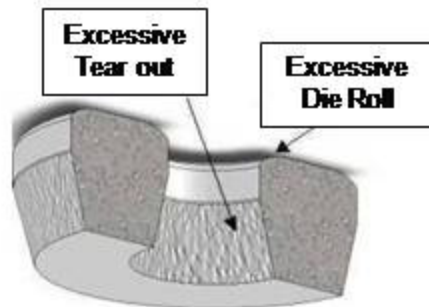
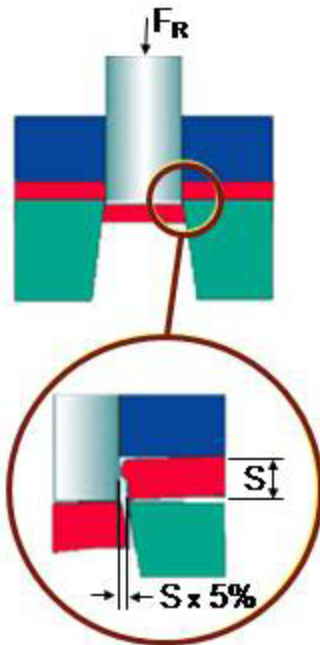


# Benefits of Fine Blanking

## Conventional Blanking



## Exceptional flatness

Significantly improved capability on providing tight tolerance features

Punch holes within 60% of material thickness to the edge of part

Holes may be as small as 60-70% of material thickness

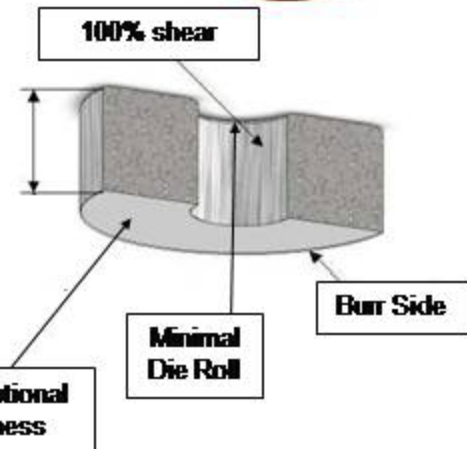
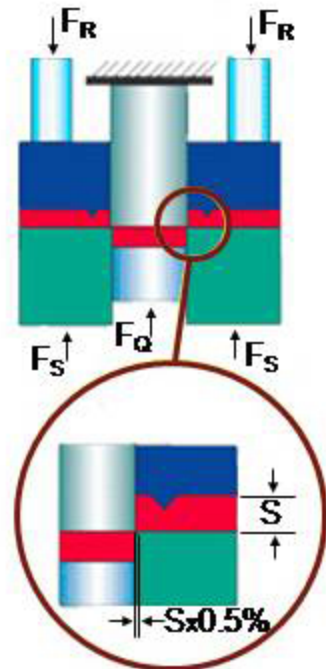
## Minimal die roll on edges

No edge break out, so trim edges are within tolerance over the entire thickness of the part

Semi pierces formed by flowing material, not shearing, to provide structurally sound feature up to 50% of material thickness in height

Ability to punch precision holes at angles up to  $8^\circ$

## Fine Blanking



Exceptional flatness