

# SHARPENING TAPS

Longer tap life, more accurate cutting, and easier machining are three major advantages of properly resharpened taps.

## POINTS TO REMEMBER:

1. The tap that has been run too long without sharpening may be damaged beyond repair.
2. Chamfer may be sharpened four or five times before it is necessary to sharpen flute or spiral point.
3. When the damage occurs only on the chamfer, the damaged portion may be cut off. This will give perfect thread form for the new chamfer.
4. When the chamfer becomes too long due to several grindings, it should be cut off.
5. Single chipped or loaded threads back of the chamfer should be completely removed by grinding out the damaged part to a point below the root diameter.
6. If a tap is damaged the full length of the thread form, it is not worth reconditioning.
7. Be sure to have the lands of the chamfered portion ground even as to height or you will force the entire cutting burden on lesser number of lands, causing poor threads, increased power consumption, and high tap breakage.
8. Do not grind your point diameter too small or you will force the entire cutting burden on a small portion of the chamfered section, resulting in shorter tap life due to dulling of cutting edges and greater power consumption.
9. Regardless of whether a tap is ground by hand or in a machine, only light grinding cuts should be taken to prevent burning of the cutting edge.
10. When a tap must be resharpened by hand, great care should be exercised so as to reproduce as nearly as possible the original grind of the tap manufacturer. A new tap should be used as a guide.

