

Finetech

TOOLINGS



BORING SYSTEM

MICRO BORING KIT



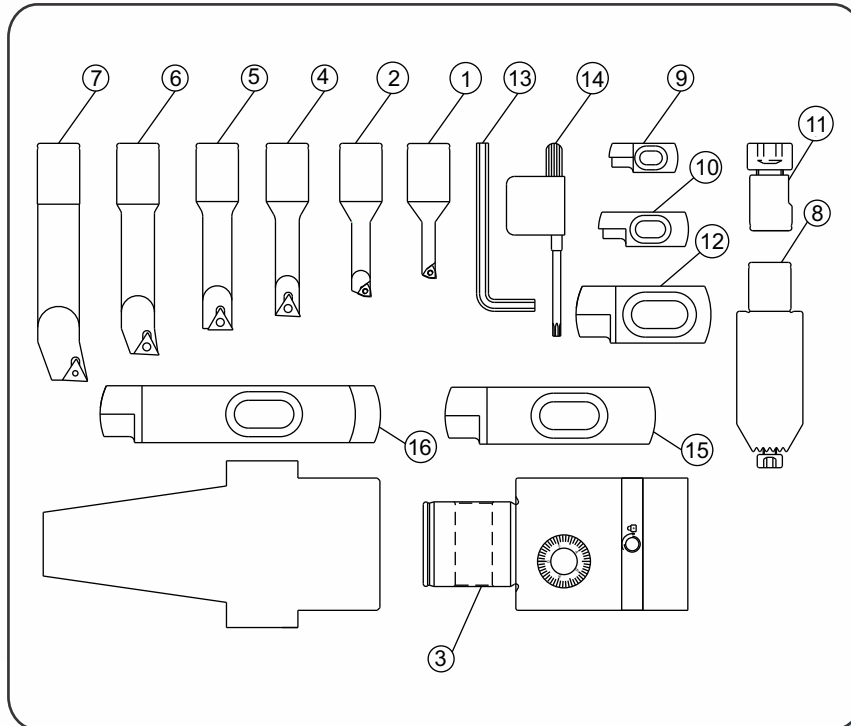
The MICRO BORING KIT was developed to accommodate & manufacture a wide range of bores from Dia 6 mm to 135 mm using a single MICRO BORING HEAD. The parts are made of high quality tool steel & heat treated to a good hardness, for a longer durability and maintain its accuracy for many years. Also care 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



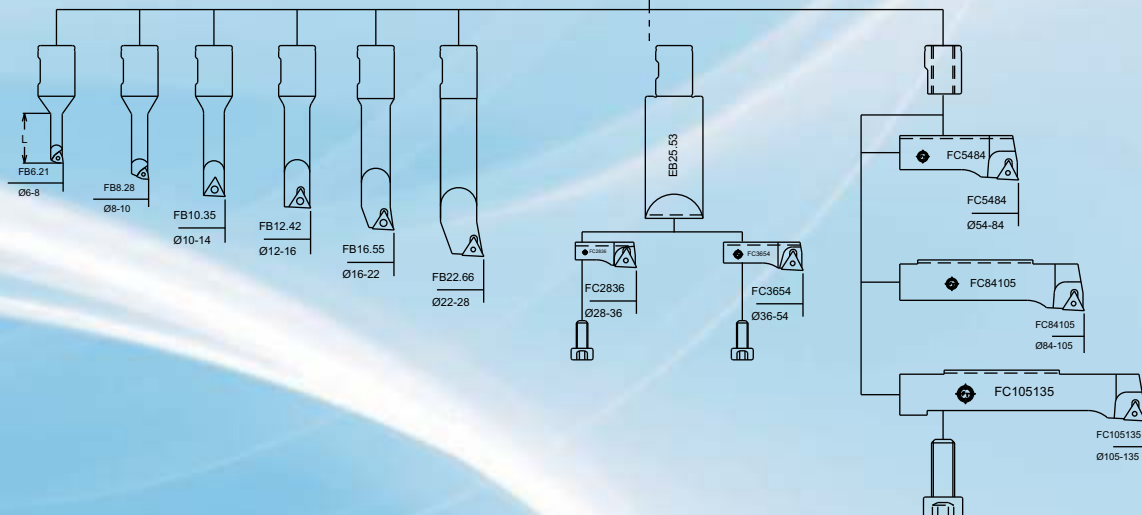
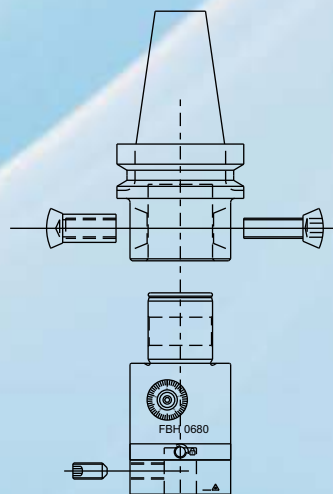
PART LIST

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

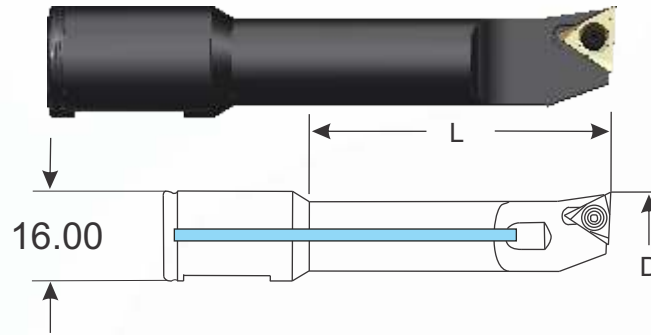
NOTE:

- 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.



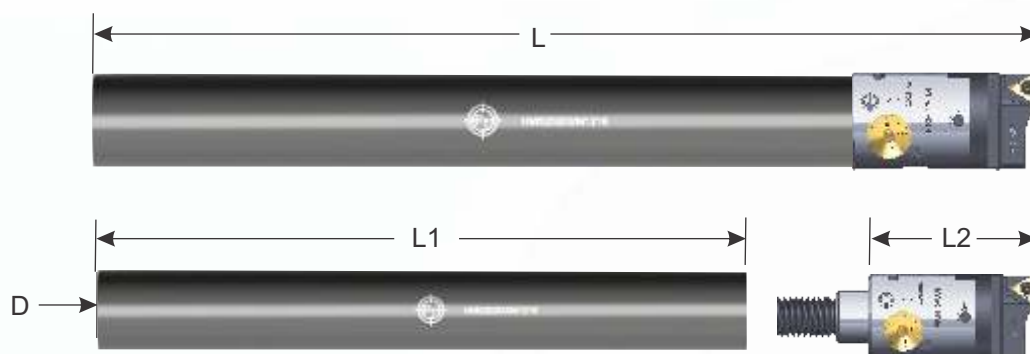
| MICRO BORING HEAD | RANGE 'D' | L | L2 | CARTRIDGE | INSERT | SCREW | ORDER CODE |
|-------------------|-------------|---------|-----|-----------|--------|--------|------------|
| FBH 2228 - B01 | Ø22 - Ø28 | 83 | 108 | FC 2228 | CCGT06 | TS 25 | FBH022083 |
| FBH 2836 - B01 | Ø28 - Ø36 | 98 | 123 | 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



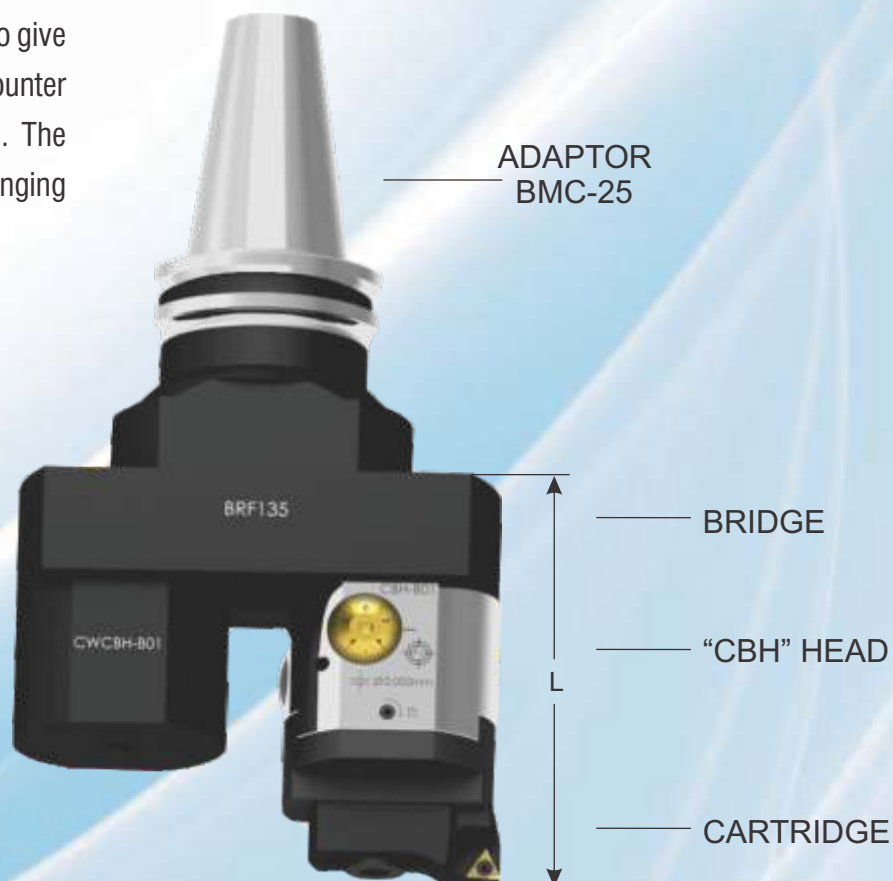
| CARTRIDGE | RANGE 'D' | INSERT | INSERT SCREW | ORDER CODE |
|-----------|-------------|--------|--------------|------------|
| FC 2228 | Ø22 - Ø28 | CCGT06 | TS 25 | FCS022028 |
| FC 2836 | Ø28 - Ø36 | TPGX09 | CS250T | FCS028036 |
| FC 3654 | Ø36 - Ø54 | | | FCS036054 |
| FC 5484 | Ø54 - Ø84 | | | 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.



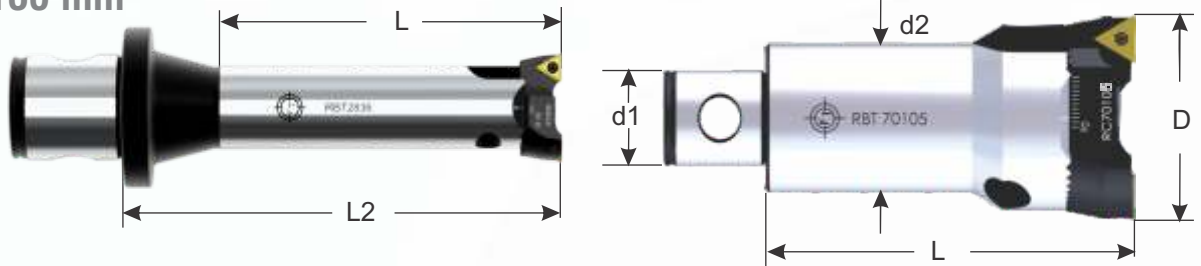
| MICRO BORING HEAD | RANGE 'D' | CARTRIDGE | INSERT | L | ORDER CODE |
|-------------------|-------------|-----------|--------|----|------------|
| CBH-B01 | Ø135 - Ø165 | FC 5484 | TPGX09 | 98 | CBH013501 |
| | Ø165 - Ø195 | FC 84105 | | | |
| BRF 135 (BRIDGE) | Ø195 - Ø225 | FC 105135 | | | CBH013501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

NOTE : RANGE ABOVE Ø315 CAN BE SUPPLIED ON REQUEST

NOTE : THROUGH COOLANT IS OPTIONAL

ADJUSTABLE TWIN ROUGH BORING TOOLS

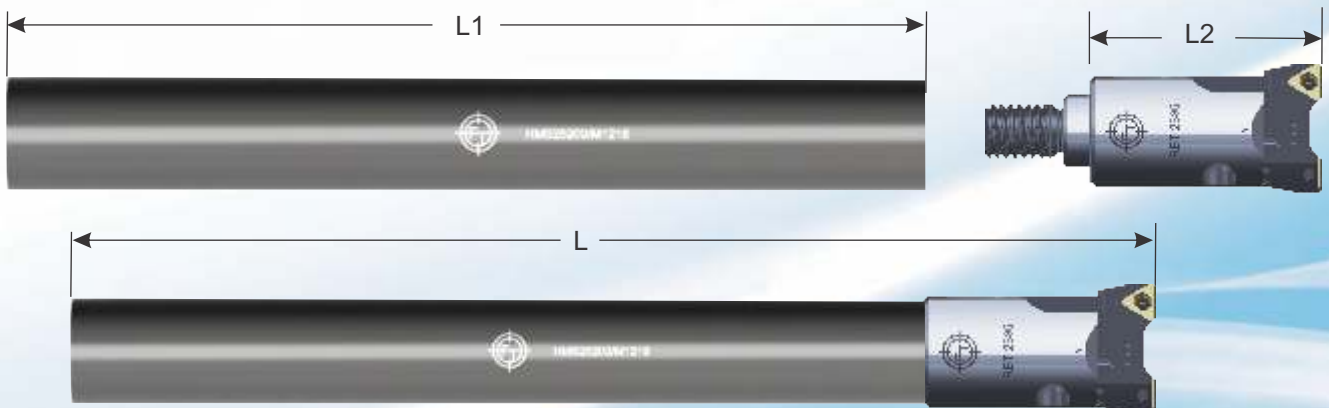
DIA 18 - 135 mm



| 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

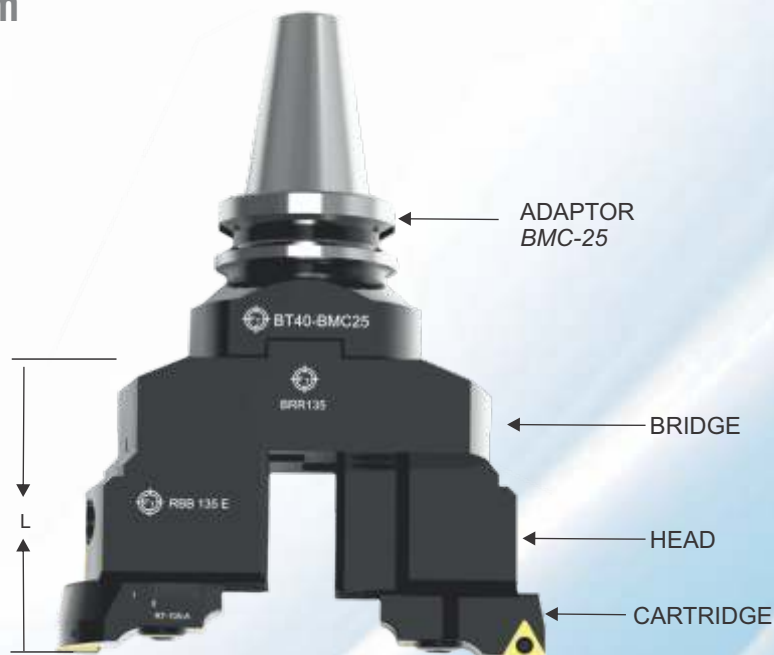


| ROUGH BORING HEAD | RANGE 'D' | CARBIDE SHANK | SHANK DIA | L | L1 | L2 | ORDER CODE |
|-------------------|-----------|----------------|-----------|-----|-----|----|------------|
| M-RBT 2228/M10X40 | Ø22 - Ø28 | CBS20160/M1014 | 20 | 200 | 160 | 40 | MRB022028 |
| M-RBT 2836/M12X50 | Ø28 - Ø36 | CBS25200/M1216 | 25 | 250 | 200 | 50 | MRB028036 |
| M-RBT 3650/M16X60 | 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 |

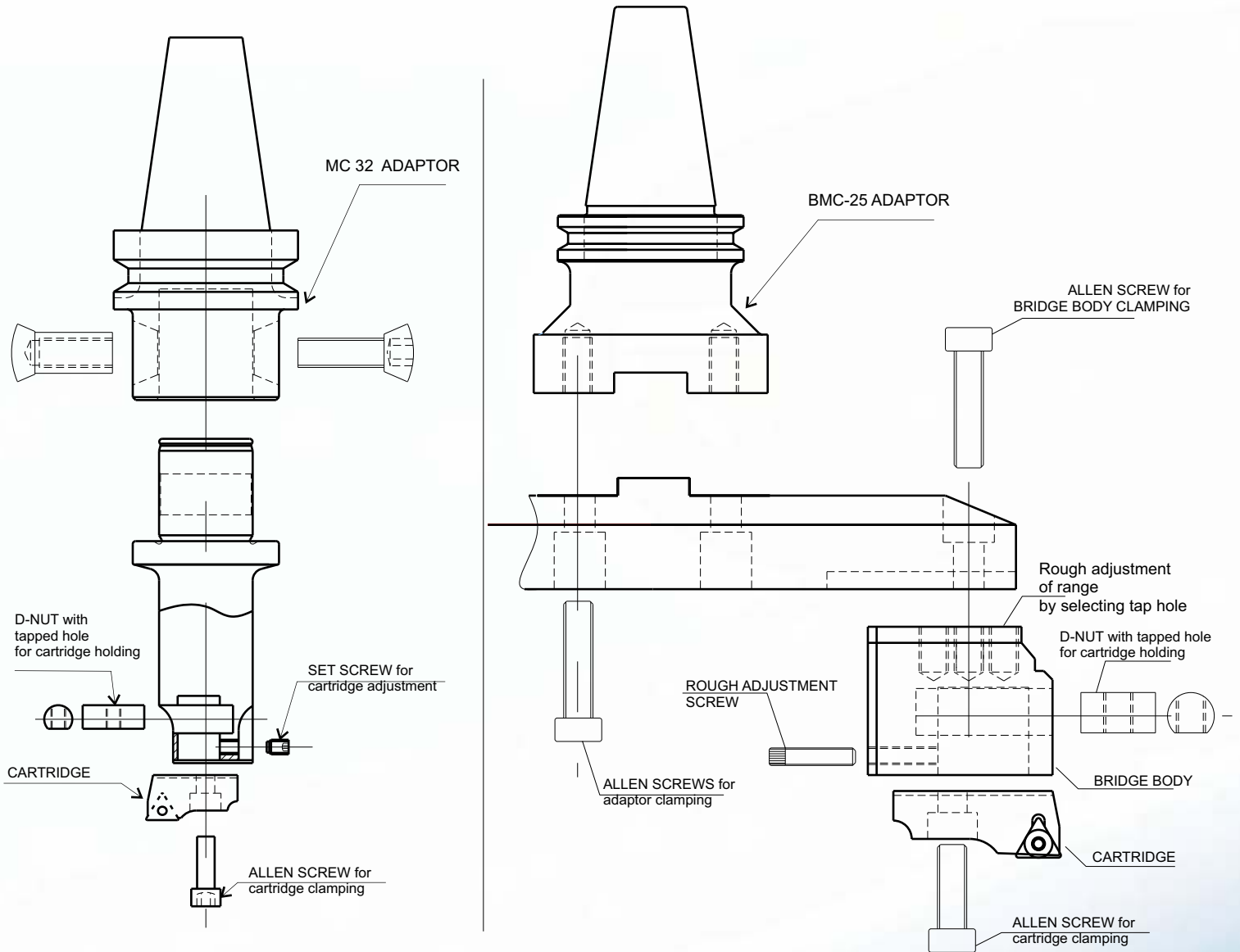
NOTE : RANGE BEYOND DIA 315 CAN BE SUPPLIED ON REQUEST

ROUGH BORING CARTRIDGES

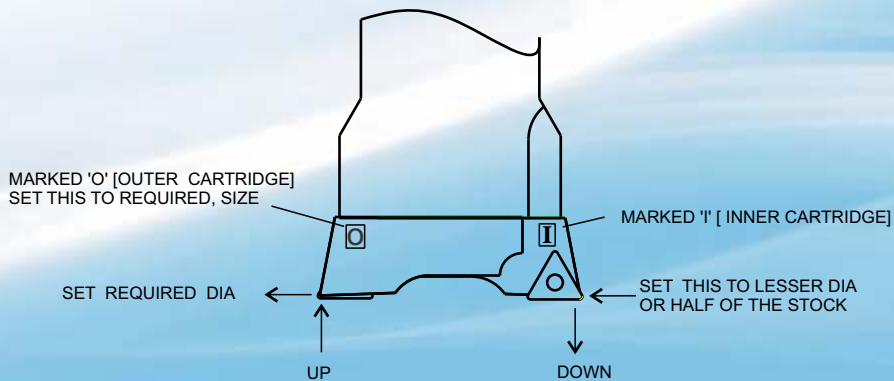


| CARTRIDGE | RANGE | INSERT | INSERT SCREW | TORX KEY | SET SCREW | CLAMP SCREW | ORDER CODE |
|-----------|------------|---------|--------------|----------|-----------|-------------|------------|
| RC 1822 | Ø18 - Ø22 | CCMT 06 | M2.5 X 0.45 | T8 | M3 X 0.5 | M3 X 0.5 | RCS018022 |
| RC 2228 | Ø22 - 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.



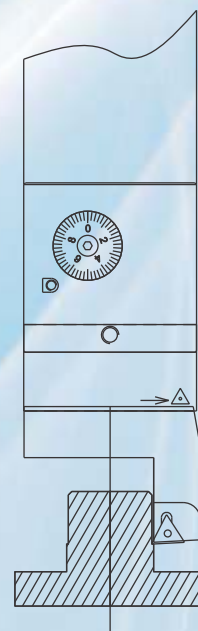
NOTE : Rough boring tools with same cartridge height can be supplied on request

SPECIAL TOOLS

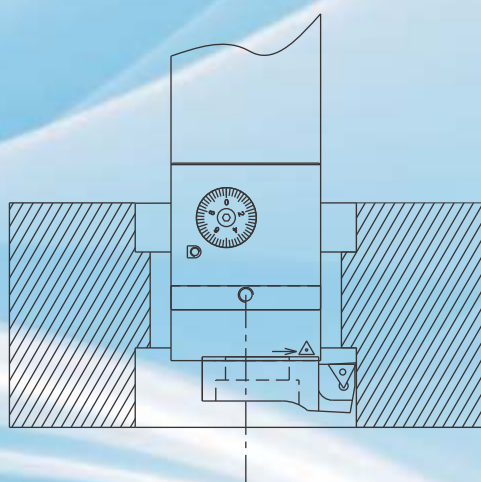
OD TURNING TOOL



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”

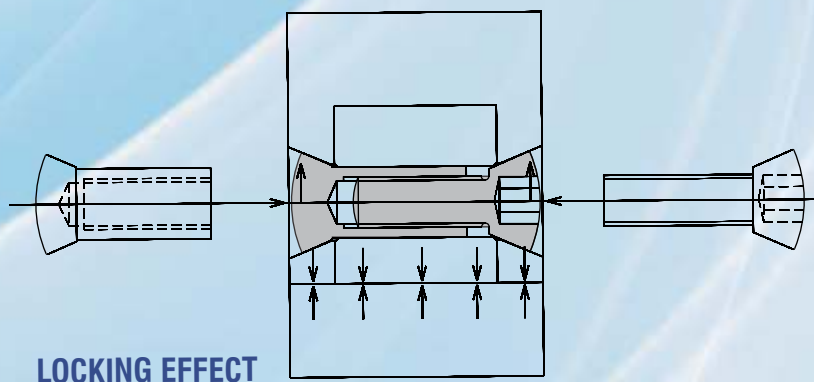
The complete design of boring tools is built on a MODULAR concept. This helps in easy interchanging of tools. The parts to be coupled are inserted and fastened with the help of tapered bolt and nut. On tightening the tapered bolt, it creates an axial thrust to clamp the face rigidly. The diameter and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



| 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

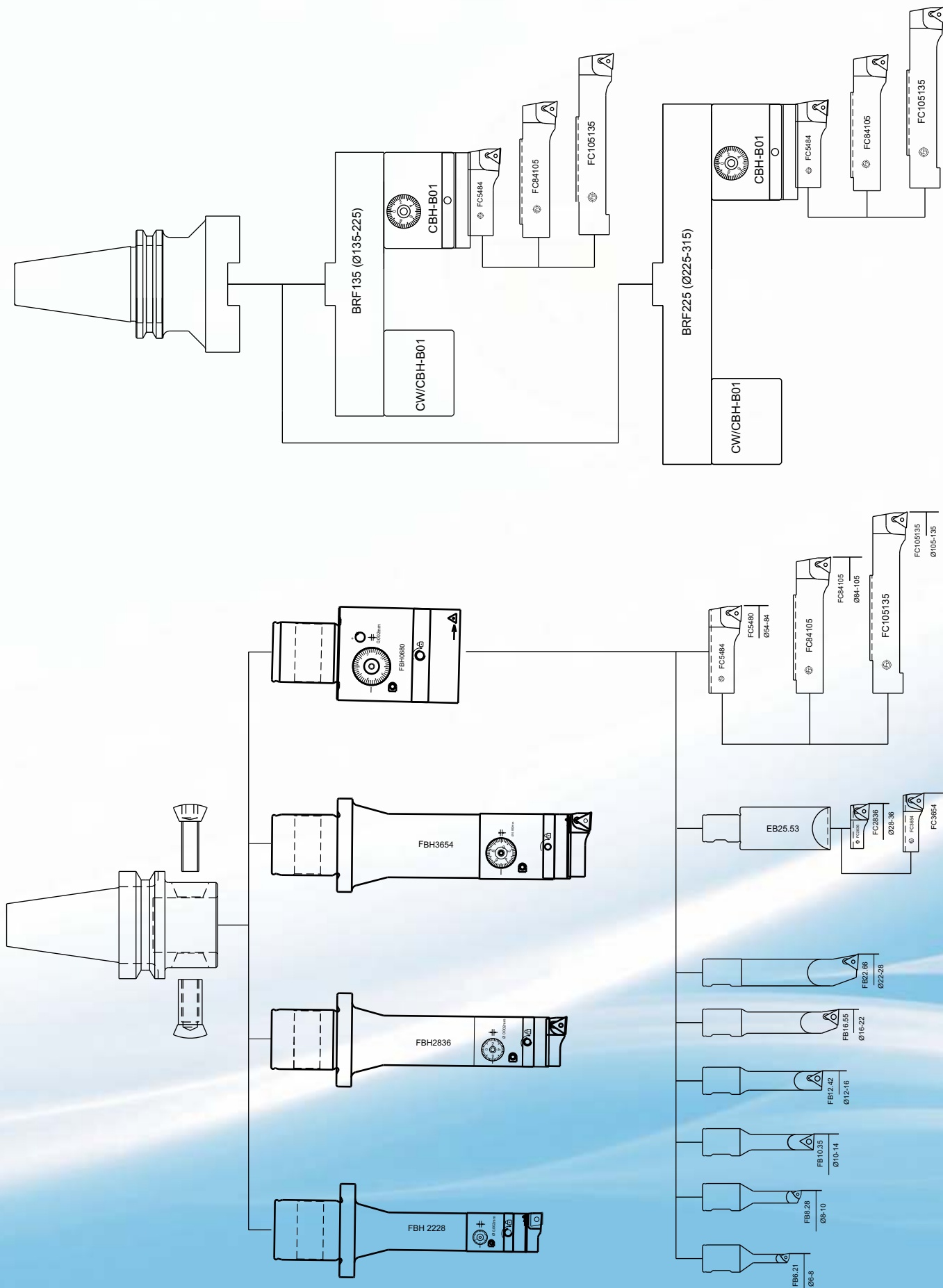
“BMC-25”

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.

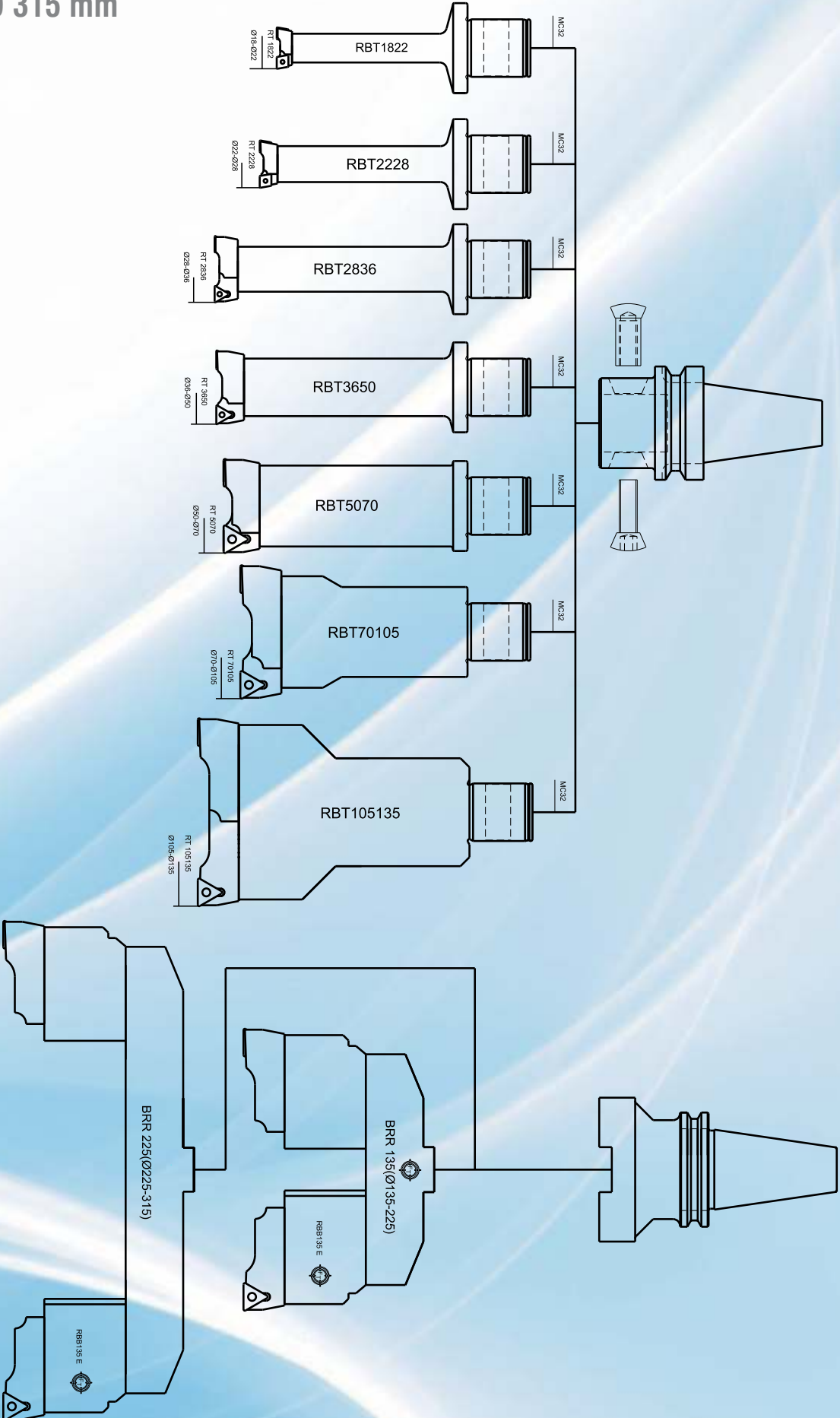


USER SELECTION GUIDE FOR MICRO BORING TOOLS - DIA 6mm to 315mm



USER SELECTION GUIDE FOR TWIN ROUGH BORING TOOLS

DIA 18 TO 315 mm



RANGE ABOVE 315mm CAN BE SUPPLIED ON REQUEST



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 $\varnothing 18$ mm to 315 mm and finish boring head from $\varnothing 6$ 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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