

Please read these instructions before use and keep them where the operator may refer to them whenever necessary.

OPERATION MANUAL DOWNLOAD SITE
http://big-daishowa.com/manual_index.php

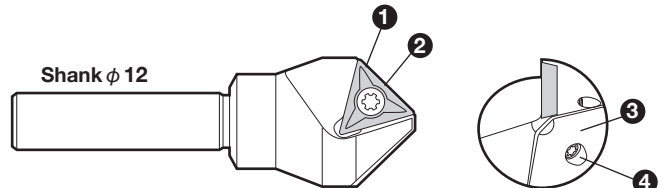


C-CUTTER BOY is a chamfering tool which is designed for manual operation in a drilling machine or similar.
(BIG) C-CUTTER is recommended for the application in a machining center.

ASSEMBLY

1 Insert

- This insert is exclusively designed. Inserts made by other companies are not suitable.
- Mount the insert securely in the condition that there is no dirt such as chips and etc. on the insert or the seat of the insert, and no opening between the insert and the seat because of lift-up and etc.



2 Insert Clamping Screw (M4 × 8)

3 Carbide Guide

Carbide Guide is disposable. Timely replacement is recommended. On replacement, tighten 1 piece of clamp screw while thrusting the Carbide Guide against V-shaped recess on the body. After replacement, clamp the C Cutter Boy with a quality chuck such as BIG New Baby Chuck and ensure that runout of the Carbide Guide is within 0.05mm.

4 Carbide Guide Clamp Screw (M4 x 7)

CAUTION

- Only use the clamping screw and wrench supplied.
- Make sure that the clamping screw are not loosened before using.
- Since the clamping screw is a consumptive part, timely replacement is recommended.

OPERATIONAL CAUTIONS

- Since Carbide Guide guides the tool along the cutting surface during cutting operation, low speed cutting is recommended.
- Refer to Table 1 to select recommended min^{-1} .
- Feed the tool while observing the cutting condition. Do not feed the tool too strongly.
- Coolant supply is recommended.

Table 1 : Recommended min^{-1}

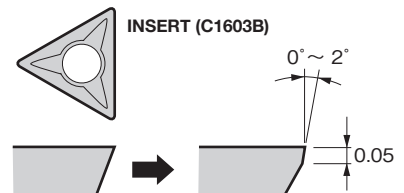
Bore	Steel	Cast Iron	Aluminum
φ 5	600 min^{-1}	800 min^{-1}	1,000 min^{-1}
φ 10	500 min^{-1}	600 min^{-1}	800 min^{-1}
φ 15	400 min^{-1}	500 min^{-1}	600 min^{-1}
φ 20	300 min^{-1}	400 min^{-1}	500 min^{-1}

CAUTION

- Hold the shank of C-CUTTER BOY securely enough to prevent from running idle.
- Make sure that a workpiece is securely clamped. Especially, it is dangerous to hold a small workpiece by hands, because the workpiece may fly out.
- Do not use C-CUTTER BOY out of the cutting range.
 (min. bore = φ 5, max. chamfering dia. = φ 25)
- The max. allowable min^{-1} is 2,000 min^{-1} .
- Wear protect glasses and etc. surely during operation.
- Be careful of burning with the workpiece soon after operation.

TROUBLESHOOTING WITH THE VIBRATION IN OPERATION

1. Make sure that no chipping or notable wear exists on the insert.
 If any, change the corner of the insert or exchange the insert itself.
2. Check whether there are something wrong with the carbide guide.
 Exchange the carbide guide if chipping or wear is notable.
 In case that the trace of scratching the workpiece by carbide guide is not uniform, the carbide guide may be uncomfortably mounted.
 In this case, mount the carbide guide over again.
3. Try to use coolant supply.
4. It is effective to lap the flank of the cutting edge by diamond hand lapper (about #800).



SPARE PARTS

Inserts	C1603B
Insert Clamping Screw set	S4S
Carbide Guide set	CG0525S

- Inserts are provided by a set of 10 pieces.
- Insert Clamping Screw set contains 10 pieces of screws(M4 × 8) and 1 piece of wrench(FLR-20S).
- Carbide Guide set includes 1 pce. each of the Carbide Guide and Carbide Guide Clamp Screw.
- Carbide Guide Clamp Screw and Insert Clamping Screw share the same wrench.