

# OVERLOOKED USES OF DOUBLE ANGLE SHANK CUTTERS

Double Angle Shank Cutters are undervalued tools when considering the number of applications they can accommodate. These tools appear to be keyseat cutters with pointed (not square) profiles. They are commonly used for machining "v-groove" profiles. With the cutting head perpendicular to the centerline of the tool, there is better cutting action with adequate cutting speeds at the tip of the tool. Low tip speed can be troublesome in tools such as traditional chamfer cutters where the pointed profile is in line with the centerline of the tool (**Figure 1**).

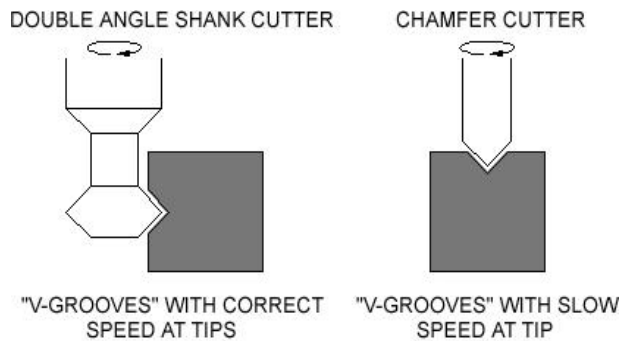


Figure 1

However, there are applications beyond "v-grooves" that are often overlooked. Jobs that involve chamfering, particularly back chamfering or internal chamfering, are where these tools begin to solve real problems. Consider a case where a drilled through-hole has resulted in a burr or tear-out on the back side of a part. Back deburring the hole before moving the workpiece is possible with these tools, and is the preferred method in order to save setup time and avoid the challenge of relocating the hole at a later time (**Figure 2**). Take it a step further and consider multiple holes meeting at a common point within the workpiece (**Figure 3**). This is a situation where Double Angle Shank Cutters can chamfer or deburr the front and back side of the holes without changing the workpiece orientation at all.

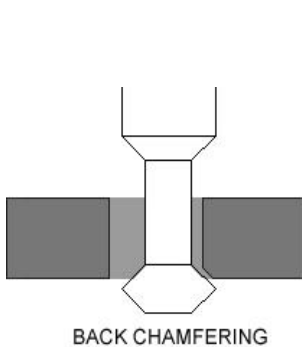


Figure 2

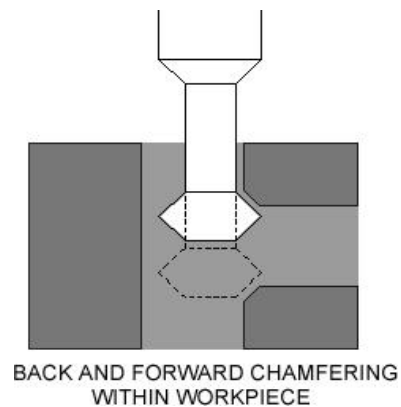


Figure 3