

## Troubleshooting (Chamfering series)

	Details of the trouble	Cause	Pulled out of holder. Unable to attach fast to spindle or holder in case of MT shank.
1	Poor cutting Scratches on machining surface (poor surface roughness, peeling, burr, chatter, etc.)	① Inappropriate machining conditions ・Large or small rotation number  ・Low work holding rigidity  ② Abrasion or deposition of holder cutting edge  ③ Wrong chamfering tool selection ・Chamfering: soft materials such as aluminum, mild steel ・NEW chamfering: general steel, cast iron ・Chip selection does not match material ・No.504: general steel, cast iron ・No.510: soft materials such as aluminum, mild steel  ④ Gap between chip and chip seat ・Gap due to dust seizing ・Gap due to chip mounting trouble  ⑤ Inappropriate machining diameter	① Revision of machining conditions ・Revision of rotation number  ・Fix the work tight  ② Ask NT for regrinding  ③ Reselection of chamfering tool (Reference: hardness more than HB 200 ···general steel hardness less than HB 200 ···mild steel)  ④ Retightening chip mounting bolts ・Cleaning of chip and chip seat ・Tighten screws after mounting chip on seat  ⑤ Selection of chamfering tool appropriate to machining diameter
2	Short life	① Inappropriate machining conditions ・Large or small rotation number  ② Wrong chamfering tool selection ・Chamfering: soft materials such as aluminum, mild steel. ・NEW chamfering: general steel, cast iron ・Chip selection does not match material ・No.504: general steel, cast iron ・No.510: soft materials such as aluminum, mild steel.	① Revision of machining conditions ・Revision of rotation number  ② Reselection of chamfering tool (Reference: hardness more than HB 200 ···general steel. hardness less than HB 200 ···mild steel) ・Use a gold chamfering drill.
3	Chip cannot be mounted	① Designated chip is not used.  ② Designated chip mounting bolts are not used.	① Use designated chip.  ② Use designated mounting bolts.