



TIM'S TECH TIPS



Welding on Blades

We have recently received a number of service calls inquiring about welding and re-machining cutting blades and piercing tips, and while we understand why someone may want to do this, this Tech Tip explains why we don't recommend.

The heat treatment process is specific to the blade material and desired hardness. Welding on heat-treated material alters the existing mechanical properties the heat-treating creates and softens the material in the heat affected zone, which greatly reduces blade life in a shear application.



Blades do not have the same internal and external hardnesses. The external layer of the blade is much harder and provides the wear surface against which steel is cut. When blade material is melted in order to fuse with the weld material, the steel is softened and the hardness characteristics that provide the external toughness of a blade are removed, causing the blade edge to wear very quickly.

In addition, the time spent welding and re-machining blades, as well as the greatly increased blade maintenance intervals and reduced run time, don't outweigh the cost and performance of replacement parts.



For this and other blade maintenance questions, contact Tim at 218-349-5755, talseth@genesisattachments.com, or Loren, 715-919-8316, llagesse@genesisattachments.com.