

Ramping and Helical milling

## FULLCUT MILL FCR Cutter Dia. $\phi$ 16 - $\phi$ 32

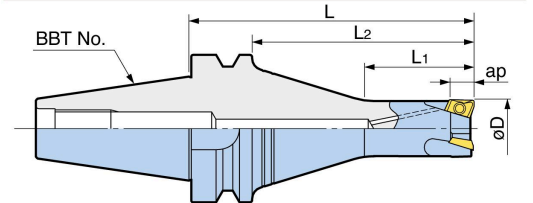
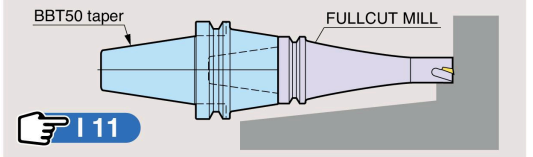
Unique inserts designed for ramping make multi-functional cutting possible.



**BBT Standard type** JIS B 6339 (BIG-PLUS)



Adapter for BT50 taper shank (FCR & FCM)



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

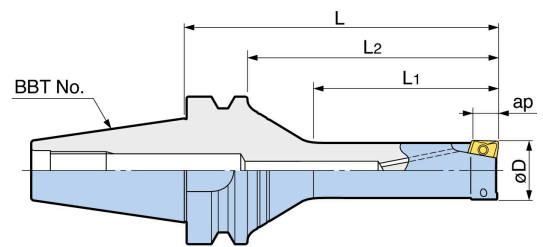
Cutter Dia. $\phi$ D	Model	ap	L	L1	L2	No. of Insert	Insert Size	Weight (kg)
16	<b>BBT30-FCR16082- 65</b>	8	65	28	43	2	BRG16	0.5
20	<b>-FCR20083- 65</b>		65	28	43	3	BRG20	0.5
25	<b>-FCR25083- 65</b>		65	33	43	3	BRG25	0.6
32	<b>-FCR32103- 65</b>	10	65	40	43	3	BRG32	0.6
16	<b>BBT40-FCR16082- 85</b>	8	85	25	58	2	BRG16	1.3
	<b>-120</b>		120	30	93			1.5
	<b>-135</b>		135	25	108			1.6
20	<b>-FCR20083- 85</b>	8	85	35	58	3	BRG20	1.2
	<b>-120</b>		120	30	93			1.6
	<b>-135</b>		135	30	108			1.7
25	<b>-FCR25083- 85</b>	8	85	40	58	3	BRG25	1.3
	<b>-120</b>		120	45	93			1.6
	<b>-135</b>		135	35	108			1.8
32	<b>-FCR32103- 85</b>	10	85	45	58	3	BRG32	1.4
	<b>-120</b>		120	50	93			1.7
	<b>-135</b>		135	40	108			1.9

- Wrench and Anti-seizure Lubricant are included. Inserts are ordered separately.
- Long nose type shown below is recommended for medium-heavy or heavy slot milling with long projection, exceeding L=120mm for 16 & 20mm diameters / L=135mm for 25 or larger diameters.

For Insert : | 7

For Cutting Condition : | 8

**BBT Long nose type** JIS B 6339 (BIG-PLUS)



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

Cutter Dia. $\phi$ D	Model	ap	L	L1	L2	No. of Insert	Insert Size	Weight (kg)
16	<b>BBT30-FCR16082L- 85</b>	8	85	45	63	2	BRG16	0.5
20	<b>-FCR20082L- 85</b>		85	50	63	2	BRG20	0.5
25	<b>-FCR25082L- 85</b>		85	50	63	2	BRG25	0.6
32	<b>-FCR32102L- 85</b>	10	85	60	63	2	BRG32	0.7
16	<b>BBT40-FCR16082L-105</b>	8	105	45	78	2	BRG16	1.3
	<b>-120</b>		120	45	93			1.4
	<b>-120</b>		120	60	93			1.4
20	<b>-FCR20082L-120</b>	8	135	60	108	2	BRG20	1.5
	<b>-135</b>		135	60	108			1.5
25	<b>-FCR25082L-135</b>	8	135	75	108	2	BRG25	1.5
	<b>-150</b>		150	75	123			1.7
32	<b>-FCR32102L-135</b>	10	135	80	108	2	BRG32	1.7
	<b>-150</b>		150	90	123			1.9

- Wrench and Anti-seizure Lubricant are included. Inserts are ordered separately.

For Insert : | 7 For Cutting Condition : | 8