

# Finetech

## TOOLINGS



## MICRO BORING KIT



The MICRO BORING KIT was developed to accommodate & manufacture a wide range of bores from Dia 6 mm to 135 mm using a single MICRO BORING HEAD. The parts are made of high quality tool steel & heat treated to a good hardness, for a longer durability and maintain its accuracy for many years. Also care has been taken to design and manufacture every part with stringent quality checks to produce products of very high quality. The MICRO BORING KIT is available in different range of KITS and contains all the required accessories to conveniently FINISH bores. The boring bars have been manufactured to bore length up to 3 times its diameter. Also the design is such that the boring bar does not move too much from its center to maintain a balance and facilitate a good boring accuracy. Through coolant facility can be provided for easy chip removal and better cutting of material.

ITEM	RANGE	PART DETAILS	ORDER CODE
MBK1084/FTB01	Ø10 - 84	PARTS 3 - 14	MBK010084
MBK10105/FTB01	Ø10 - 105	PARTS 3 - 15	MBK010105
MBK10135/FTB01	Ø10 - 135	PARTS 3 - 16	MBK010135
MBK0684/FTB01	Ø6 - 84	PARTS 1 - 14	MBK006084
MBK06105/FTB01	Ø6 - 105	PARTS 1 - 15	MBK006105
MBK06135/FTB01	Ø6 - 135	PARTS 1 - 16	MBK006135

**NOTE : THROUGH COOLANT IS OPTIONAL**

# MICRO BORING KIT

FROM DIA 06 - 135 mm

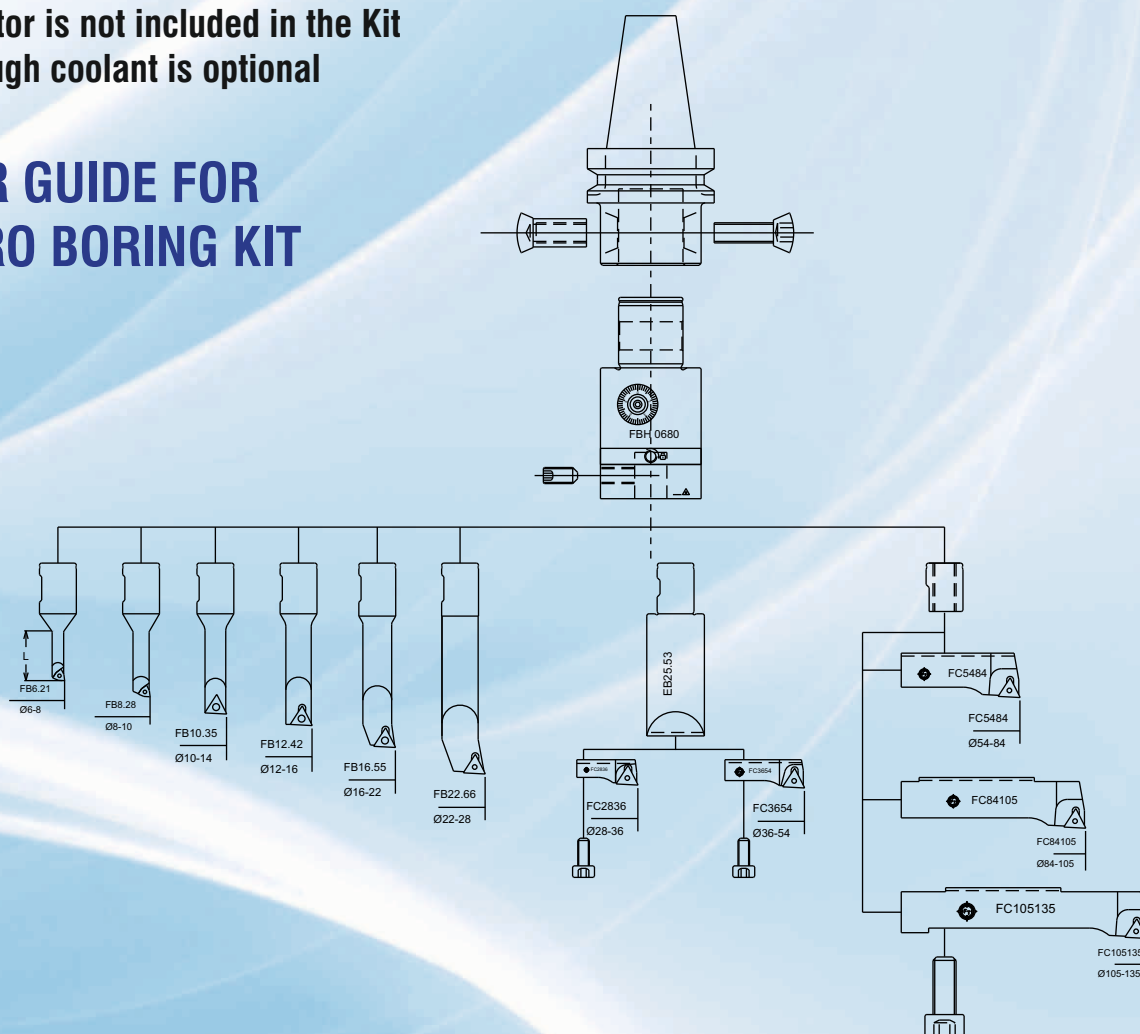
## PART LIST

1. FB 6.21
2. FB 8.28
3. FBH 0680
4. FB10.35
5. FB12.42
6. FB16.55
7. FB22.66
8. EB25.53 + M5 Screw
9. FC2836
10. FC3654
11. CLAMPING NUT + M10 Screw
12. FC5484
13. 2.5mm ALLEN KEY
14. T8 TORX KEY
15. FC 84105
16. FC 105135

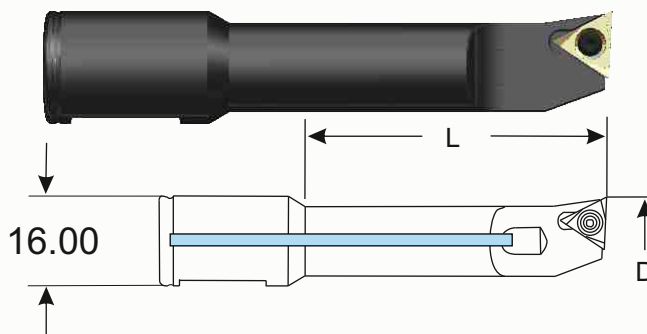
## NOTE:

- Adaptor is not included in the Kit
- Through coolant is optional

## USER GUIDE FOR MICRO BORING KIT



## FINISH BORING BARS



FINISH BORING BAR	RANGE 'D'	L	CARTRIDGE	INSERT	SCREW	ORDER CODE
FB 6.21	Ø6 - Ø8	21.0	—	WCGT02	TS 21	FBS006021
FB 8.28	Ø8 - Ø10	28.0	—			FBS008028
FB 10.35	Ø10 - Ø14	35.0	—	TPGX09	CS250T	FBS010035
FB 12.42	Ø12 - Ø16	42.0	—			FBS012042
FB 16.55	Ø16 - Ø22	55.0	—			FBS016055
FB 22.66	Ø22 - Ø28	66.0	—			FBS022066
EB 25.53	Ø28 - Ø36	62.0	FC 2836			EBS025053
EB 25.73	Ø28 - Ø36	82.0	FC 2836			EBS025073
EB 25.53	Ø36 - Ø54	64.0	FC 3654			EBS025053
EB 25.73	Ø36 - Ø54	84.0	FC 3654			EBS025073

## CARBIDE BORING BARS



FINISH BORING BAR	RANGE 'D'	L	INSERT	SCREW	ORDER CODE
FB 6.40	Ø6 - Ø8	40.0	WCGT02	TS 21	FBC006040
FB 8.50	Ø8 - Ø10	50.0			FBC008050
FB 10.60	Ø10 - Ø14	60.0	TPGX09	CS250T	FBC010060
FB 12.80	Ø12 - Ø16	80.0			FBC012080
FB 16.100	Ø16 - Ø22	100.0			FBC016100
FB 22.100	Ø22 - Ø28	100.0			FBC022100

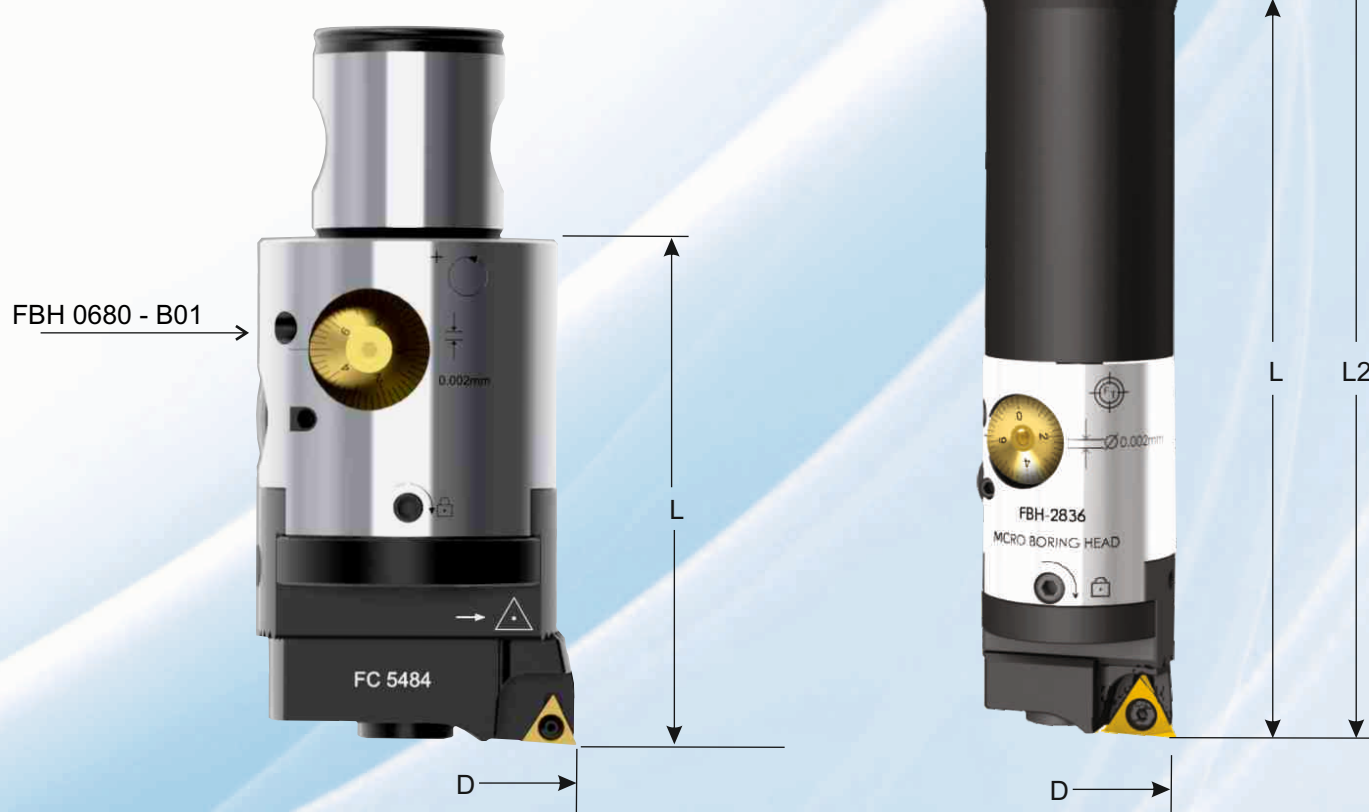
**NOTE : THROUGH COOLANT IS OPTIONAL**

# MICRO BORING HEADS

## “FBH” SERIES

The MICRO BORING HEAD, FBH series are available from dia 22 mm in different sizes up to dia135mm. The head has a fine adjustment of 2 microns on dia. The system is built on a modular concept with MC-32 connection on one side.

The BORING HEADS are designed with a good dia/length ratio for better depth without compromising on the rigidity and to give excellent hole quality.



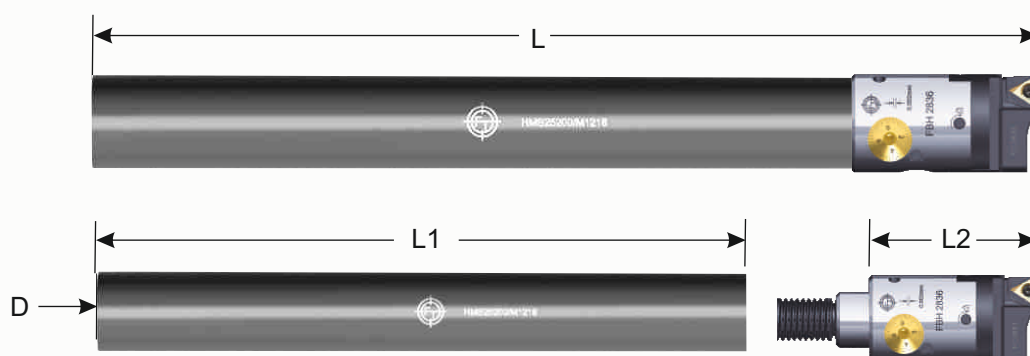
MICRO BORING HEAD	RANGE 'D'	L	L2	CARTRIDGE	INSERT	SCREW	ORDER CODE
FBH 2228 - B01	Ø22 - Ø28	83	108	FC 2228	CCGT06	TS 25	FBH022083
FBH 2836 - B01	Ø28 - Ø36	98	123	FC 2836	TPGX09	CS250T	FBH028098
FBH 3654 - B01	Ø36 - Ø54	110	136	FC 3654			FBH036110
FBH 0680 - B01	Ø54 - Ø84	84+La ★	-	FC 5484			FBH006080
FBH 0680 - B01	Ø84 - Ø105	87+La ★	-	FC 84105			
FBH 0680 - B01	Ø105 - Ø135	87+La ★	-	FC 105135			

★ Add adaptor length “La” - see P13.(can be customised)

**NOTE : THROUGH COOLANT IS OPTIONAL**

# FINISH BORING HEADS

## “MFBH” SERIES WITH CARBIDE SHANK



MICRO BORING HEAD	RANGE 'D'	SHANK DIA	L	L1	L2	ORDER CODE
M-FBH 2228-B01/M10X40 (HEAD)	Ø22 - Ø28	20	200	160	40	MFB022028
CBS20160/M1014 (CARBIDE SHANK)						CBS201610
M-FBH 2836-B01/M12X50 ((HEAD)	Ø28 - Ø36	25	250	200	50	MFB028036
CBS25200/M1216 (CARBIDE SHANK)						CBS252012
M-FBH 3654-B01/M16X60 (HEAD)	Ø36 - Ø54	32	320	260	60	MFB036054
CBS32240/M1620 (CARBIDE SHANK)						CBS322416

# FINISH BORING CARTRIDGES



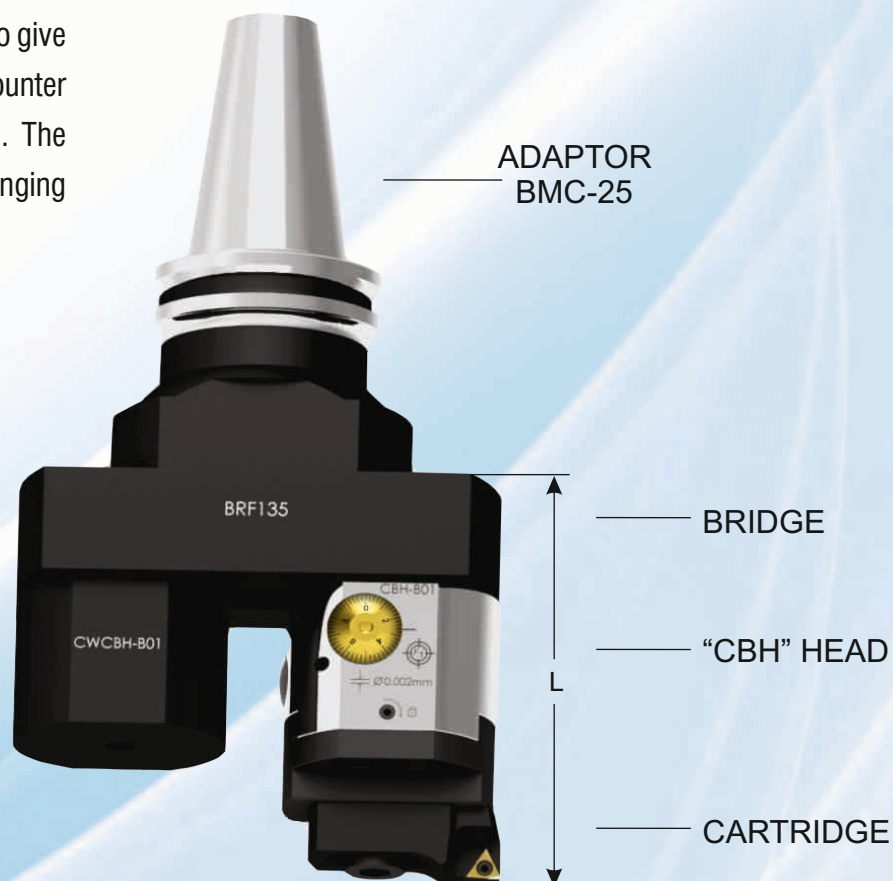
CARTRIDGE	RANGE 'D'	INSERT	INSERT SCREW	ORDER CODE
FC 2228	Ø22 - Ø28	CCGT06	TS 25	FCS022028
FC 2836	Ø28 - Ø36	TPGX09	CS250T	FCS028036
FC 3654	Ø36 - Ø54			FCS036054
FC 5484	Ø54 - Ø84			FCS054084
FC 84105	Ø84 - Ø105			FCS084105
FC 105135	Ø105 - Ø135			FCS105135

**NOTE : THROUGH COOLANT IS OPTIONAL**

# MICRO BORING HEADS

## “CBH” SERIES

The CBH-B01 is designed to bore large dia bores beyond 135 mm. It has a fine adjustment of 2 microns on dia. It is mounted on a modular bridge BRF series with BMC-25 modular connection to give a very rigid holding. It also has a counter weight to provide a balanced tool. The range can be easily extended by changing the bridge.



MICRO BORING HEAD	RANGE 'D'	CARTRIDGE	INSERT	L	ORDER CODE
CBH-B01	Ø135 - Ø165	FC 5484	TPGX09	98	CBH013501
	Ø165 - Ø195	FC 84105			
BRF 135 (BRIDGE)	Ø195 - Ø225	FC 105135			BRF000135
CBH-B01	Ø225 - Ø255	FC 5484			CBH013501
	Ø255 - Ø285	FC 84105			
BRF 225 (BRIDGE)	Ø285 - Ø315	FC 105135			BRF000225

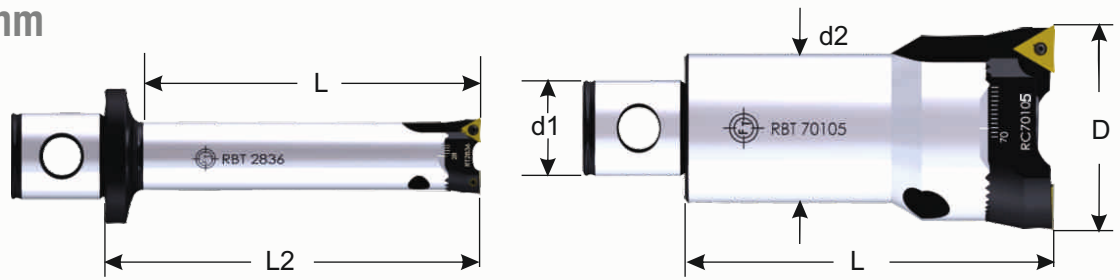
**NOTE : RANGE ABOVE Ø315 CAN BE SUPPLIED ON REQUEST**

**NOTE : THROUGH COOLANT IS OPTIONAL**



# ADJUSTABLE TWIN ROUGH BORING TOOLS

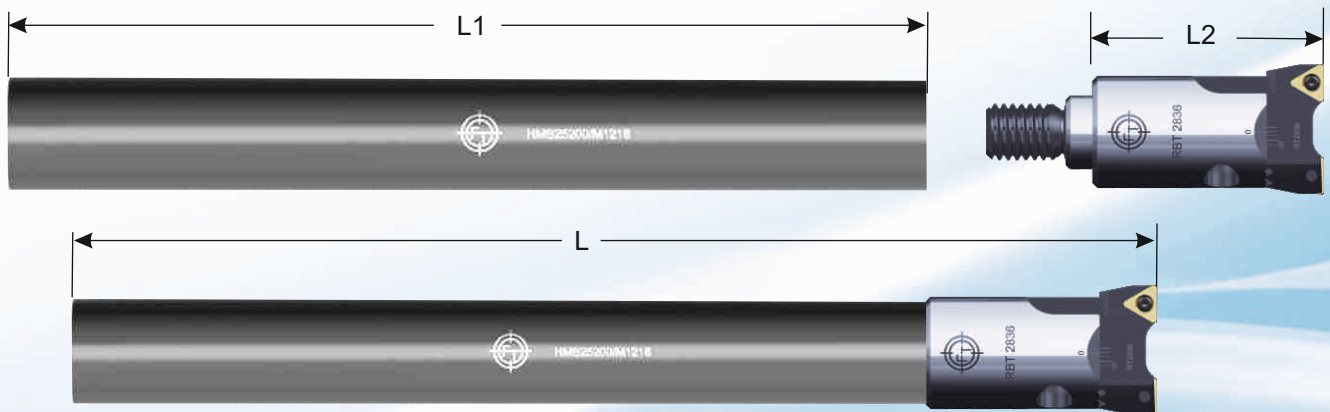
DIA 18 - 135 mm



ROUGH BORING BAR	RANGE 'D'	CARTRIDGE	d2	d1	L	L2	Wt.KG	ORDER CODE
RBT 1822	Ø18 - Ø22	RC 1822	Ø16.0	MC 32.0	72	85	0.41	RBS018072
RBT 2228	Ø22 - Ø28	RC 2228	Ø20.0		90	105	0.50	RBS022090
RBT 2836	Ø28 - Ø36	RT 2836	Ø25.0		110	124	0.72	RBS028110
RBT 3650	Ø36 - Ø50	RT 3650	Ø32.0		115	128	1.00	RBS036115
RBT 5070	Ø50 - Ø70	RT 5070	Ø45.0		125	134	1.63	RBS050125
RBT 70105	Ø70 - Ø105	RT-105-A	Ø50.0		125	-	2.08	RBS070125
RBT 105135	Ø105 - Ø135	RT-105-A	Ø60.0		150	-	3.65	RBS105150

NOTE : THROUGH COOLANT IS OPTIONAL

# ADJUSTABLE TWIN ROUGH BORING TOOLS WITH CARBIDE SHANK



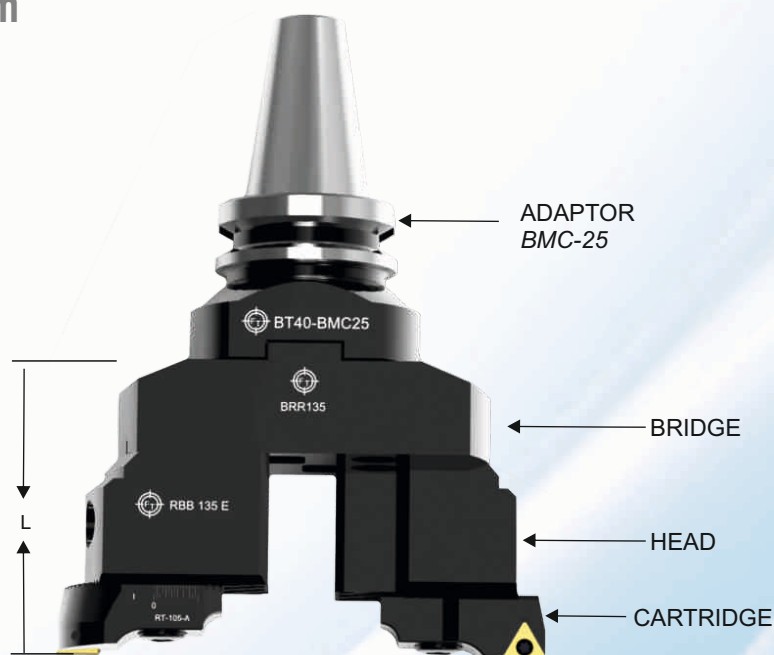
ROUGH BORING HEAD	RANGE 'D'	CARBIDE SHANK	SHANK DIA	L	L1	L2	ORDER CODE
M-RBT 2228/M10X40	Ø22 - Ø28	CBS20160/M1014	20	200	160	40	MRB022028
M-RBT 2836/M12X50	Ø28 - Ø36	CBS25200/M1216	25	250	200	50	MRB028036
M-RBT 3650/M12X60	Ø36 - Ø50	CBS32240/M1620	32	320	240	60	MRB036050

NOTE : THROUGH COOLANT IS OPTIONAL



# TWIN ROUGH BORING TOOLS

DIA 135 - 315 mm



ROUGH BORING HEAD	RANGE 'D'	CARTRIDGE	INSERT	L	ORDER CODE
RBB 135E (HEAD)	Ø135 - Ø225	RT-105-A	TCMT 16	98	RBB000135
BRR 135 (BRIDGE)					BRR135098
RBB 135E (HEAD)	Ø225 - Ø315				RBB000135
BRR 225 (BRIDGE)					BRR225098

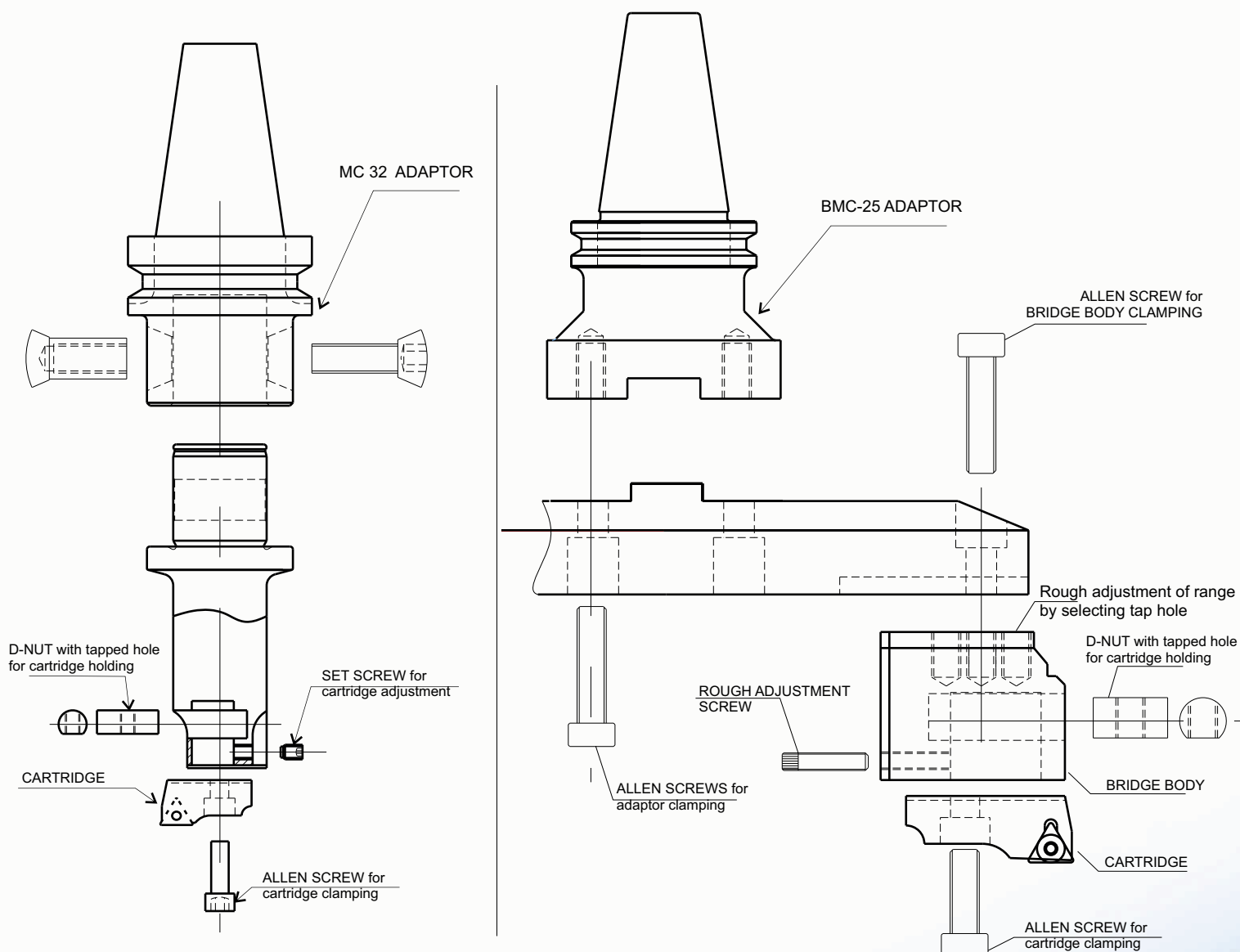
**NOTE : RANGE BEYOND DIA 315 CAN BE SUPPLIED ON REQUEST**

## ROUGH BORING CARTRIDGES

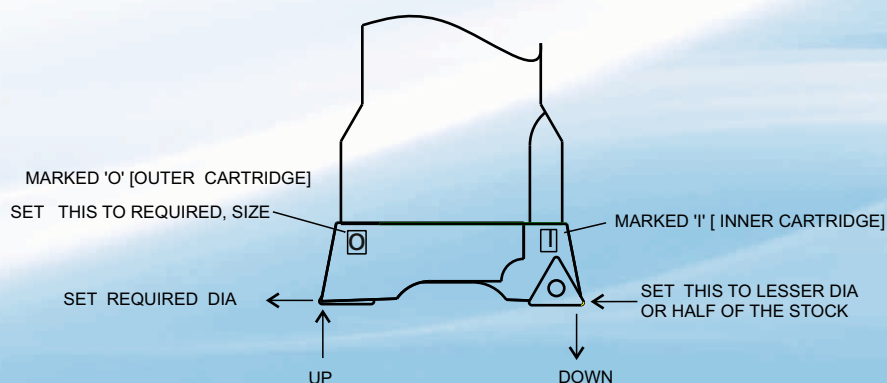


CARTRIDGE	RANGE	INSERT	INSERT SCREW	TORX KEY	SET SCREW	CLAMP SCREW	ORDER CODE
RC 1822	Ø18 - Ø22	CCMT 06	M2.5 X 0.45	T8	M3 X 0.5	M3 X 0.5	RCS018022
RC 2228	Ø22 - Ø28	CCMT 06	M2.5 X 0.45	T8	M3 X 0.5	M4 X 0.7	RCS022028
RT 2836	Ø28 - Ø36	TCMT 09	M2.2 X 0.45	T7	M4 X 0.7	M5 X 0.8	RCS028036
RT 3650	Ø36 - Ø50	TCMT 11	M2.5 X 0.45	T8	M5 X 0.8	M6 X 1.0	RCS036050
RT 5070	Ø50 - Ø70	TCMT 16	M4.0 X 0.7	T15	M6 X 0.1	M8 X 1.25	RCS050070
RT-105-A	Ø70 - Ø105	TCMT 16	M4.0 X 0.7	T15	M6 X 0.1	M10X1.5	RCS105001

**NOTE : THROUGH COOLANT IS OPTIONAL**



Twin Rough Boring Tool has 2 Cartridges marked I & O FOR differential cutting .  
There is a 0.3mm difference in height in manufacturing.



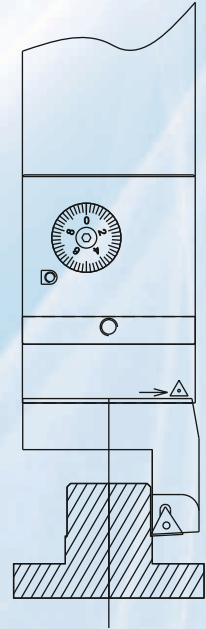
NOTE : Rough boring tools with same cartridge height can be supplied on request

# SPECIAL TOOLS

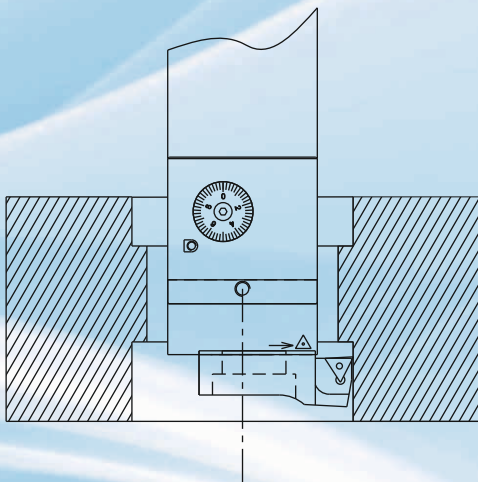
## OD TURNING TOOL



Cylindrical projections in parts sometimes become very difficult to machine and may need a separate setup. Using a OD turning tool with Micro Boring Head FBH series and CBH series, we can machine cylinders accurately and conveniently in same setup. This would be very useful when large parts are machined on Machining centers.



## BACK BORING TOOL



It becomes very convenient to finish accurate bores in one set up using a back boring tools. This avoids additional setup, saving time and costs. These are made to specific applications.

The Micro boring head FBH series and CBH series can be used to perform BACK BORING operation and a wide range of bores can be machined conveniently.



**Finish Back Boring**

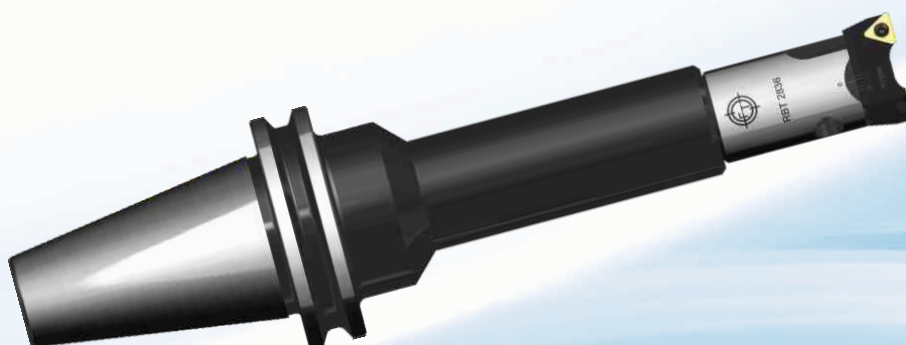
## BACK BORING ROUGHING TOOLS



## EXTENDED LENGTH TOOLS FOR FINISHING



## EXTENDED LENGTH TOOLS FOR ROUGHING



By using M-FBH series Micro boring head and special Adaptor, it is possible to reach smaller step bores. That require machining at greater depths. The special Adaptor with a rigid shank provides a stable machining for smaller & deeper holes.

This solution is also available on TWIN ROUGH BORING tools.

**NOTE : THROUGH COOLANT IS OPTIONAL**

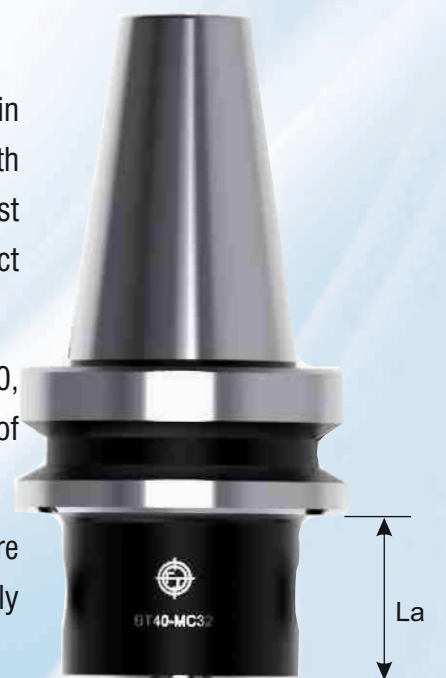
## MODULAR ADAPTOR

### “MC-32”

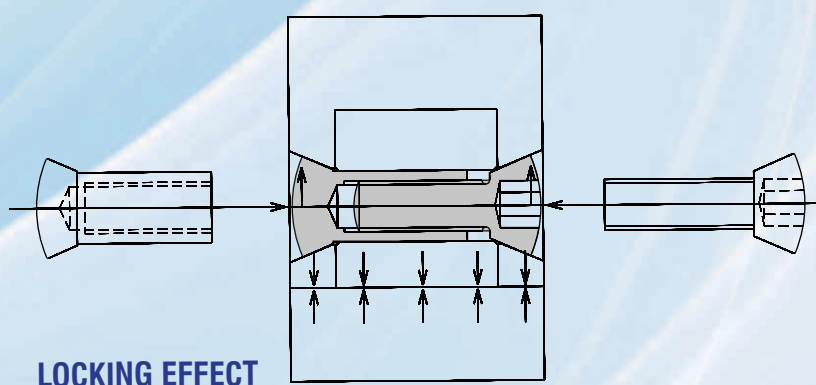
The complete design of boring tools is built on a MODULAR concept. This helps in easy interchanging of tools. The parts to be coupled are inserted and fastened with the help of tapered bolt and nut. On tightening the tapered bolt, it creates a axial thrust to clamp the face rigidly. The diameter and face are accurately ground to give perfect seating, a better concentricity and rigidity.

The modular adaptor are available in different machine tapers (BT-40, BT-50, SK-40, HSK-63, HSK-100 etc..) with MC-32 connector, to suit the BORING HEADS of FB series from rough boring tools.

For boring tools from dia 105 mm and above, modular adaptors with BMC-25 are available in various machine tool tapers. The bridge BRF and BRR series are rigidly



ADAPTOR MC32/BMC25	GPL	La
BT 40	60	30
BT 50	100	60
HSK A50	60	30
HSK A63	80	54
HSK 100	100	40



## M/C TOOL ADAPTOR FOR BRIDGE CLAMPING

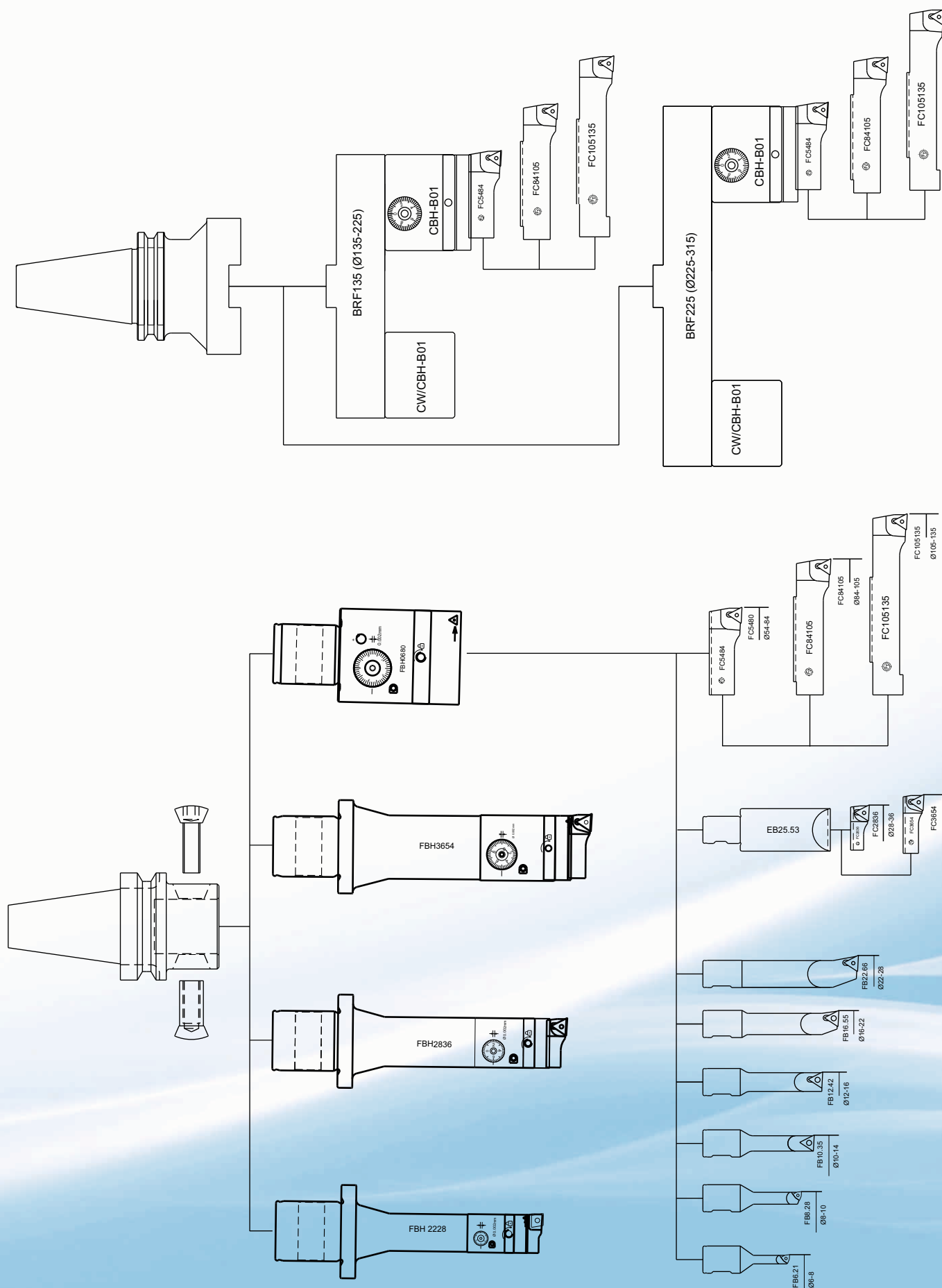
### “BMC-25”

This has a very rigid construction, to take the cutting tools required while roughing large diameters.

The bridge is firmly clamped to the BMC-25 adaptor, and engages into the slot for a positive drive during machining.

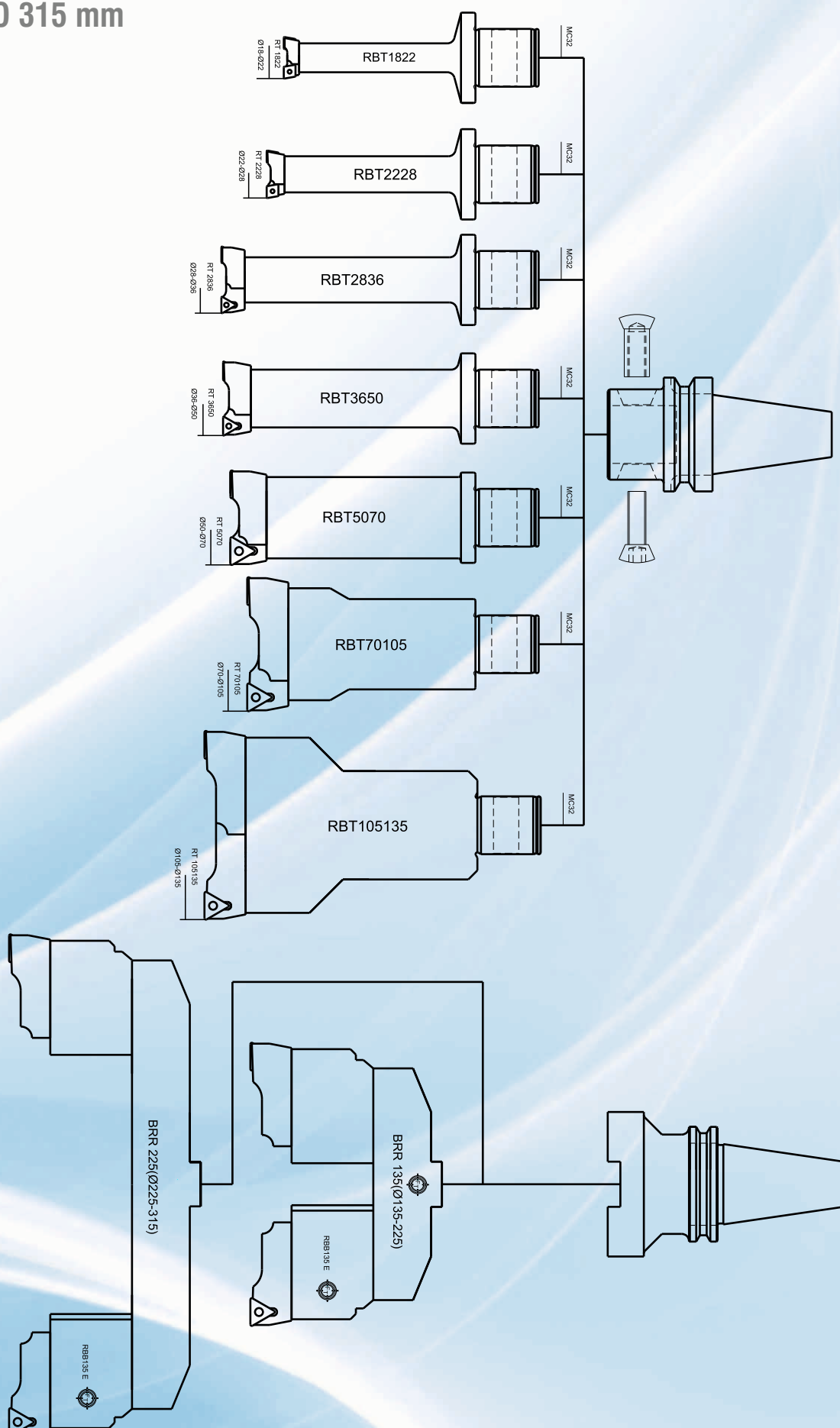


# USER SELECTION GUIDE FOR MICRO BORING TOOLS - DIA 6mm to 315mm



# USER SELECTION GUIDE FOR TWIN ROUGH BORING TOOLS

DIA 18 TO 315 mm







Introduces 'BORING SYSTEM' that makes hole making convenient and cost effective. Having been in the machining field for more than two decade and with a lot of experience in fine boring and rough boring, we have tried to offer a range that will be useful and convenient to all user (both for production and one off application).

We have made it economically affordable so that even small machine shop can afford to use them.

The range and boring length have been so designed that it can be used for most of your needs, with minimum number of tools, accessories and inserts.

We have rough boring heads from Ø18 mm to 315 mm and finish boring head from Ø6 mm to 315 mm and above.

*Manufactured by :*

**Finetech**  
**T O O L I N G S**

**Cat.Rev.2017-1**

**CERTIFIED ISO 9001:2008**

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