

Effects on Cutter / Holder by Improper Teaching

■ Introduction

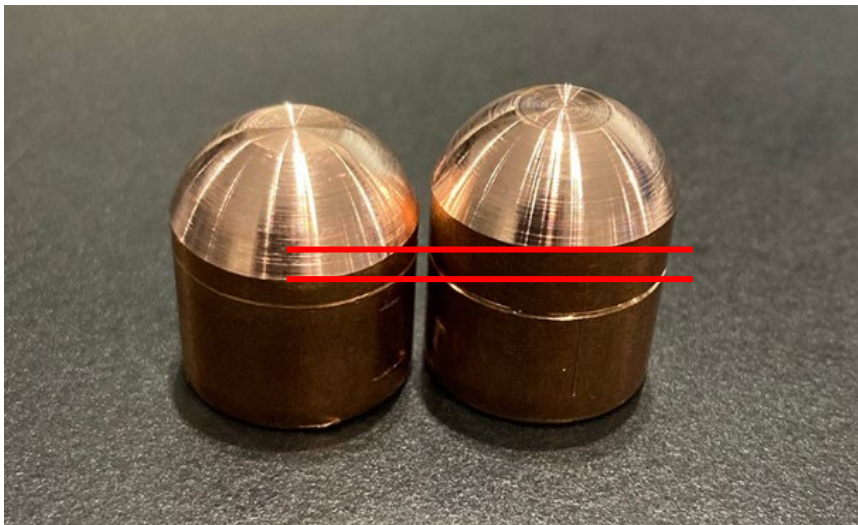
This manual indicates “Effects on Cutter / Holder by Improper Teaching” and describes about proper dressing method what we have known by our experiment.

※Only for results occurred by Push-up motion.

■ Result of repetitive Push-up motions

① Difference of dressing amount appeared (Moveable /Fixed)

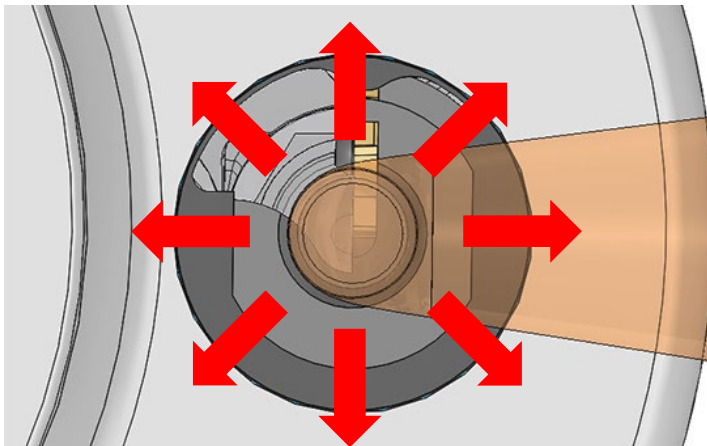
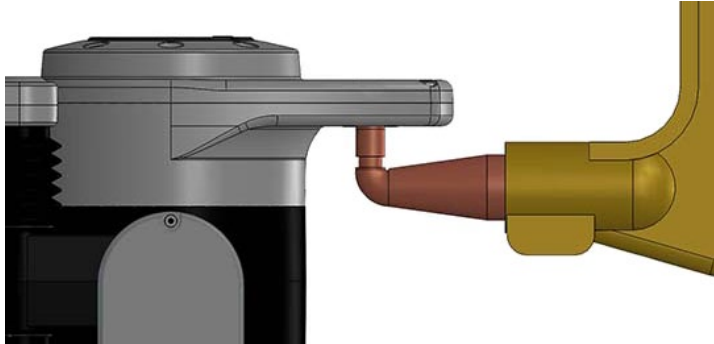
Since the fixed side tip is in contact with the cutter for a long time, there is a difference in the amount of grinding if repetitive Push-up motions are held.



※L : Fixed R : Moveable

② Black residue remains on tip surface by deflection

Deflection occurs on gun / dresser by cap tip attaching only on one side of the holder.



Poor dress occurs by lack of dress time since a certain amount of time passes before the deflection is fixed.



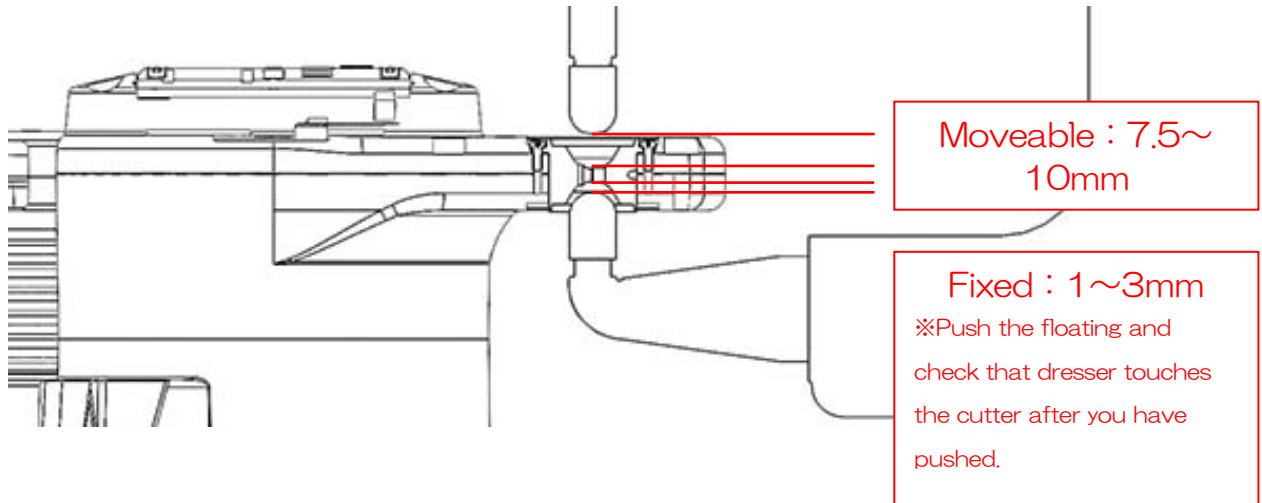
※Figure above shows the chip after repeated push-up motions. Radial marks can be confirmed.

Although not confirmed in this experiment, tips may remain surface-black or not circular.

■ Proper Way to Dress

① Proper position when starting to dress

※Start pressing as the image below. Do not push-up the lower side.



② Pressing conditions.

- Kyokutoh recommended pressing condition

Pressure	1470N (150kgf)
Dress time	1sec (1sec after reaching to the indicated pressure)
Abut speed	80~100mm/sec
Release speed	50~80mm/sec

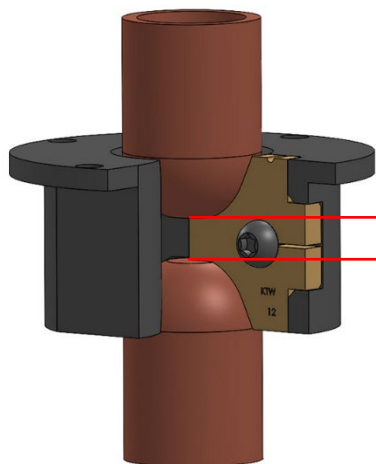
※Insert speed should be fast to maintain the performance of cutter.

- About dressing time (Yasukawa, .etc)

Press type	Pressure	Note
Pre-press	150kgf	-
Main-press	150kgf	1sec
Finish-press	100kgf	-

※For dressing time / Abut speed setting unavailable robots, adjust the pressure / dress time based on actual dressing amount.

- About pressure point thickness (Fanuc, .etc) .



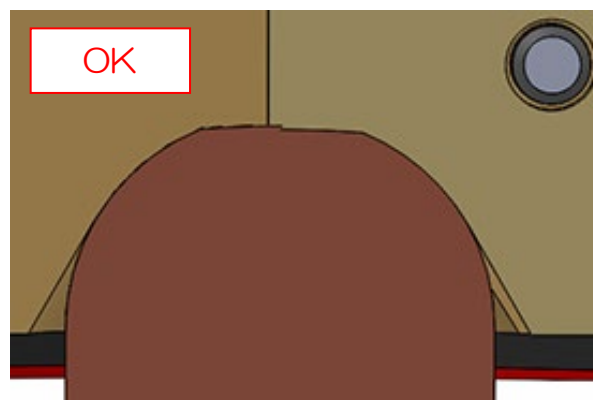
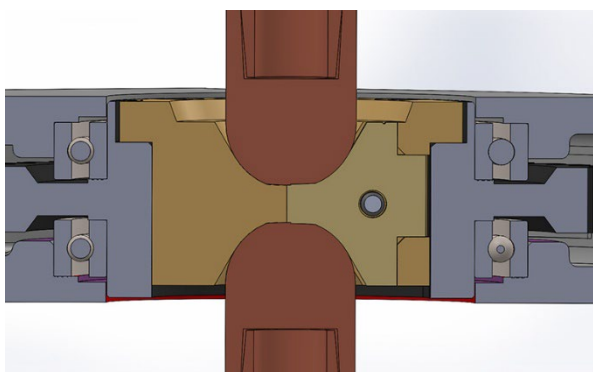
Drawing

Pressure point thickness	00.0 mm	
Upper cap tip	00R (φ16)	
Lower cap tip	φ6-6.5R (φ16)	
Recommended power of pressure	150kgf	
Model of cutter	KTW-00	
Model of holder	KTWH-00	
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※For thickness setting available robots (Fanuc), see “Pressure point thickness” shown on our cutter / holder drawing.

③ About abutment.

Life of cutter may be shortened if pre-pressure is lower, which is often applied for equipment protection, but 150kgf is recommended.



※In order to extend the life of the cutter, a certain power of pressure is necessary so that the cutter bites into the tip.