coolant-through hole

# NEW BABY CHUCK PAT. Clamping Range : $\phi 0.25 - \phi 20$



Model	Clamping Range $\phi d$	$\phi D$	$\phi D_1$	L	L <sub>1</sub>	H	Collet Model	Nut Model	Weight (kg)
<b>BT50-NBS 6- 90</b>	0.25 - 6	20	19.5	90	37	20 - 40	NBC 6-□	NBN 6	3.9
-120				120	67				4.0
-165				165	112				4.1
-200				200	147				4.2
<b>-NBS 8- 90</b>	0.5 - 8	25	24.5	90	37	23 - 42	NBC 8-□	NBN 8	4.0
-120				120	67				4.1
-165				165	112				4.2
-200				200	147				4.3
<b>-NBS10- 90</b>	1.5 - 10	30	29.5	90	37	35 - 45	NBC10-□	NBN10	4.0
-120				120	67				4.1
-165				165	112				4.4
-200				200	147				4.6
-250 ※				250	197				4.9
<b>-300 ※</b>	300	247	5.2						
<b>-NBS13- 90</b>	2.5 - 13	35	34.5	90	37	41 - 60	NBC13-□	NBN13	4.2
-120				120	67				4.4
-165				165	112				4.7
-200				200	147				5.0
-250 ※				250	197				5.4
<b>-300 ※</b>	300	247	5.8						
<b>-NBS16- 75</b>	2.5 - 16	42	41.5	75	27	45 - 65	NBC16-□	NBN16	4.0
- 90				90	42				4.1
-120				120	72				4.4
-165				165	117				4.8
-200				200	152				5.2
-250 ※				250	202				5.7
<b>-NBS20- 75</b>	2.5 - 20	46	45.5	75	27	48 - 65	NBC20-□	NBN20	4.0
- 90				90	42				4.2
-120				120	72				4.5
-165				165	117				4.9
-200				200	152				5.3
-250 ※	250	202	5.9						

1. NEW BABY NUT is included.

2. Models of L longer than 200mm(※) do not have the coolant-through hole as standard.

3. "H" indicates the adjustment length with an Adjusting Screw.

Spare Parts		Accessories								
NEW BABY NUT		WRENCH		NBC COLLET		BABY PERFECT SEAL		ADJUSTING SCREW		
NEW BABY CHUCK	Model	Model	Model	Model	Model	Model	G	L	B	
NBS 6	<b>NBN 6</b>	<b>NBK 6</b>	<b>NBC 6-□</b>	<b>BPS 6-□</b>	<b>NBA 6B</b>	M 7	12	2		
NBS 8	<b>NBN 8</b>	<b>NBK 8</b>	<b>NBC 8-□</b>	<b>BPS 8-□</b>	<b>NBA 8B</b>	M 9	13	2.5		
NBS10	<b>NBN10</b>	<b>NBK10</b>	<b>NBC10-□</b>	<b>BPS10-□</b>	<b>NBA10B</b>	M11	16	3		
NBS13	<b>NBN13</b>	<b>NBK13</b>	<b>NBC13-□</b>	<b>BPS13-□</b>	<b>NBA13B</b>	M14	20	4		
NBS16	<b>NBN16</b>	<b>NBK16</b>	<b>NBC16-□</b>	<b>BPS16-□</b>	<b>NBA16B</b>	M18	20	4		
NBS20	<b>NBN20</b>	<b>NBK20</b>	<b>NBC20-□</b>	<b>BPS20-□</b>	<b>NBA20B</b>	M21	20	4		

1. Please be aware that the rubber seal in the Adjusting Screw may be stripped off due to high pressure coolant.

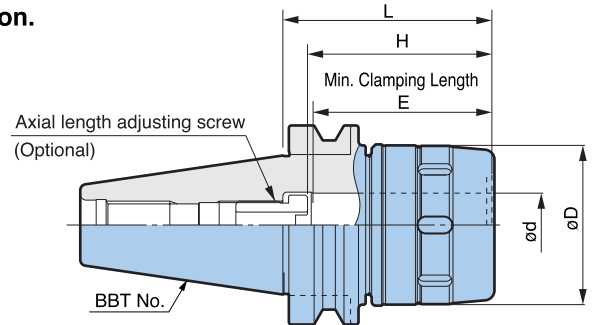
For TAP DRIVING BACK STOP **P94**

# NEW Hi-POWER MILLING CHUCK

Coolant-through hole

Clamping Range :  $\phi 16 - \phi 42$

BIG's original design of slit structure supports heavy and finish end milling with high power and precision.




## BBT Shank Type

BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	$\phi d$	$\phi D$	L	H	Min. Clamping Length E	C-Spanner Model	Weight (kg)	
<b>BBT30-HMC16- 70</b>	16	46	70	71	50	NBK20	1.0	
<b>-HMC20- 75</b>	20	52	75	56 - 66	56	FK52- 55	1.0	
<b>-HMC25- 90</b> ※	25	62	90	56 - 61		FK58- 62	1.4	
<b>-HMC32-105</b>	32	70	105	69 - 79	65	FK68- 75	1.7	
<b>BBT40-HMC16- 75</b>	16	46	75	71	50	NBK20	1.5	
<b>-HMC20- 60</b>	20	60	61	56 - 65	56	FK58- 62	1.4	
<b>- 75</b>		75	56 - 65	FK52- 55		1.5		
<b>-105</b>		105	69 - 79	FK52- 55		1.9		
<b>-120</b>		120	69 - 79	FK52- 55		2.2		
<b>-HMC25- 85</b>	25	62	85	71 - 81	56	FK58- 62	1.9	
<b>-105</b>			105				71 - 81	2.2
<b>-135</b>			135				71 - 81	2.5
<b>-HMC32- 90</b>	32	70	90	71 - 76	65	FK68- 75	2.0	
<b>-105</b>			105				71 - 76	2.3
<b>-135</b>			135				71 - 76	3.0
<b>BBT50-HMC20-105</b>	20	60	105	69 - 79	56	FK58- 62	4.7	
<b>-135</b>			135				69 - 79	5.4
<b>-165</b>			165				69 - 79	6.1
<b>-HMC25-105</b>	25	62	105	74 - 84	65	FK58- 62	4.6	
<b>-135</b>			135				74 - 84	5.3
<b>-165</b>			165				74 - 84	5.9
<b>-HMC32-105 ▲</b>	32	80	105	78 - 95	71	FK80- 90	5.2	
<b>-135 ▲</b>			135				78 - 95	6.3
<b>-165 ▲</b>			165				78 - 95	7.5
<b>-200</b>			200				78 - 95	9.2
<b>-300</b>			300				78 - 95	14.6
<b>-HMC42-105 ▲</b>	42	99	105	93 - 105	73	FK92-100	6.0	
<b>-135 ▲</b>			135				93 - 105	7.5
<b>-165 ▲</b>			165				93 - 105	8.8
<b>-200</b>			200				93 - 105	10.7
<b>-300</b>			300				15.5	

1. Wrench and axial adjusting screw is ordered separately if required.
2. ※ Straight Collet cannot be used with the BBT30-HMC25-90.
3. ▲ mark indicates the vibration reduction screw is included.
4. "H" indicates the adjustment length with an Adjusting Screw.

5. As a back stop for cutting tools for the HMC16 models, a commercially available hex socket head screw can be used. "H" is the max. tool shank length that can be inserted into the holder.
6. MEGA WRENCH is also available to clamp / release the clamping nut.  P33

Chuck types with vibration prevention screw	Minimum shank insertion length "H"
<b>BBT50-HMC32- □□□ ▲</b>	88
<b>-HMC42- □□□ ▲</b>	91

 For STRAIGHT COLLET P95

 For ADJUSTING SCREW P33

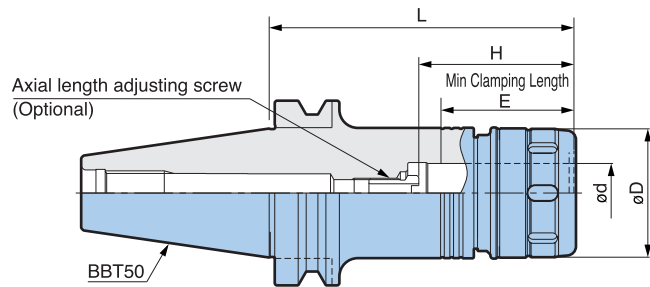
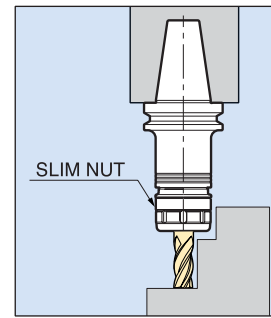
# NEW Hi-POWER MILLING CHUCK

Coolant-through hole

Clamping Range :  $\phi 20 - \phi 32$

**SLIM Type**

**BBT50 Milling Chuck with the nut for BBT40 models.**  
Smaller nut diameter minimizes interference.



## BBT Shank Type

BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	$\phi d$	$\phi D$	L	H	Min. Clamping Length E	C-Spanner Model	Weight (kg)
<b>BBT50-HMC20N-105</b>	20	52	105	69 - 79	56	FK52-55	4.6
-135			135				5.0
-165			165				5.4
-200			200				5.9
<b>-HMC32N-105</b>	32	70	105	79 - 84	65	FK68-75	5.1
-135			135				5.8
-165			165				6.5
-200			200				7.6

1. Wrench and axial adjusting screw is ordered separately if required.  
2. "H" indicates the adjustment length with an Adjusting Screw.

For STRAIGHT COLLET P95

Accessories								
	C-SPANNER	MEGA WRENCH ※	ADJUSTING SCREW					
NEW Hi-POWER MILLING CHUCK	Model	Model	Model	$\phi D$	L	L <sub>1</sub>	G	W
BBT/BT30-HMC16	<b>NBK20</b>	<b>MGR46</b>	—	—	—	—	—	—
-HMC20	<b>FK52-55</b>	<b>MGR52</b>	<b>HMA-M16</b>	19	27	6	M16P1.5	8
BBT30-HMC25	<b>FK58-62</b>	<b>MGR62</b>	<b>HMA-M16</b>					
-HMC32	<b>FK68-75</b>	<b>MGR70</b>	<b>HMA-M16S</b>	19	27	6	M16P1.5	10
BBT/BT40-HMC16	<b>NBK20</b>	<b>MGR46</b>	—					
-HMC20	<b>FK52- 55</b>	<b>MGR52</b>	<b>HMA-M16</b>					
-HMC20-60	<b>FK58- 62</b>	<b>MGR60</b>	<b>HMA-M16</b>					
-HMC25	<b>FK58- 62</b>	<b>MGR62</b>	<b>HMA-M16</b>	30	36	9.5	M24P1.5	10
-HMC32	<b>FK68- 75</b>	<b>MGR70</b>	<b>HMA-M16S</b>					
BBT/BT50-HMC20	<b>FK58- 62</b>	<b>MGR60</b>	<b>HMA-M16</b>	19	27	6	M16P1.5	8
-HMC20N	<b>FK52- 55</b>	<b>MGR52</b>	<b>HMA-M16</b>					
-HMC25	<b>FK58- 62</b>	<b>MGR62</b>	<b>HMA-M16</b>					
-HMC32	<b>FK80- 90</b>	<b>MGR80</b>	<b>HMA-M24</b>					
-HMC32N	<b>FK68- 75</b>	<b>MGR70</b>	<b>HMA-M16S</b>	30	36	9.5	M24P1.5	10
-HMC42	<b>FK92-100</b>	<b>MGR99</b>	<b>HMA-M24</b>					

※ MEGA WRENCH is also available to clamp / release the clamping nut.

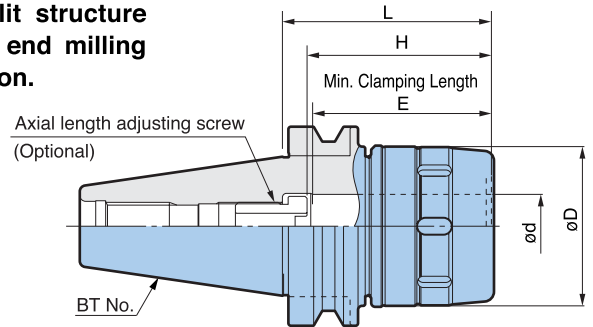
# NEW Hi-POWER MILLING CHUCK

Coolant-through hole

Clamping Range :  $\phi 16 - \phi 42$



**BIG's original design of slit structure supports heavy and finish end milling with high power and precision.**



## BT Shank Type

Model	$\phi d$	$\phi D$	L	H	Min. Clamping Length E	C-Spanner Model	Weight (kg)
BT30-HMC16- 70	16	46	70	71	50	NBK20	1.0
-HMC20- 75	20	52	75	56 – 66	56	FK52- 55	1.0
BT40-HMC16- 75	16	46	75	71	50	NBK20	1.5
-HMC20- 60	20	52	61	56 – 65	56	FK58- 62	1.4
- 75			75				1.5
-105			105				1.9
-120			120				2.2
-HMC25- 85			85				1.9
-105	25	62	105	71 – 81	56	FK58- 62	2.2
-135			135				2.5
-HMC32- 90			90				2.0
-105	32	70	105	71 – 76	65	FK68- 75	2.3
-135			135				3.0
BT50-HMC20-105			105				4.7
-135	20	60	135	69 – 79	56	FK58- 62	5.4
-165			165				6.1
-HMC25-105			105				4.6
-135	25	62	135	74 – 84	65	FK58- 62	5.3
-165			165				5.9
-HMC32-105 ▲			105				5.2
-135 ▲	32	80	135	78 – 95	71	FK80- 90	6.3
-165			165				7.5
-HMC42-105 ▲			105				6.0
-135 ▲	42	99	135	93 – 105	73	FK92-100	7.5
-165 ▲			165				8.8

- Wrench and axial adjusting screw is ordered separately if required.
- ▲ mark indicates the vibration reduction screw is included.
- "H" indicates the adjustment length with an Adjusting Screw.
- As a back stop for cutting tools for the HMC16 models, a commercially available hex socket head screw can be used. "H" is the max. tool shank length that can be inserted into the holder.
- MEGA WRENCH is also available to clamp / release the clamping nut. P33

For STRAIGHT COLLET P95  
 For ADJUSTING SCREW P33

Chuck types with vibration prevention screw	Minimum shank insertion length "H"
BT50-HMC32- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ▲	88
-HMC42- <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ▲	91

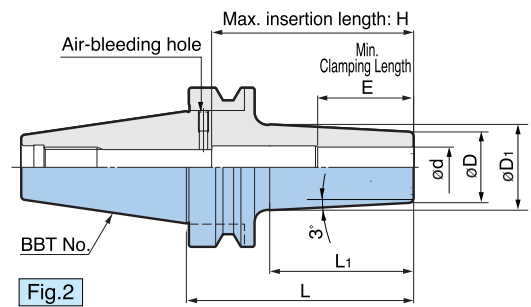
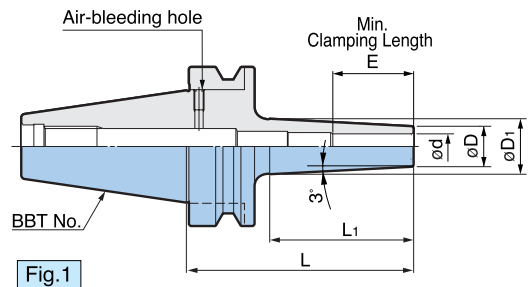
# SHRINK CHUCK

Coolant-through hole  
 Clamping Range :  $\phi 6 - \phi 20$

SLIM Type



Slim design avoids interference with the side wall and draft of the mold.



BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Fig.	$\phi d$	$\phi D$	$\phi D1$	L	L1	Min. Clamping Length E	Max. insertion length H	Weight (kg)	
BBT30 -SRC 6S -105	1	6	10	18.0	105	77	26	-	0.48	
-SRC 8S -105		8	13	21.0					0.51	
-SRC10S -105	2	10	16	24.0			32		62	0.55
-SRC12S -105		12	19	27.0						36
BBT40 -SRC 6S -120	1	6	10	19.0	120	86	26	-	1.08	
-165				23.5	165	127			1.21	
-SRC 8S -120		8	13	22.0	120	86			1.12	
-165				26.5	165	129			1.29	
-SRC10S -120		10	16	25.0	120	86			32	1.17
-165				29.5	165	129				1.36
-SRC12S -120		12	19	28.0	120	87	36		1.22	
-165				33.0	165	131			1.44	

1. Use carbide cutter within a tolerance of h6.

Please refer to the operation manual of heating / cooling equipment, as some equipments may not be compatible.

**Wiper Cleaner** (PAT.P) is recommended to clean the clamping bore.

**STANDARD Type**



Substantial body provides higher rigidity.  
Available from 6mm clamping diameter.

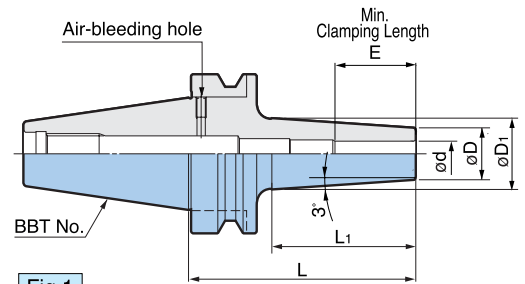


Fig.1

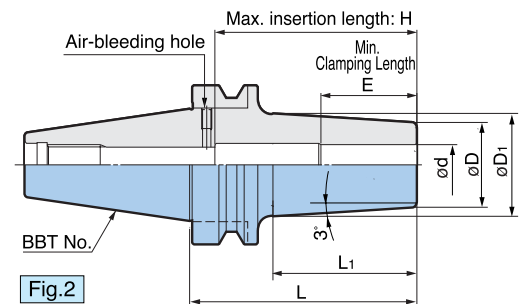


Fig.2

BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Fig.	ød	øD	øD1	L	L1	Min Clamping Length E	Max. insertion length H	Weight (kg)		
BBT30-SRC 6 - 75	1	6	14	19.0	75	47	26	-	0.47		
-SRC 8 - 75		8	18	23.0					0.51		
-SRC10 - 75	2	10	22	27.0			32	36	62	0.56	
-SRC12 - 75		12	24	29.0						0.58	
-SRC16 - 75		16	28	33.0						0.62	
BBT40-SRC 6 - 90	1	6	14	20.0	90	57	26	-	1.07		
-SRC 8 - 90		8	18	24.0					1.12		
-SRC10 - 90		10	22	28.0					1.18		
-SRC12 - 90		12	24	30.0					1.20		
-SRC16 - 90	2	16	28	34.0			165	132	38	80	1.25
-165		42.0	1.82								
-SRC20 - 90		20	34	40.0	90	57					42
-165	48.0	165	132	42	100	2.08					
BBT50 -SRC 6 -105	1	6	14	20.5	105	61	26	-	3.7		
-165				26.0	165	116			3.9		
-SRC 8 -105				8	18	24.5			105	61	3.8
-165						30.0			165	116	4.0
-SRC10 -105		10	22	28.5	105	61	32		3.8		
-165				34.0	165	116			4.2		
-SRC12 -105		12	24	30.5	105	61	36		3.9		
-165				36.0	165	116			4.2		
-SRC16 -105		16	28	34.5	105	61	38		3.9		
-165				40.0	165	116			4.3		
-SRC20 -105		20	34	40.5	105	61	42		4.0		
-165				46.0	165	116			4.6		

1. Use carbide cutter within a tolerance of h6.

Please refer to the operation manual of heating / cooling equipment, as some equipments may not be compatible.

Wiper Cleaner (PAT.P) or TK Cleaner (PAT.) is recommended to clean the clamping bore.



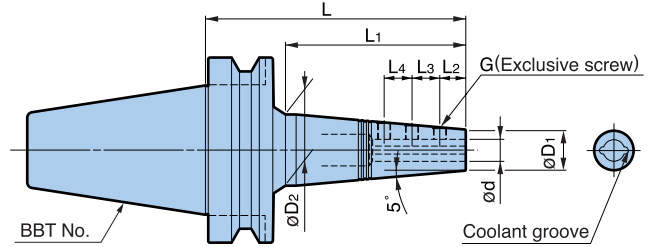
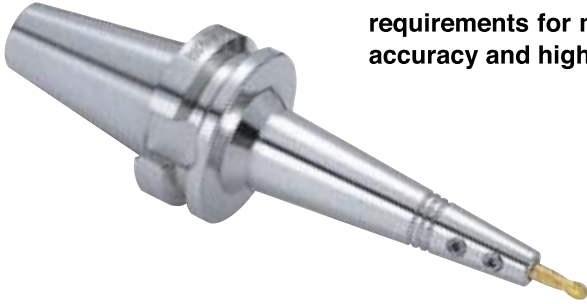
# MOLD CHUCK

Clamping Range :  $\phi 3 - \phi 20$

Coolant-through hole

Precision side lock holder to satisfy the requirements for minimum interference, accuracy and high speed.

MAX.  
20,000  
min<sup>-1</sup>



Coolant is supplied through 2-grooves in the bore.

BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	ød	øD1	øD2	L	L1	L2	L3	L4	G	Max. min <sup>-1</sup>	Weight (kg)
<b>BBT40-SSL 3-135</b>	3	10	27.3	135	100	6	6	—	M3	20,000	1.2
<b>-SSL 4-135</b>	4	11	28.2				7		M4	20,000	1.2
<b>-SSL 6-135</b>	6	13	30.0			12	13		M6	20,000	1.3
<b>-SSL 8-135</b>	8	15	31.8			13.5	18			20,000	1.3
<b>-SSL10-150</b>	10	17	36.3	150	115	15	20	M8	17,000	1.5	
<b>-SSL12-150</b>	12	22	41.1				16		16	17,000	1.7
<b>BBT50-SSL 6-150</b>	6	13	30.7	150	104	12	13	—	M6	15,000	3.9
<b>-200</b>			39.5	200	154					12,000	4.4
<b>-SSL 8-150</b>	8	15	32.5	150	104	13.5	18			15,000	3.9
<b>-200</b>			41.3	200	154					12,000	4.4
<b>-SSL10-150</b>	10	17	34.4	150	104	15	20	15,000	4.0		
<b>-200</b>			43.1	200	154			12,000	4.4		
<b>-SSL12-150</b>	12	22	39.2	150	104		16	16	15,000	4.2	
<b>-200</b>			47.9	200	154				12,000	4.9	
<b>-SSL16-150</b>	16	26	42.8	150	104	20	22	M8	15,000	4.5	
<b>-200</b>			51.6	200	154				12,000	5.0	
<b>-SSL20-150</b>	20	30	46.8	150	104		25		15,000	4.6	
<b>-200</b>			55.6	200	154				12,000	5.2	

● BIG genuine side lock screws must be used as they are made to an exclusive design and different from other screws on the market.

## ■ SIDE LOCK SCREWS

Model	Screw size	Screw Length / Quantity	Chuck Model
<b>H0304FS</b>	M3 P0.5	4mm / 2pcs.	SSL3
<b>H0404FS</b>	M4 P0.5	4mm / 2pcs.	SSL4
<b>H06FSA</b>	M6 P0.75	4.5 , 5mm / 1pce. each	SSL6
<b>H06FSB</b>		4.5 , 6mm / 1pce. each	SSL8,10
<b>H08FSA</b>	M8 P0.75	6mm / 2pcs. 8mm / 1pce.	SSL12
<b>H08FSB</b>		6, 8, 10mm / 1pce. each	SSL16,20

1. Each model consists of 1 set of screws required for 1 Mold Chuck.

# SIDE LOCK HOLDER

Clamping Range :  $\phi 6 - \phi 50$

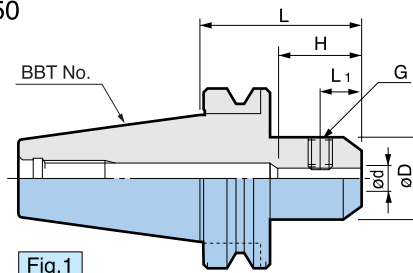


Fig.1

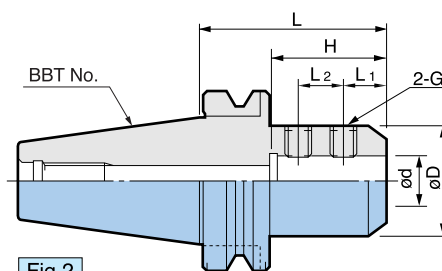


Fig.2

## For ENDMILL

BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Fig.	$\phi d(H5)$	$\phi D$	L	L1	L2	H	G	Weight (kg)			
BBT30-ISL 6- 60	1	6	25	60	18	—	85※	M 6	0.6			
-ISL 8- 60		8	28					M 8				
-ISL10- 60		10	35					M10				
-ISL12- 60		12	42					M12				
-ISL16- 60		16	48					M14				
BBT40-ISL12- 75	1	12	42	75	22.5	—	110※	M12	1.5			
-ISL16- 75		16	48					M14				
-ISL20- 75		20	52					M16				
-ISL25- 90	2	25	63.5	90	24	25	60	M18	2.1			
-ISL32-105		32	72	105	24	28	82	M20	2.9			
BBT50-ISL16- 90	1	16	48	90	24	—	145※	M14	4.4			
-ISL20- 90		20	52					M16	4.5			
-ISL25-105	2	25	65	105	24	25	60	M18	4.6			
-ISL32-105		32	72						28	5.3		
-ISL40-120		40	90						90	32	M20	6.5
-ISL42-120		42	90									
-ISL50-121		50	99.5	121	35	35	M24	7.2				

1. H dimension marked with ※ indicates this dimension to the back end of the retention knob.

## For DRILL

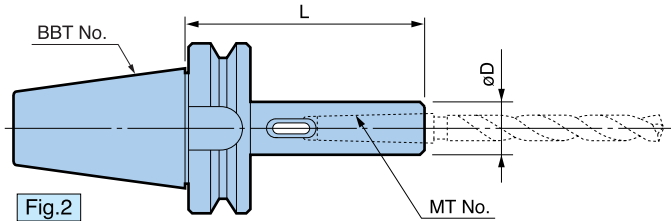
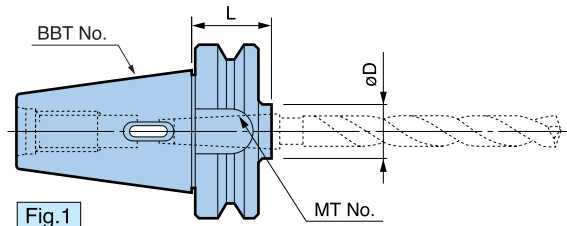
BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Fig.	$\phi d(H6)$	$\phi D$	L	L1	L2	H	G	Weight (kg)		
BBT30-TSL20- 75	2	20	48	75	14	14	50	M10	1.0		
-TSL25- 80		80		20	15	56	M16				
BBT40-TSL20- 90	2	20	48	90	14	14	50	M10	1.7		
-TSL25- 90		25								15	20
-TSL32-105		32		105	25	60	M16				
-TSL40-105		40						68		70	
BBT50-TSL20- 90	2	20	48	90	14	14	50	M10	4.2		
-135				135					4.8		
-165				165					5.2		
-TSL25-105		25		105	135	15	20	56	M16	4.3	
-135										135	4.7
-165										165	5.1
-TSL32-105		32		63	105	15	20	60	M16	4.8	
-135										135	5.5
-165										165	6.2
-TSL40-105		40		68	105	15	25	70	M16	4.8	
-135										135	5.6
-165										165	6.4
-TSL50-105	50	84	105					5.4			

# MORSE TAPER HOLDER



Precise finish of inner taper guarantees high concentricity.



BIG-PLUS tools can be used in machining centers with conventional spindles.

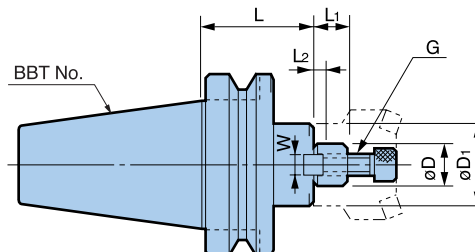
Model	MT No.	Fig.	øD	L	Weight (kg)
<b>BBT30-MTA1- 60</b>	1	1	25	60	0.5
<b>-MTA2- 60</b>	2		32	60	
<b>-MTA3- 80</b>	3		40	80	
<b>BBT40-MTA1- 45</b>	1	1	25	45	1.0
<b>-120</b>		2		120	1.3
<b>-MTA2- 45</b>	2	1	32	45	1.0
<b>-120</b>		2		120	1.6
<b>-MTA3- 75</b>	3	1	40	75	1.0
<b>-135</b>		2		135	1.7
<b>-MTA4- 90</b>	4	2	50	90	1.6
<b>BBT50-MTA1- 45</b>	1	1	25	45	3.9
<b>-120</b>		2		120	4.2
<b>-180</b>		2		180	4.3
<b>-MTA2- 45</b>	2	1	32	45	3.9
<b>-135</b>		2		135	4.3
<b>-180</b>		2		180	4.6
<b>-MTA3- 45</b>	3	1	40	45	3.8
<b>-150</b>		2		150	4.6
<b>-180</b>		2		180	4.9
<b>-MTA4- 75</b>	4	1	50	75	3.9
<b>-180</b>		2		180	5.4
<b>-MTA5-105</b>	5	1	65	105	4.5
<b>-210</b>		2		210	7.2

## Morse taper size and corresponding drill diameter

MT No.	Drill diameter ※
1	ø 3 - ø14
2	ø14.5 - ø23
3	ø23.5 - ø31.5
4	ø32 - ø50
5	ø51 - ø76

※ Drill diameter JIS B4302 1 Standard

# FACE MILL ARBOR Type FMC



BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	øD(h6)	øD1	L	L1	L2	G	W	Weight (kg)
<b>BBT30-FMC16 - 45</b> ※	16	40	45	16	4	M8	8	0.7
<b>-FMC22 - 45</b> ※	22	45		18	5	M10	10	0.8
<b>-FMC27 - 45</b> ※	27	70		20	6	M12	12	1.0
<b>-FMC25.4- 45</b> ※	25.4	70	45	20	5	M12	9.5	1.0
<b>BBT40-FMC22 - 45</b>	22	45	45	18	5	M10	10	1.3
<b>- 90</b>			90					1.7
<b>-150</b> ※			150					2.5
<b>-FMC27 - 60</b>	27	70	60	20	6	M12	12	2.0
<b>- 90</b>			90					2.6
<b>-150</b> ※			150					4.1
<b>-FMC32 - 60</b>	32	85	60	22	7	M16	14	2.1
<b>- 75</b>			75					2.5
<b>-FMC25.4- 60</b>			60					2.0
<b>- 90</b>	25.4	70	90	20	5	M12	9.5	2.7
<b>-150</b> ※			150					4.2
<b>-FMC38.1- 60</b>			60					2.3
<b>- 75</b>	38.1	85	75	22	7	M16	15.9	2.7
<b>BBT50-FMC22 - 60</b>			60					4.1
<b>-105</b>			105					4.6
<b>-150</b> ※	22	45	150	18	5	M10	10	4.9
<b>-FMC27 - 45</b>			45					4.1
<b>- 90</b>			90					5.1
<b>-150</b> ※	27	70	150	20	6	M12	12	6.9
<b>-FMC32 - 45</b>			45					4.3
<b>- 75</b>			75					5.6
<b>-105</b>	32	85	105	22	7	M16	14	7.0
<b>-FMC25.4- 45</b>			45					3.7
<b>- 90</b>			90					5.1
<b>-150</b> ※	25.4	70	150	20	5	M12	9.5	6.9
<b>-FMC38.1- 45</b>			45					4.2
<b>- 75</b>			75					5.5
<b>-105</b> ※	38.1	85	105	22	7	M16	15.9	6.7

1. Models marked with ※ do not have a through coolant hole.

# FACE MILL ARBOR Type FMH



For cutters that require a coolant hole through the pilot.

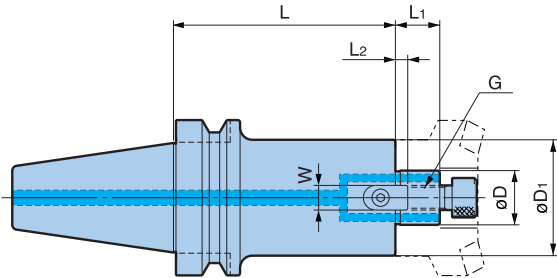
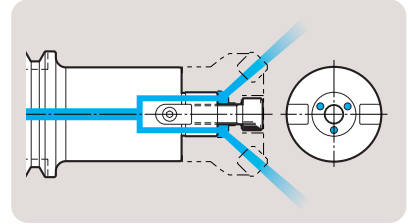


Fig.1

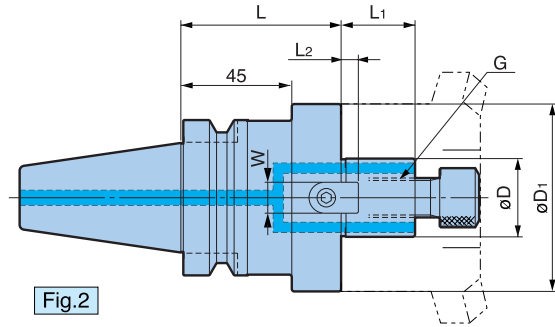


Fig.2

BIG-PLUS tools can be used in machining centers with conventional spindles.

Model	Fig.	øD (h6)	øD1	L	L1	Driver keys		G	Weight (kg)
						L2	W		
<b>BBT40-FMH22</b> -47- 45	1	22	47	45	18	5	10	M10	1.3
				60					1.5
				90					1.9
				150					2.7
<b>-FMH22</b> -60- 45	1	22	60	45	18	5	10	M10	1.5
				60					1.8
				90					2.5
<b>-FMH27</b> -60- 45	1	27	60	45	20	6	12	M12	1.5
				60					1.8
				90					2.5
<b>-FMH27</b> -76- 60	2	27	76	60	20	6	12	M12	2.1
				90					2.8
<b>-FMH32</b> -96- 60	2	32	96	60	22	7	14	M16	2.4
<b>-FMH22.225-47-</b> 45	1	22.225	47	45	17	3.5	8	M10	1.3
				60					1.5
				90					1.9
				150					2.7
<b>-FMH22.225-60-</b> 45	1	22.225	60	45	17	3.5	8	M10	1.5
				60					1.8
				90					2.5
<b>-FMH25.4</b> -70- 60	2	25.4	70	60	22	5	9.5	M12	2.0
				90					2.7
				105					3.1
<b>-FMH31.75</b> -76- 60	2	31.75	76	60	30	7	12.7	M16	2.2
				90					2.9
<b>-FMH31.75</b> -96- 60	2	31.75	96	60	30	7	12.7	M16	2.5

1. By utilizing a clamping bolt with a hole through, coolant is supplied through the bolt.

BIG-PLUS tools can be used in machining centers with conventional spindles.

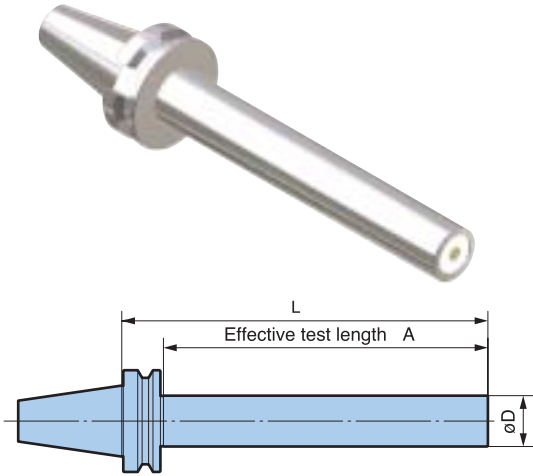
Model	Fig.	øD (h6)	øD1	L	L1	Driver keys		G	Weight (kg)
						L2	W		
<b>BBT50-FMH22 -47- 60</b>	1	22	47	60	18	5	10	M10	4.1
				105					4.7
				150					5.3
				200					6.0
				250					6.7
<b>-FMH22 -60- 60</b>	1	22	60	60	18	5	10	M10	4.2
				105					5.2
				150					5.2
				200					7.4
				250					8.5
<b>-FMH27 -60- 45</b>	1	27	60	45	20	6	12	M12	3.9
				90					5.0
				150					6.3
<b>-FMH27 -76- 45</b>	1	27	76	45	20	6	12	M12	4.0
				90					5.6
				150					7.8
<b>-FMH32 -96- 45</b>	1	32	96	45	22	7	14	M16	4.2
				90					6.8
				150					10.2
<b>-FMH40 -100- 45</b>	2	40	100	45	26	8.5	16	M20 (MBA-M20)	4.4
				75					6.2
				105					8.1
<b>-FMH22.225-47- 60</b>	1	22.225	47	60	17	3.5	8	M10	4.1
				105					4.7
				150					5.3
				200					6.0
				250					6.6
<b>-FMH22.225-60- 60</b>	1	22.225	60	60	17	3.5	8	M10	4.2
				105					5.2
				150					6.2
				200					7.4
				250					8.5
<b>-FMH25.4 -70- 45</b>	1	25.4	70	45	22	5	9.5	M12	4.0
				60					4.5
				90					5.4
				150					7.2
				200					8.7
<b>-FMH31.75 -76- 45</b>	1	31.75	76	45	30	7	12.7	M16	4.1
				75					5.2
				105					6.3
				150					7.9
				200					9.7
<b>-FMH31.75 -96- 45</b>	1	31.75	96	45	30	7	12.7	M16	4.3
				75					6.0
				105					7.7
				150					10.3
				200					13.1
<b>-FMH38.1 -100- 45</b>	2	38.1	100	45	34	9	15.9	M20 (MBA-M20)	4.4
				75					6.3
				105					8.1
				150					10.9

1. By utilizing a clamping bolt with a hole through, coolant is supplied through the bolt.

# DYNA TEST

**BBT Shank**

JIS B 6339 (BIG-PLUS)



**Precision test bar of the highest quality.**

- Periodic inspection of machine tools to control production stability.
- Shorter models are ideal for measuring ATC repeatability.

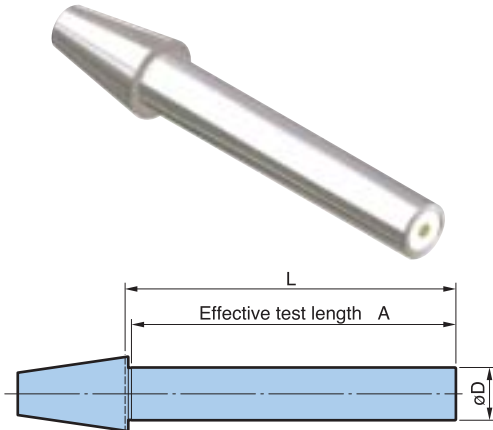
**BIG-PLUS tools can be used in machining centers with conventional spindles.**

Model	L	A	øD
<b>BBT30-32-L150</b>	150	125	32
<b>-L235</b>	235	210	
<b>BBT40-50-L200</b>	200	170	50
<b>-L350</b>	350	320	
<b>BBT50-50-L200</b>	200	159	
<b>-L360</b>	360	319	

1. Taper length is in accordance with MAS BT standard.

**NT Shank**

Basic Type (NT Shank) is only suitable for BT shank.



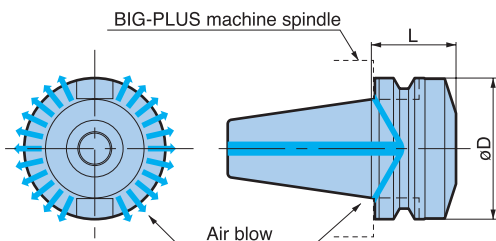
Model	L	A	øD
<b>NT30-32-L150</b>	150	144	32
<b>-L225</b>	225	219	
<b>NT40-50-L200</b>	200	184	50
<b>-L335</b>	335	319	
<b>NT50-50-L200</b>	200	194	
<b>-L335</b>	335	319	

1. Taper length is in accordance with MAS BT standard.

# CLEANER



**Blowing air cleans the BIG-PLUS machine spindle face.**  
Oil and dirt is removed from the spindle face.



Model	øD	L
<b>SBT30-ASC-30T</b>	46	30
<b>SBT40-ASC-40T</b>	63	40
<b>SBT50-ASC-60T</b>	100	60

1. When the cleaner is clamped into a BIG-PLUS machine spindle, faces have 1mm clearance.