

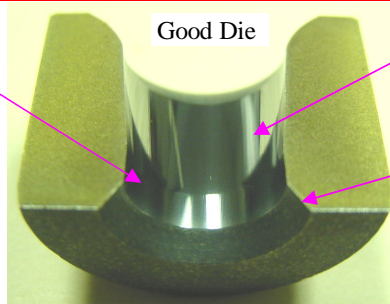


### Things To Know About Recut Dies (Do Your Dies Pass The Test)

The main argument against recutting inserts is that very few of these recuts are returned to an "As good as new" condition. Most die rooms simply lack the production equipment and/or inspection equipment to guarantee consistent control of the many important parameters in a wire die. Improperly manufactured wire dies translate to inconsistent and typically less than optimal wire drawing performance. The wire die is a very important part of the wire drawing process and the same level of consistency needs to be maintained with both new and recut inserts. Paramount guarantees that all recut inserts are returned to an "As good as new" condition.

### Key Parameters To Consider For Both New And Recut Dies

Bearing Zone is round and Cylindrical (near zero taper). Bearing length is optimal and is even on all sides. The bearing/angle intersection is slightly blended.

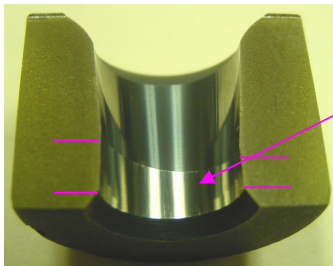


Good Die

Sub-Micron Finish (Angle & Bearing)

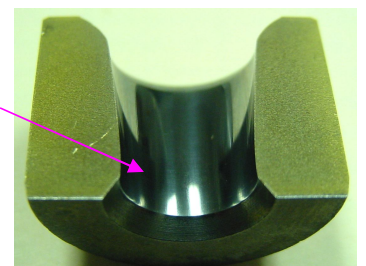
Correct Back Relief Depth (Needed for Support)

Cammed Bearing



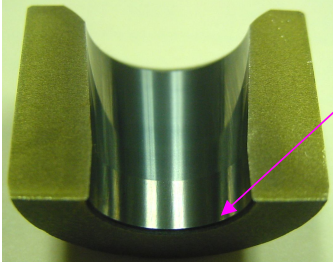
Bearing length uneven, may result in oval/out of round wire, cast & helix problems and also "Cork Screwed" wire

Over Blended Bearing



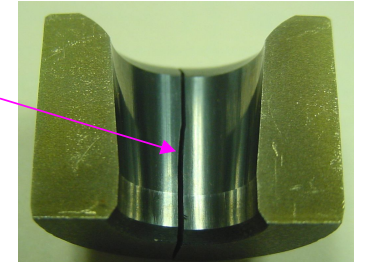
Over blended bearings, may result in shorter die life due to the actual bearing length being very short.

Short Back Relief Angle



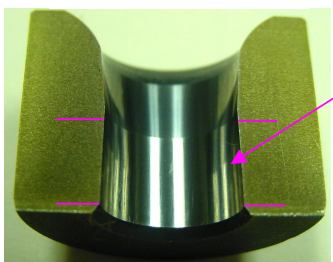
The back relief angle provides support for the bearing, a very short back angle may result in die breakage starting in this area.

Cracked Die



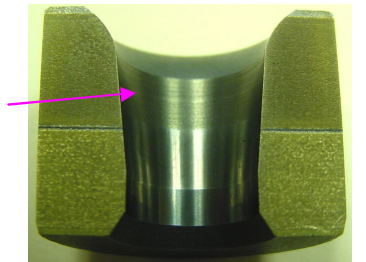
Cracked or broken dies are known to start from small hairline fractures. Paramount inspects 100% of recuts for cracks using eddy current testing.

Long Bearing Length



Too long of a bearing will result in higher friction/more heat, require more HP to draw, and may result in "Suck Down" (small diameter). Also reduces the amount of reduction angle.

Poor Surface Finishes



Poor surface finishes in the angle or bearing areas can lead to scratches on the wire and in some cases will result in "Galling"