Bag full of wisdom when you are in trouble



No. 042

Cutting Taps
Spiral Fluted Taps: Improvement of the entangled chipping problem

(Question)

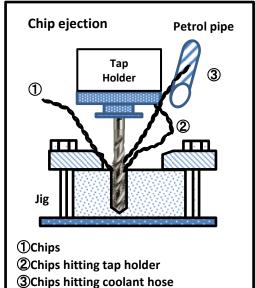
I have a problem with chips getting entangled on the tap and the machine when tapping with a Spiral Fluted Tap. Can you advise a solution to this problem?



[Answer]

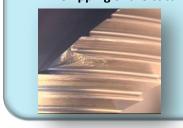
Make sure the chips are not hitting the tap holder or other parts of the macahine. Chips that are entangled on the tap or the machine may cause the cutting edge to chip or tap breakage problems. Please refer to the following guide lines and check your work environment.

Counter measures



- If the chips hit against the machine, a jig or the coolant hose, they may get entangled in the tap's threads instead of being properly ejected from the hole.
- If the outside diameter of the tap holder is too large, the chips may hit against the holder causing the the chips to become entangled in the threads of the taps.
- Entangled chip problems can easily cause chipping of the cutting edge or catastrophic tap breakage.
- Check your work environment to see if the chips will be ejected smoothly.

Chipping of the cutting edge and tap breakage





[Improvement are made by changing the type of holder]



Chips hit against the holder and are not ejected smoothly if the outside diameter of the holder is too large.

You can prevent chips from being entangled on the tap if the outside diamater of the holder is reduced in size.



Chips are ejected smoothly if the outside diameter of the holder is reduced.







If you cannot change the type of holder you are using, you can prevent chips from hitting against the holder by changing the tap to a long shanked type tap.