Hardfacing Wood Chipper Knives

There are many different types of chipper knives and most can be hardfaced. The advantage of hardfacing new knives lies in the starting or base materials. Quite often knives are made of a carbon steel or low alloy steel. The knife comes into the shop as an annealed steel, and is soft, thereby allowing easy machining of holes and profiles. The knife is then treated to the desirable hardness and finally ground to a sharp profile.

By hardfacing the new knife, money can be saved. First of all, base material can be low carbon steel or T1 type which will not require any heat treatment. This also makes it easier to weld. The steps for manufacturing the hardfaced knives are shown below.

The most common hardfacing is 2898-SPL for this application, but perhaps a better choice is Super Edge or Ultra-Shred 580, both of which are used on tire recycling knives and will outwear 2898-SPL. All require shielding gas, and are available in .045” (1.2mm) or 1/16” (1.6mm) diameters.

These type of knives can also be rebuilt using the same procedures as shown below. The hardfacing step can be plasma or carbon arc gouged.