Dealing with Shims in Die Maintenance

Shimming dies in the normal maintenance operation can be a time consuming nightmare. Shimming dies can be as much as 40-50% of the total maintenance time. Some shops utilize shim packs, where a group of shims are machined together and stocked. Some shops invoke a 3 or 4 shim rule, which limits the number of shims to be used before replacing these with 1 thicker shim. Shims can also cause die failures if they are not machined properly and block slug holes. Another problem is shimming components in the sub .005 range. Another method of raising components is welding the back and grinding the component back to a desired size. Below illustrates a unique shimming method whereby plates are used in various thickness, to not only limit the quantity of shims but encompass a variety of thickness using various combinations. These shims would be engineered into the die design and used for pre-determined sharpenings. These illustrate .010 increments.

SHIM PACK DESIGN. SOLID SHIMS, CAN STACK UP TO .200 WITHOUT HAVING MORE THAN TWO SHIMS