

Thank you for purchasing **BIG** BF CUTTER.
Please read these instructions before use and keep them where the operator may refer to them whenever necessary.

HOW TO ATTACH INSERTS

- Before attaching inserts, remove any foreign particles from the insert seat with compressed air.
- Thoroughly wipe the side and back faces of the inserts with a cloth.
- Apply an anti-seizure lubricant to an insert clamping screw. Tighten the screw while lightly pressing on the insert.
- Do not tighten insert clamping screws with more clamping torque than those in the figure shown to the right. Otherwise, the insert may crack or break.
- Ensure that there is no space between the insert and the insert seat.

Insert	Clamping torque (N·m)
CM05	0.5
CC07	1.0
CC09	2.5

CAUTION

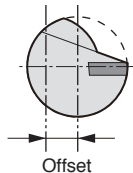
- Do not use other insert clamping screws than the original BIG screw.
- In case anti-seizure lubricant is not applied, there is a possibility that the clamping screw cannot be loosened.
- Be careful not to cut yourself when exchanging inserts.
- Replace the screw periodically since they are consumable parts.
- Do not use a wrench whose tip is damaged or a clamping screw whose hole is damaged.

HOW TO USE

CAUTION

BF CUTTER is the backspot facing cutter which goes through the bore after offsetting the amount mentioned in the chart and executes backspot facing.

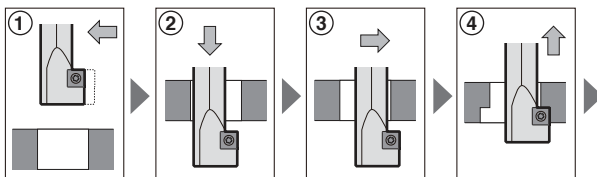
Therefore, if the orientations between the insert edge and machine spindle are not aligned, it may lead to a crash.



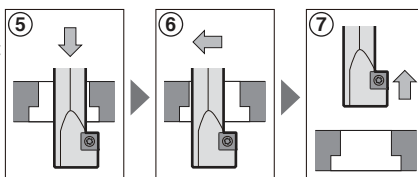
Cutter Type	Offset Amount (mm)
BFM 6/11	2.40
BFM 8/14	2.90
BFM10/17.5	3.65
BFM12/20	3.65
BFM14/23	4.15
BFM16/26	4.65
BFM18/29	5.20
BFM20/32	5.70
BFM22/35	6.20
BFM24/39	7.30
BFM27/43	6.80
BFM30/48	7.80

《 Use the following procedure for proper operation.》

- ① Orient the machine spindle and shift the centerline by the Offset Amount.
- ② Move the cutting edge through the workpiece to a position with no interference.
- ③ Move the machine spindle to the bore centerline.



- ④ Rotate the spindle and feed to the required depth.
 - Center through coolant is available. Water soluble coolant is recommended.
 - When long chips are generated, use step feeding.



- ⑤ After completing the backspot face, stop and orient the spindle.
- ⑥ Shift the spindle centerline by the Offset Amount.
- ⑦ Retract the cutter from the workpiece.

CUTTING CONDITIONS

MATERIALS	CUTTING SPEED (m/min)	FEED (mm/rev)
Carbon/Alloy Steel	30	0.03
Cast Iron	30	0.03
Aluminium Non-Ferrous Material	30 - 50	0.03



CAUTION

- Do not cut under inappropriate cutting condition.
- Do not use after the body is bumped or strongly shocked.
- The tool can develop high temperatures during cutting.
- Minimize the overhang of the tool for use.
- Use a machine tool with sufficient rigidity and horsepower.
- Use a cover on the machine tool and personal protective equipment to guard against shattering chips and broken tools due to misuse.

INSERT AND PARTS (OPTION)

Cutter Type	Insert Model	Insert Clamping Screw Set	Cutter Type	Insert Model	Insert Clamping Screw Set
BFM 6/11	CM0502	S2SS-T6	BFM18/29	CC07	S3S
BFM 8/14			BFM20/32		
BFM10/17.5		BFM22/35			
BFM12/20		S2TS-T6	CC09	BFM24/39	S4S-T15
BFM14/23				BFM27/43	
BFM16/26			BFM30/48		

- 10 screws and 1 exclusive wrench are included in the Insert Clamping Screw Set.