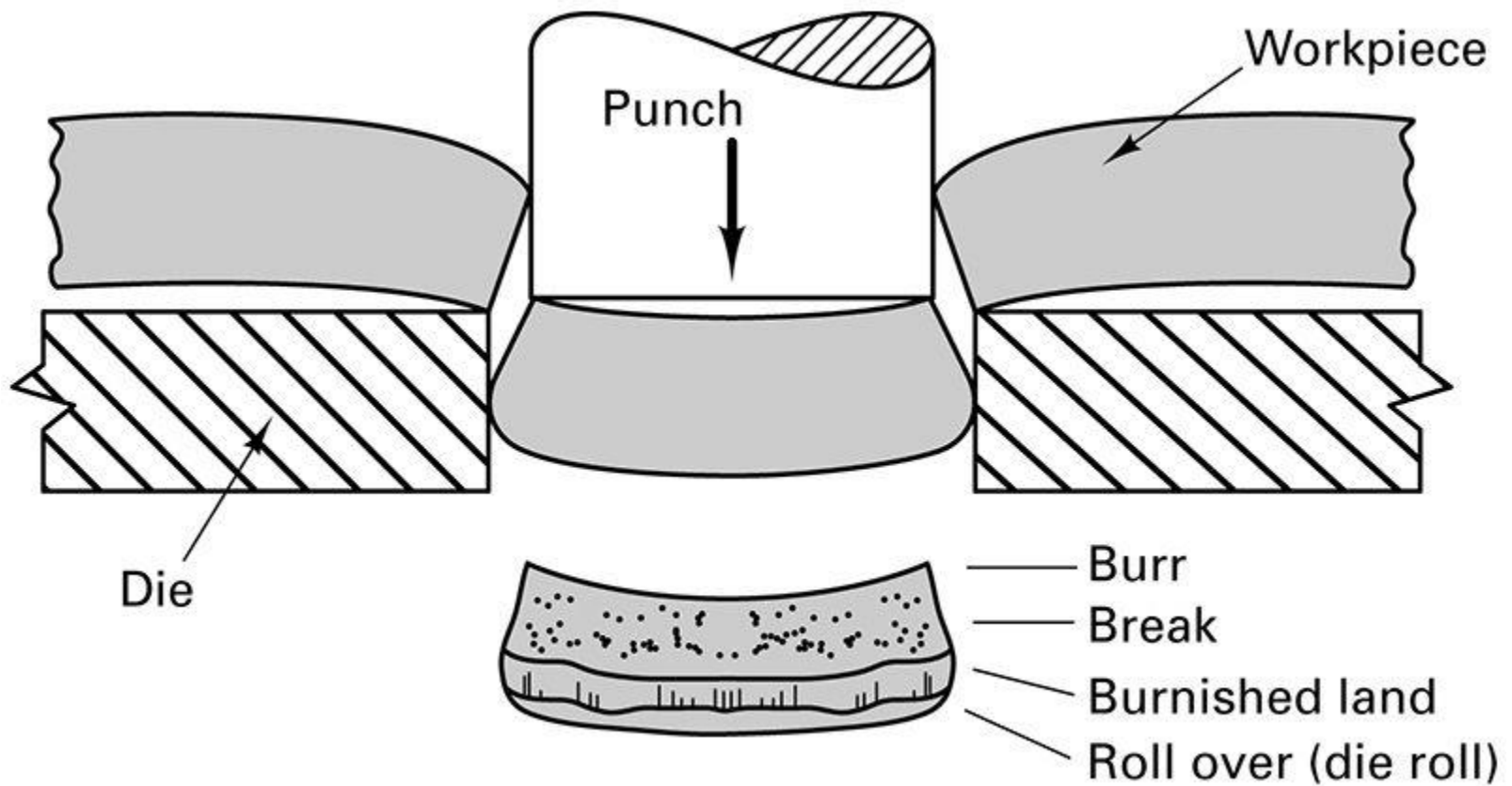


# Sheet Forming Processes

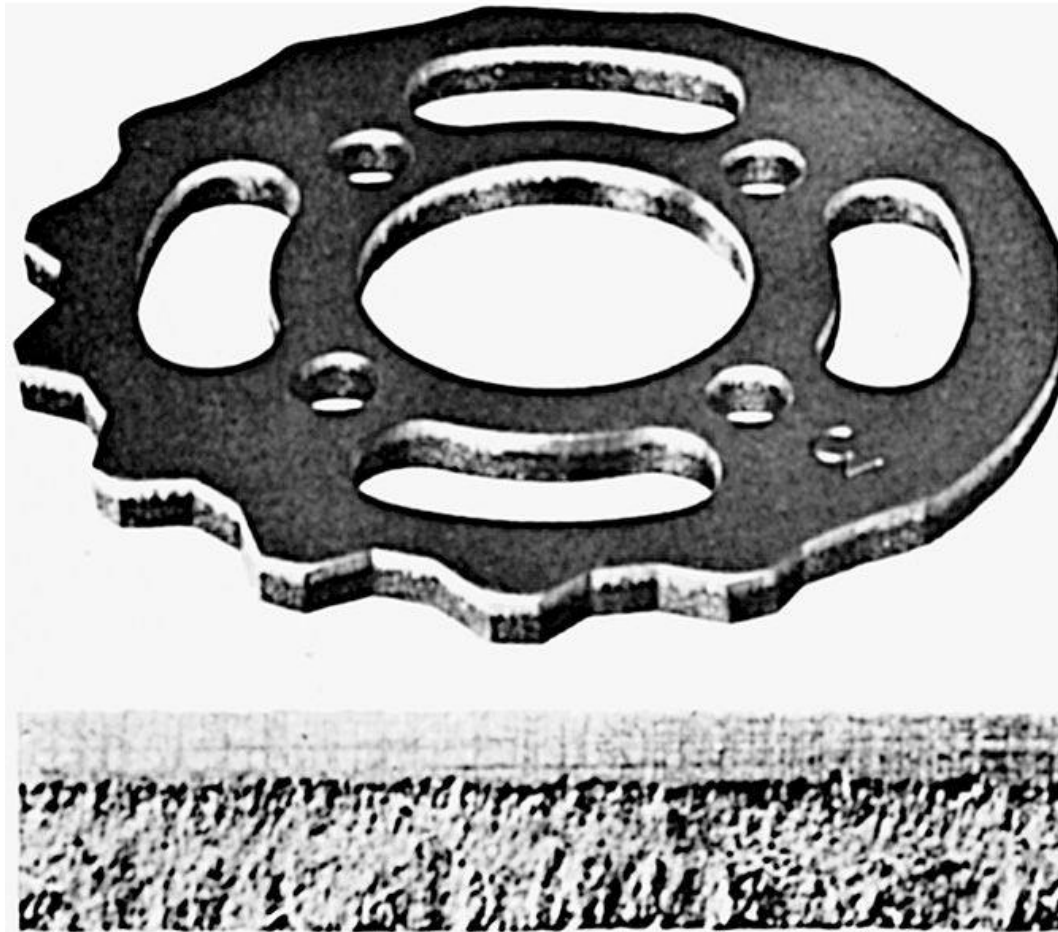
# Basic Categories

- Shearing
- Bending
- Drawing

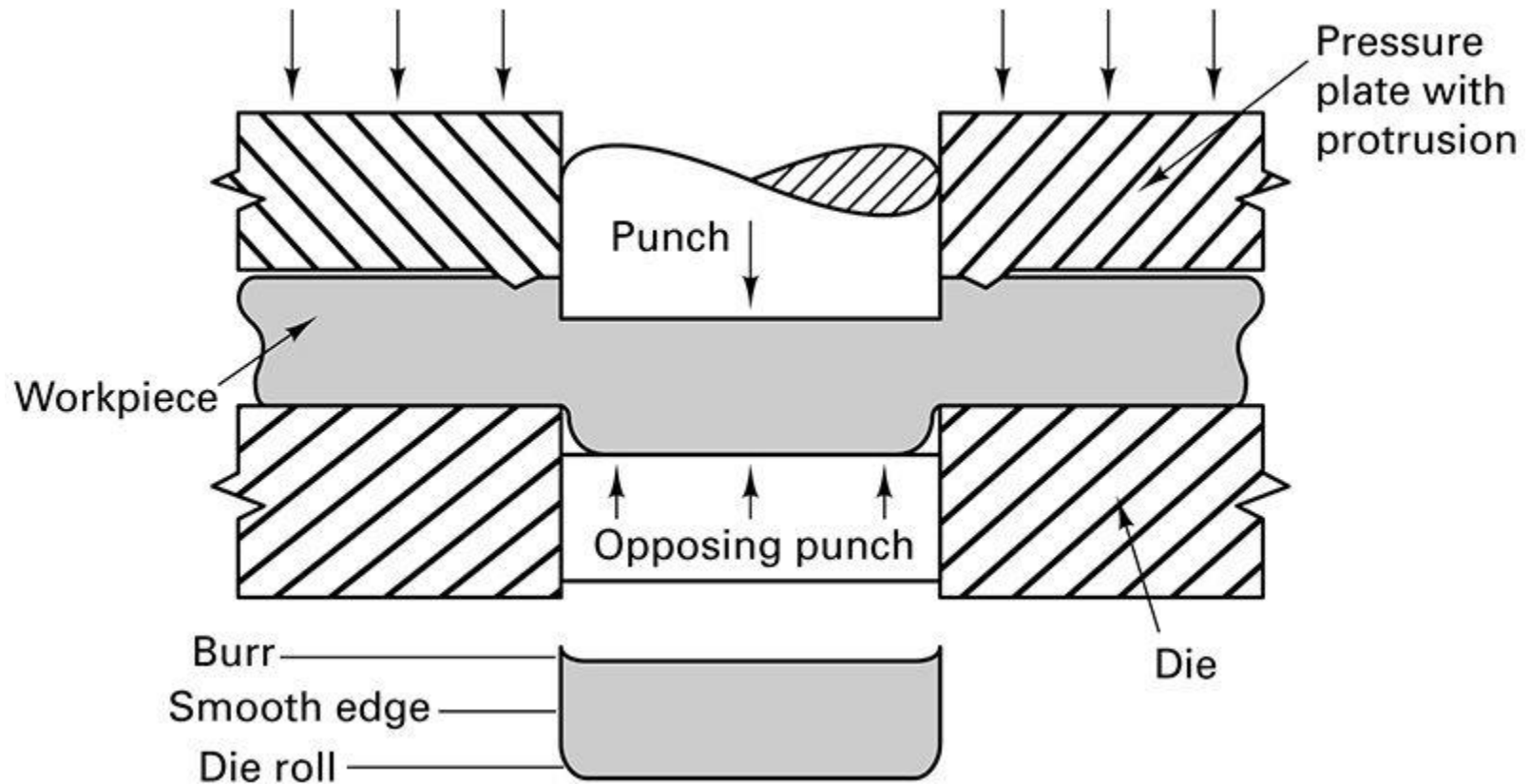
# Standard Punching Operation



# Conventionally Sheared Surface



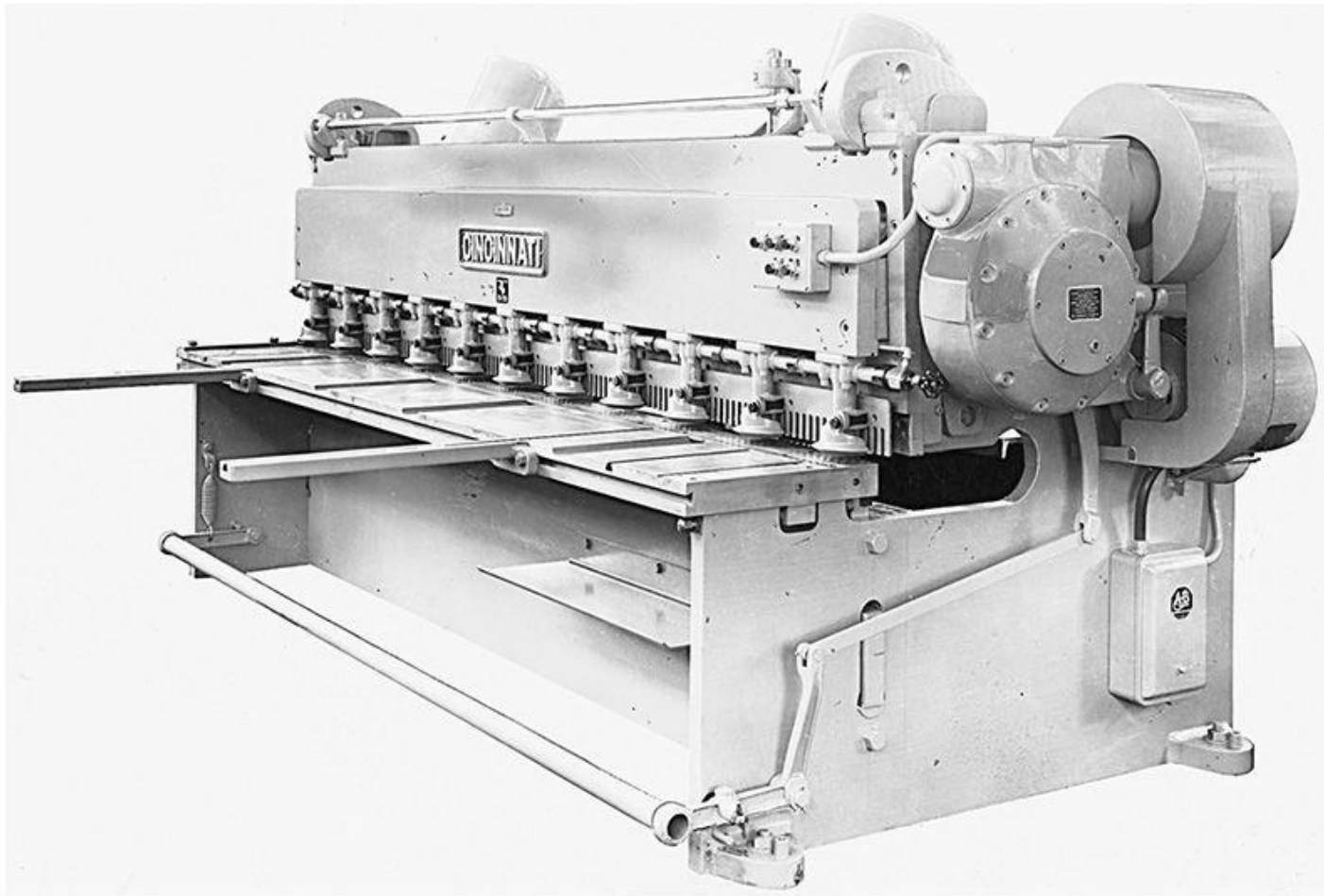
# Fineblanking Process



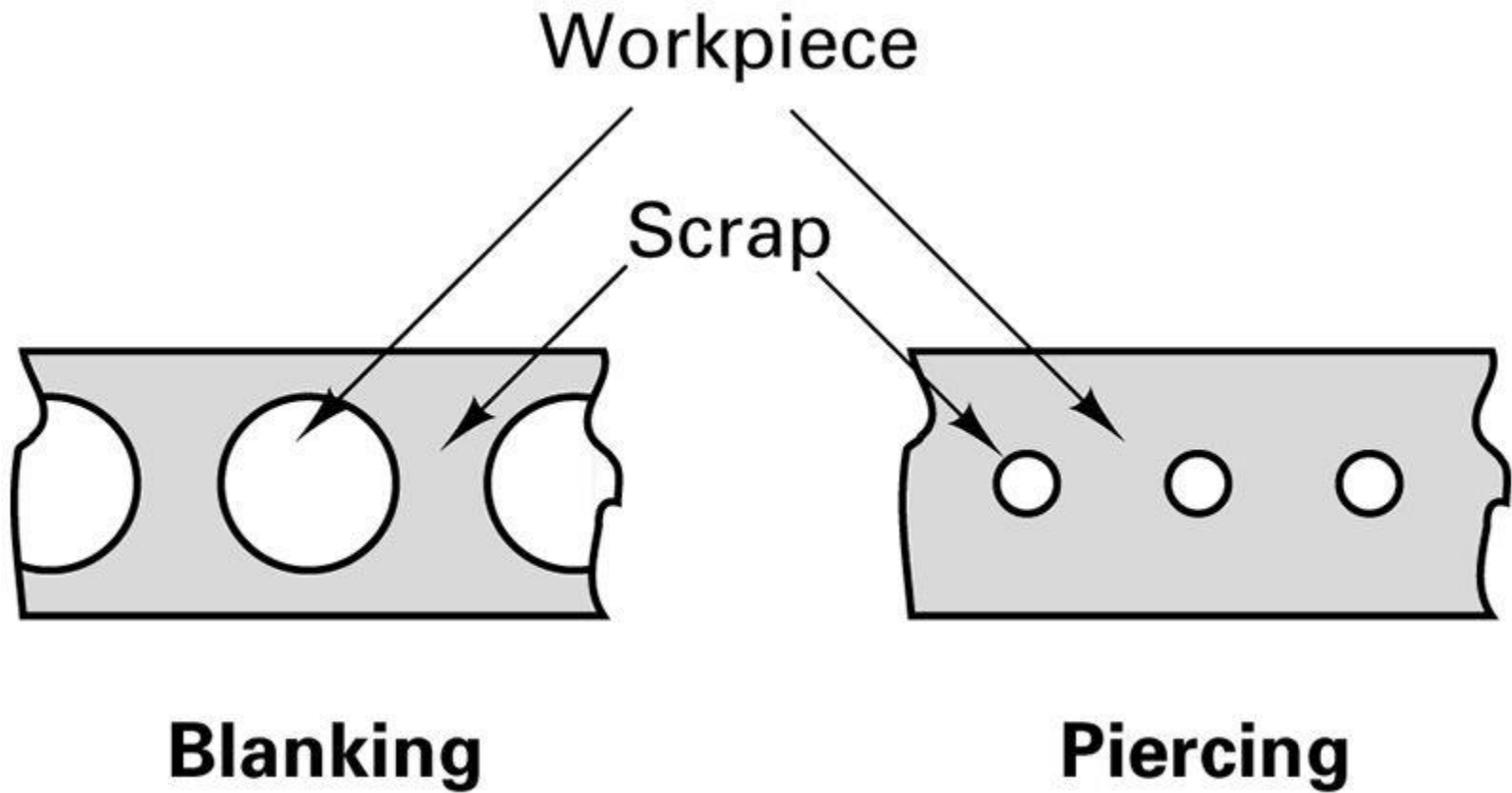
# Fineblanked Part



# Power Shear

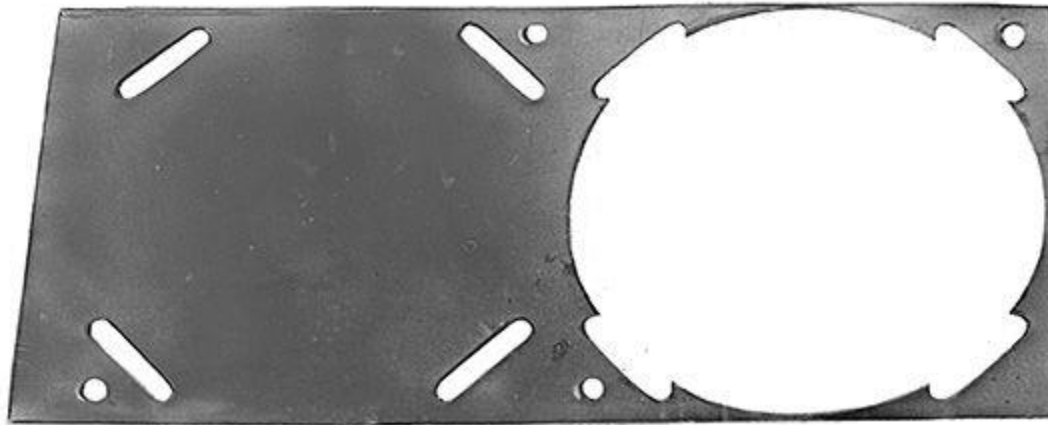


# Piercing vs. Blanking

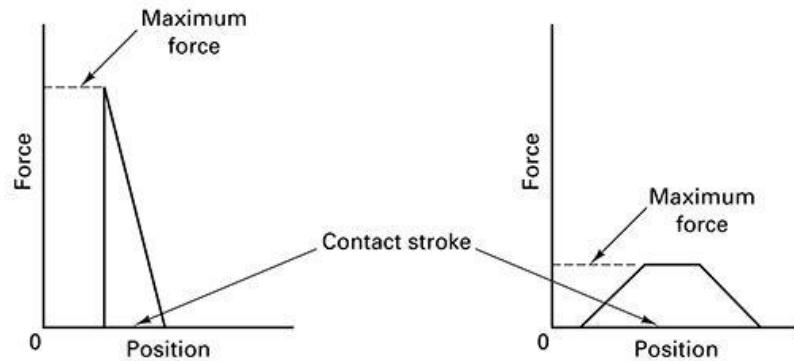
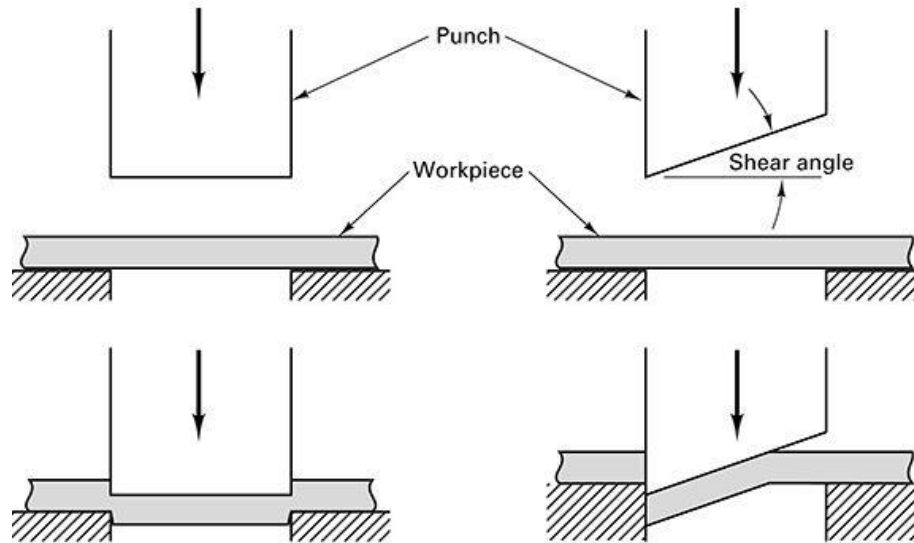




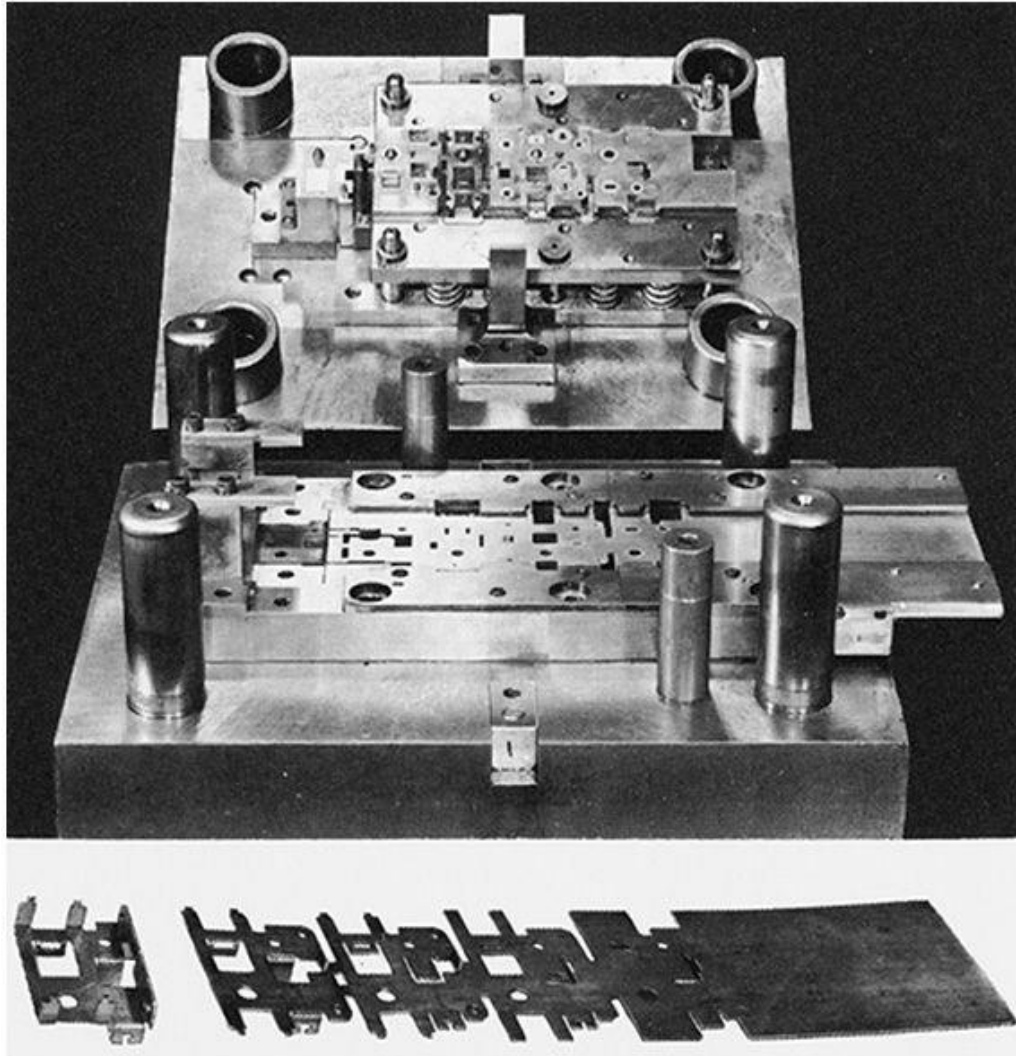
# Piercing, Lancing and Blanking



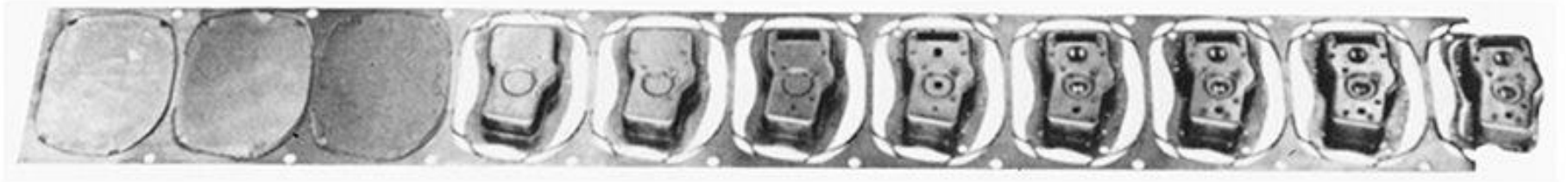
# Blanking Punch Design



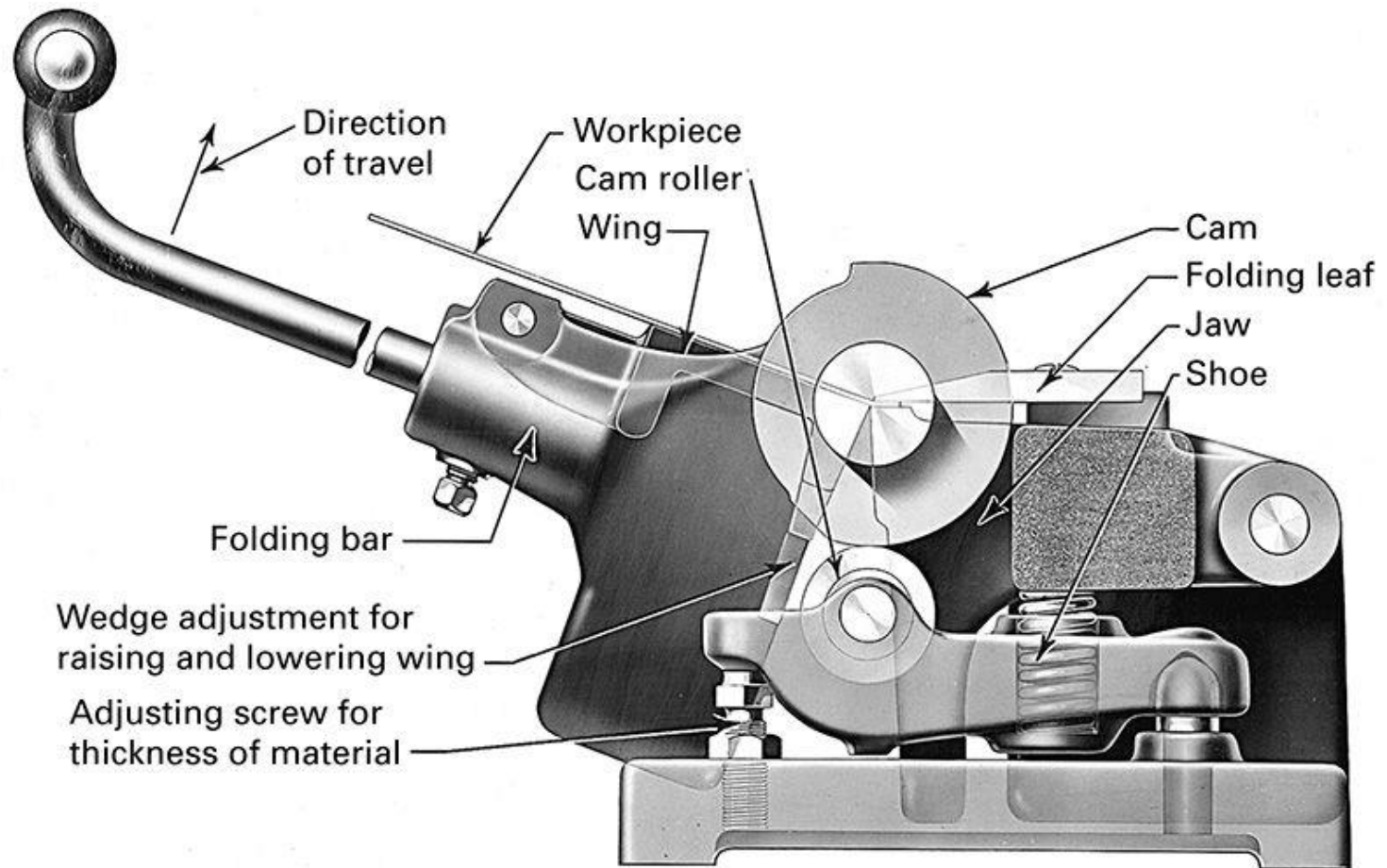
# 5-Station Progressive Piercing, Forming and Cut-off Punch and Die



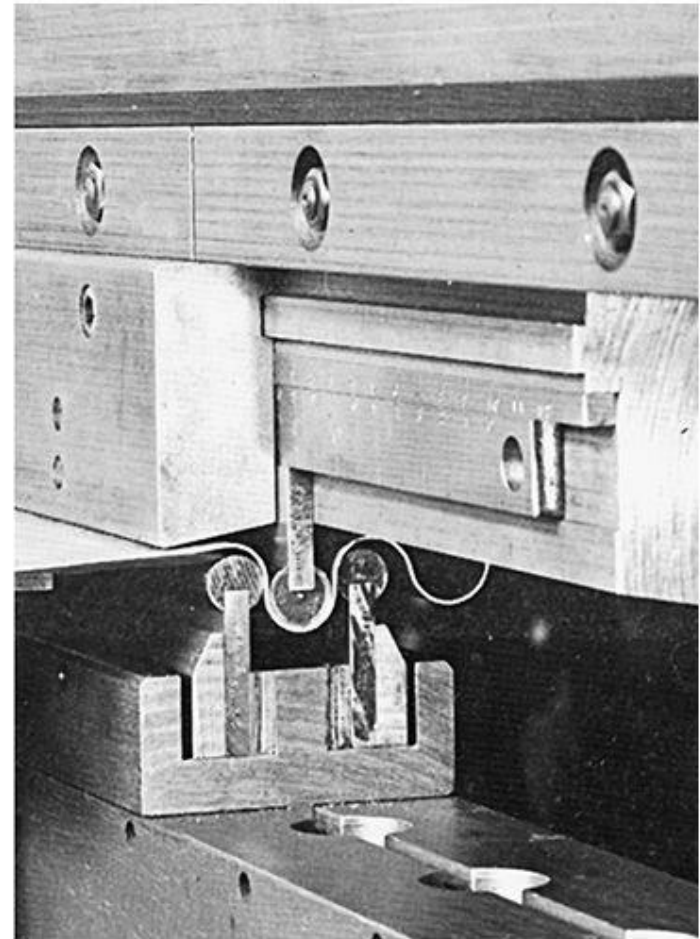
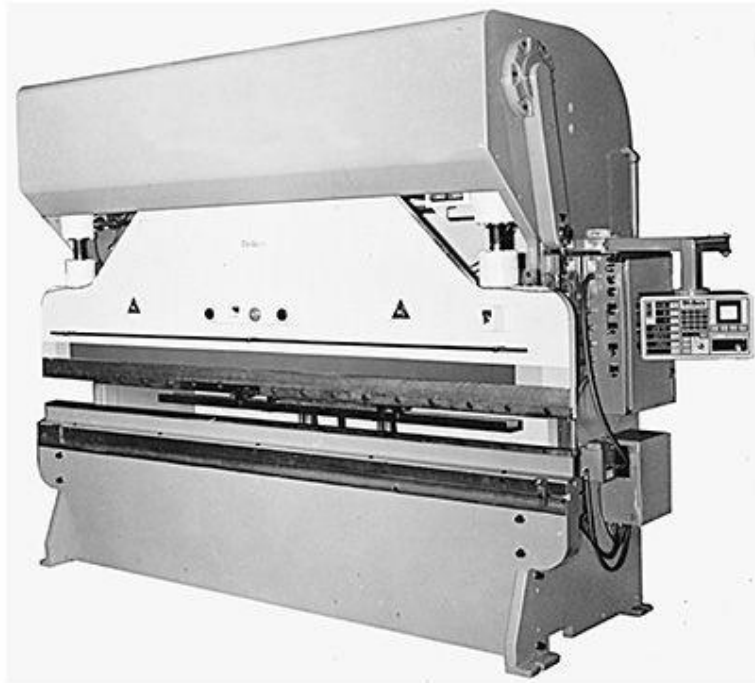
# Stages of 11-Station Progressive Punch and Die



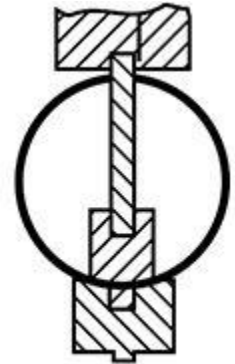
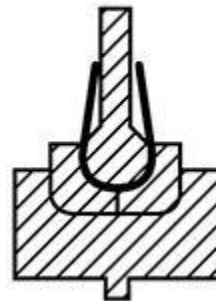
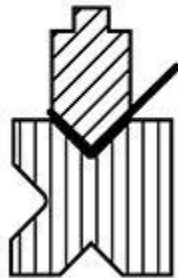
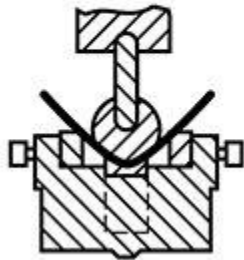
# Bar Folder



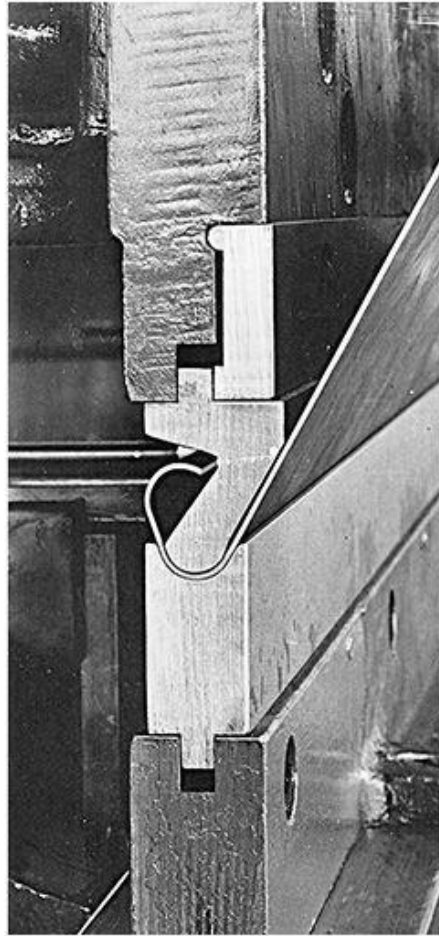
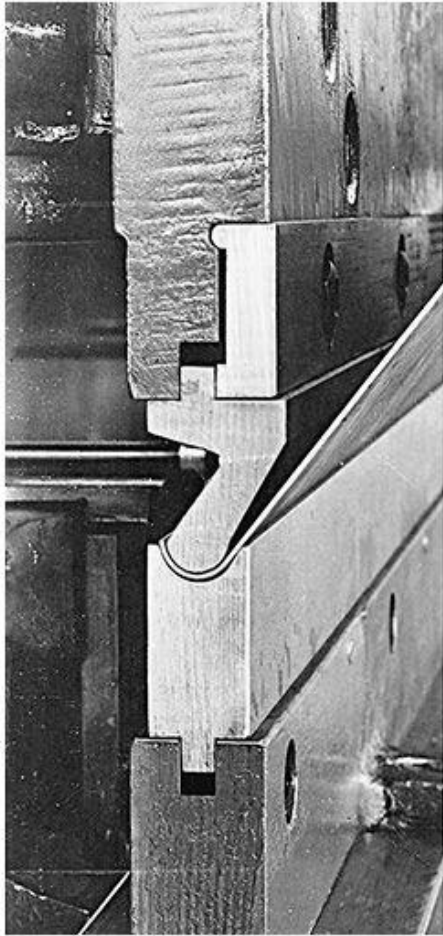
# Press Brake



# Bent Sheet Profiles

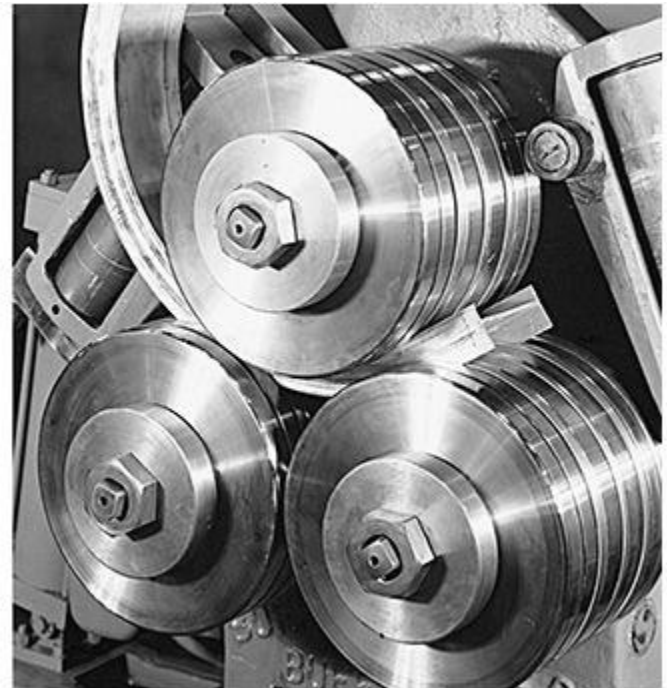
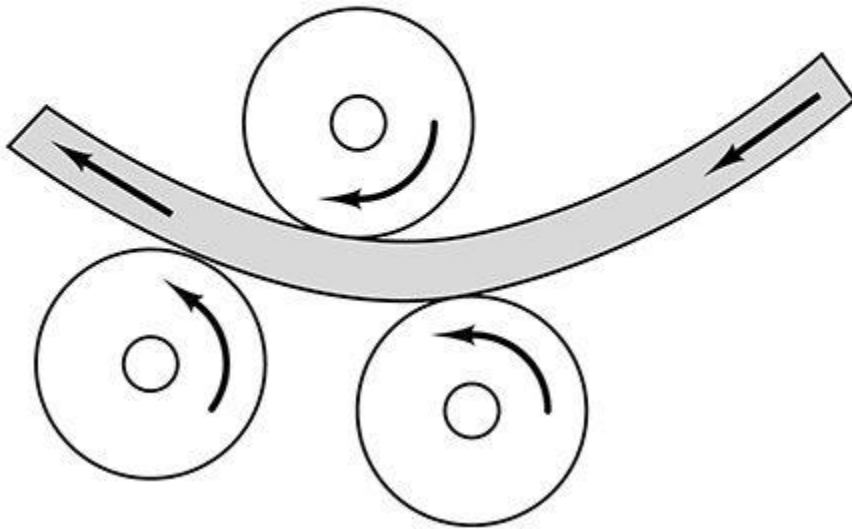


# Dies Forming a Rolled Bead

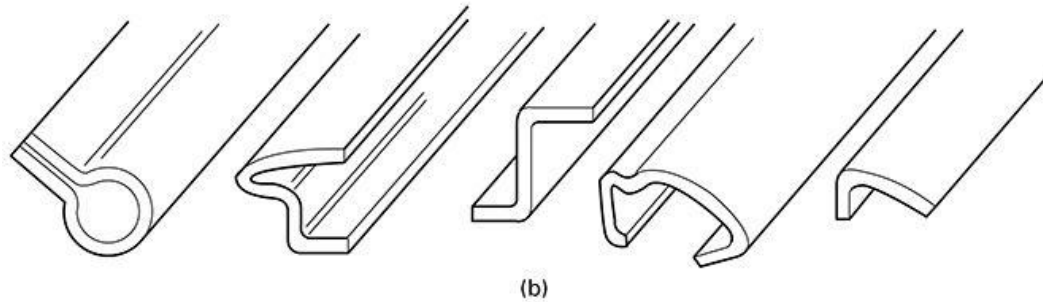
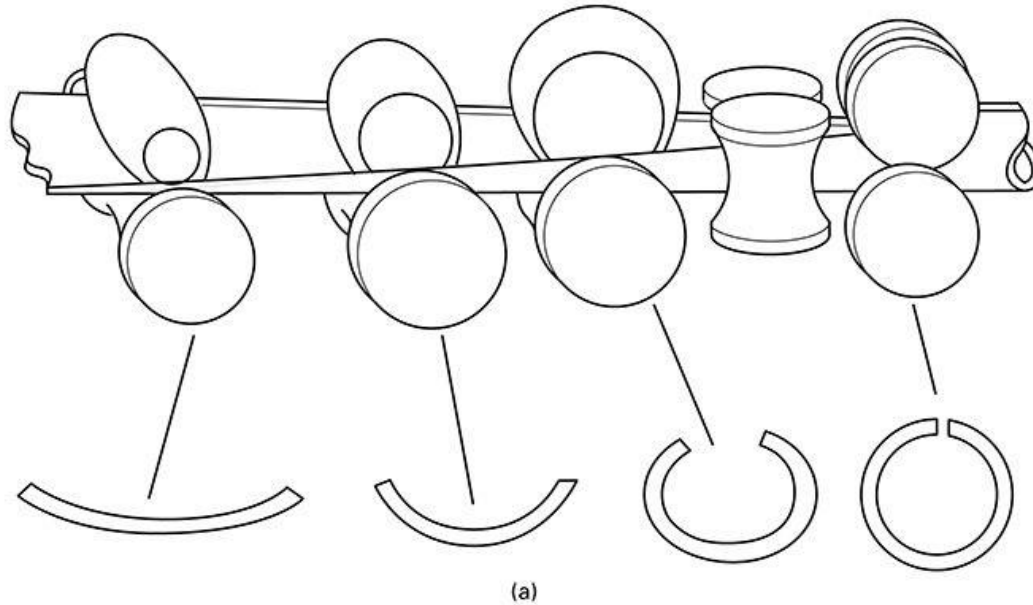




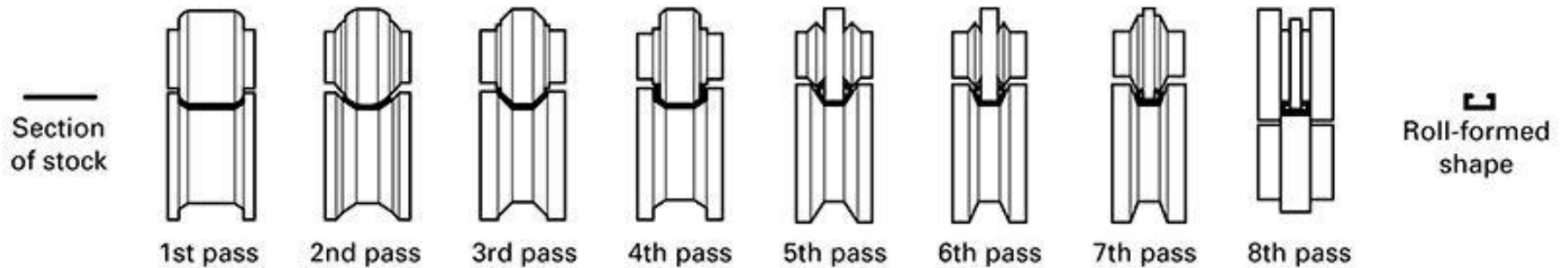
# Roll Bending



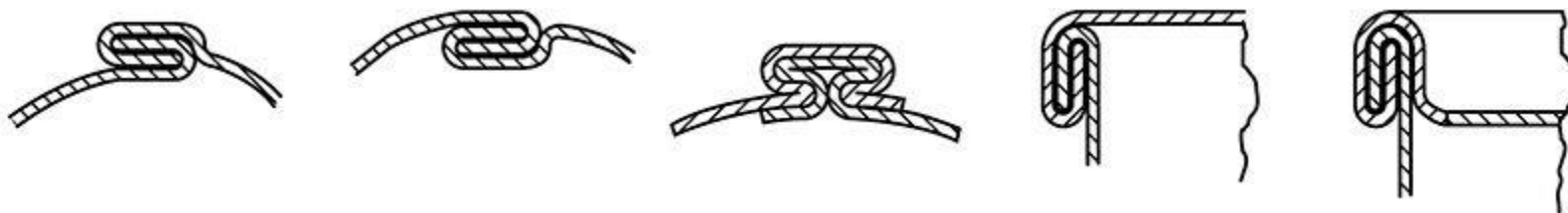
# Bend Sheets into Shapes



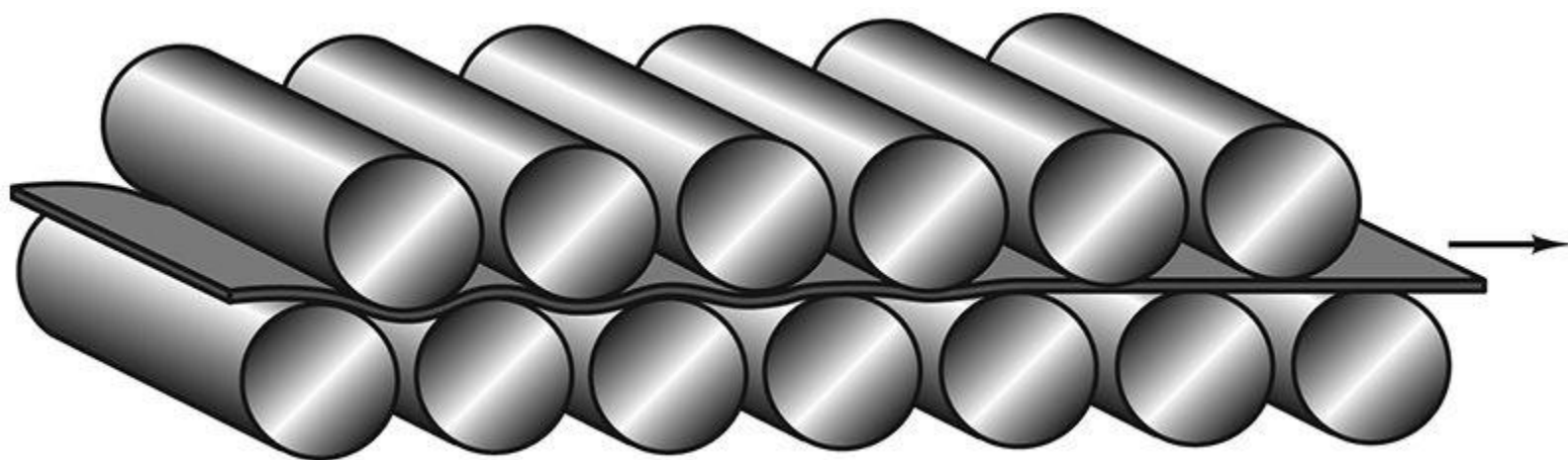
# Forming a Box Channel



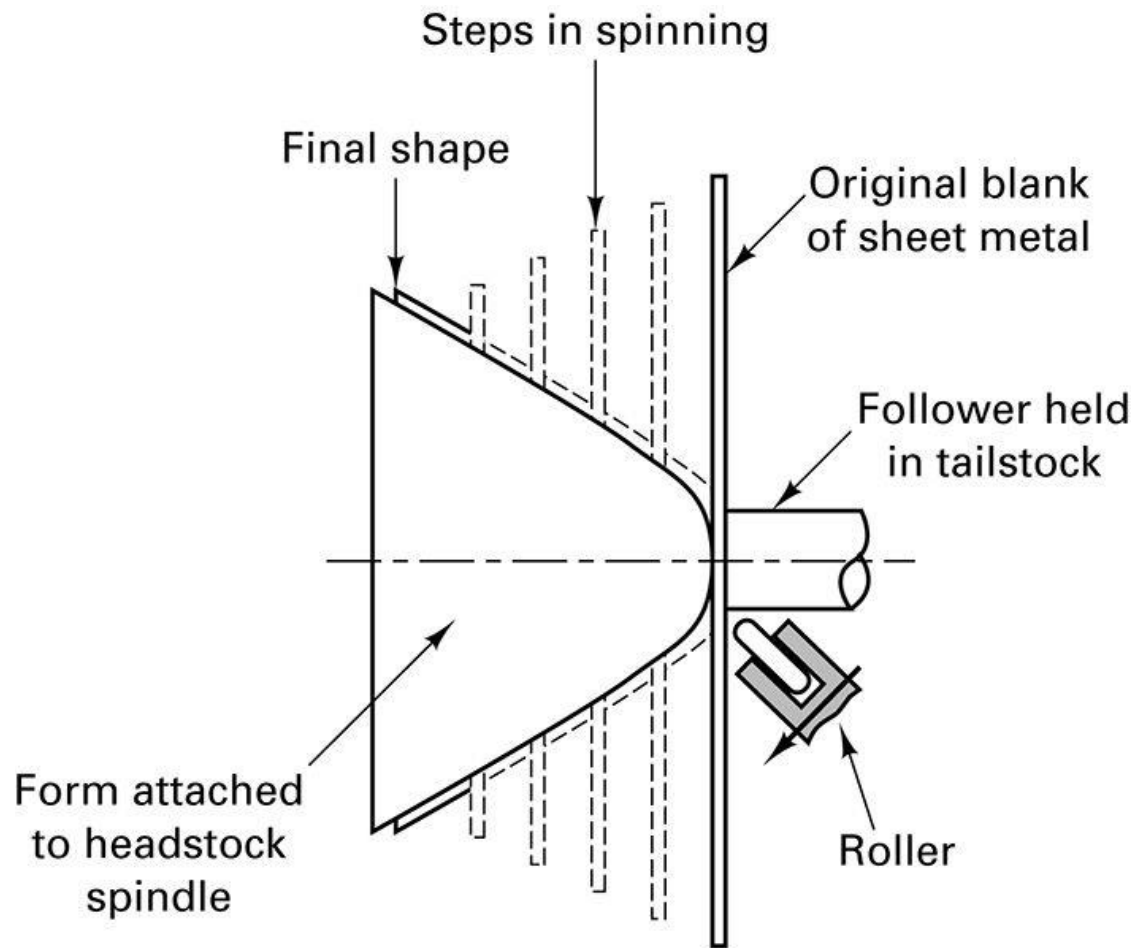
# Sheet Metal Seaming



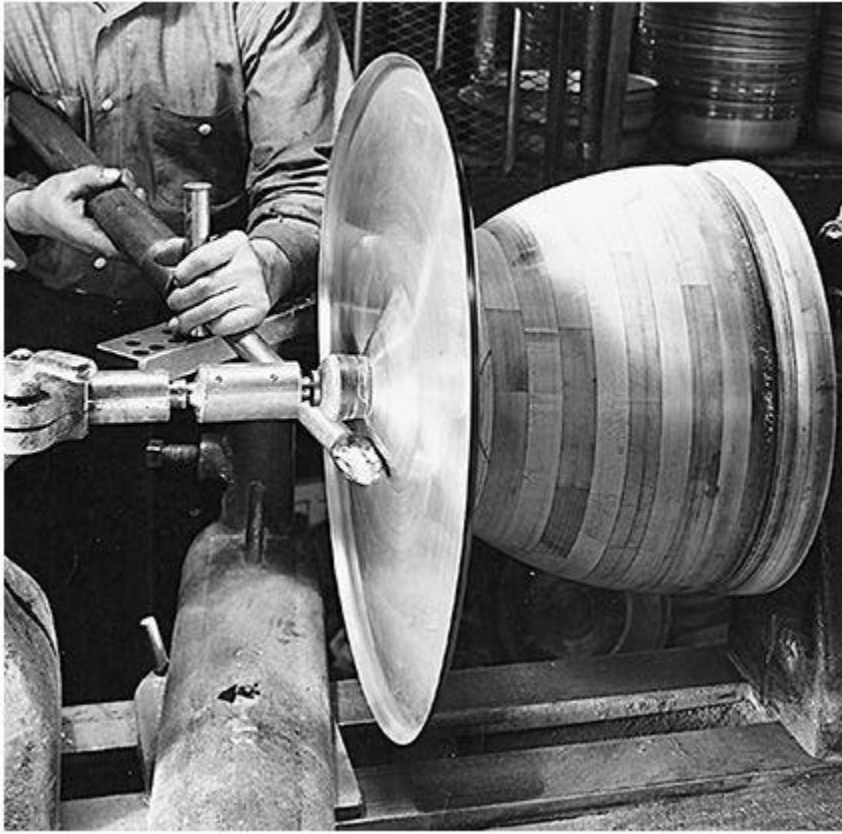
# Straightening Sheets and Strips



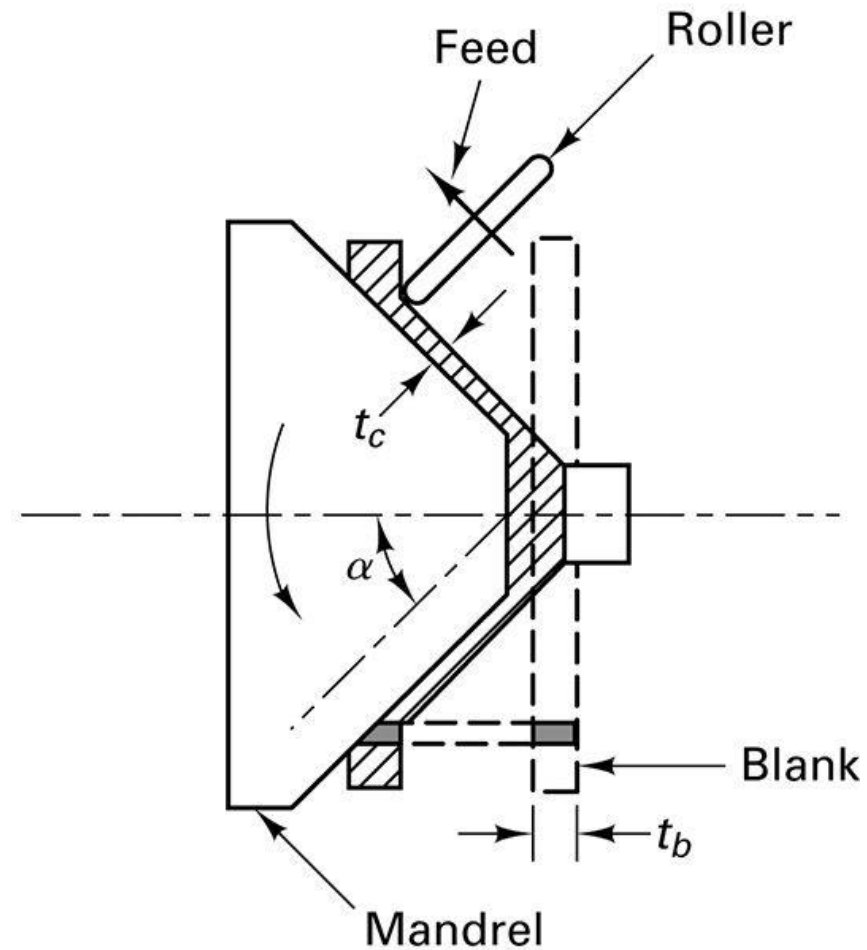
# Forming Sheet by Spinning



# Forming a Reflector by Spinning

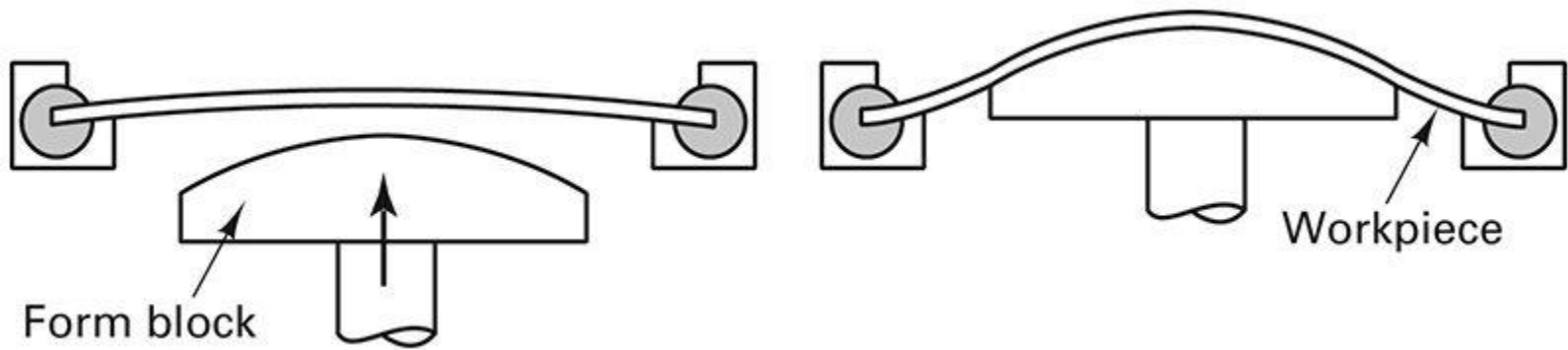


# Shear Forming

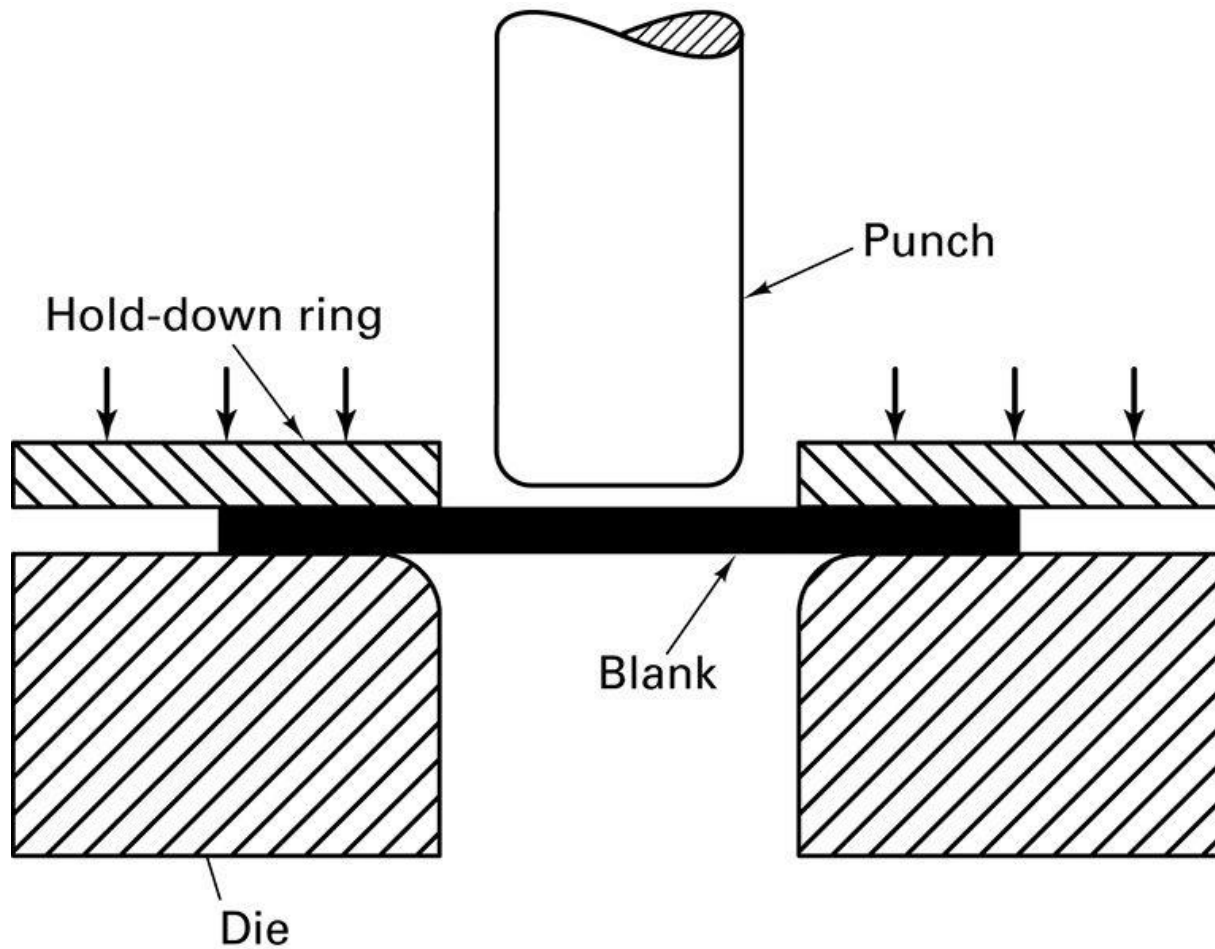




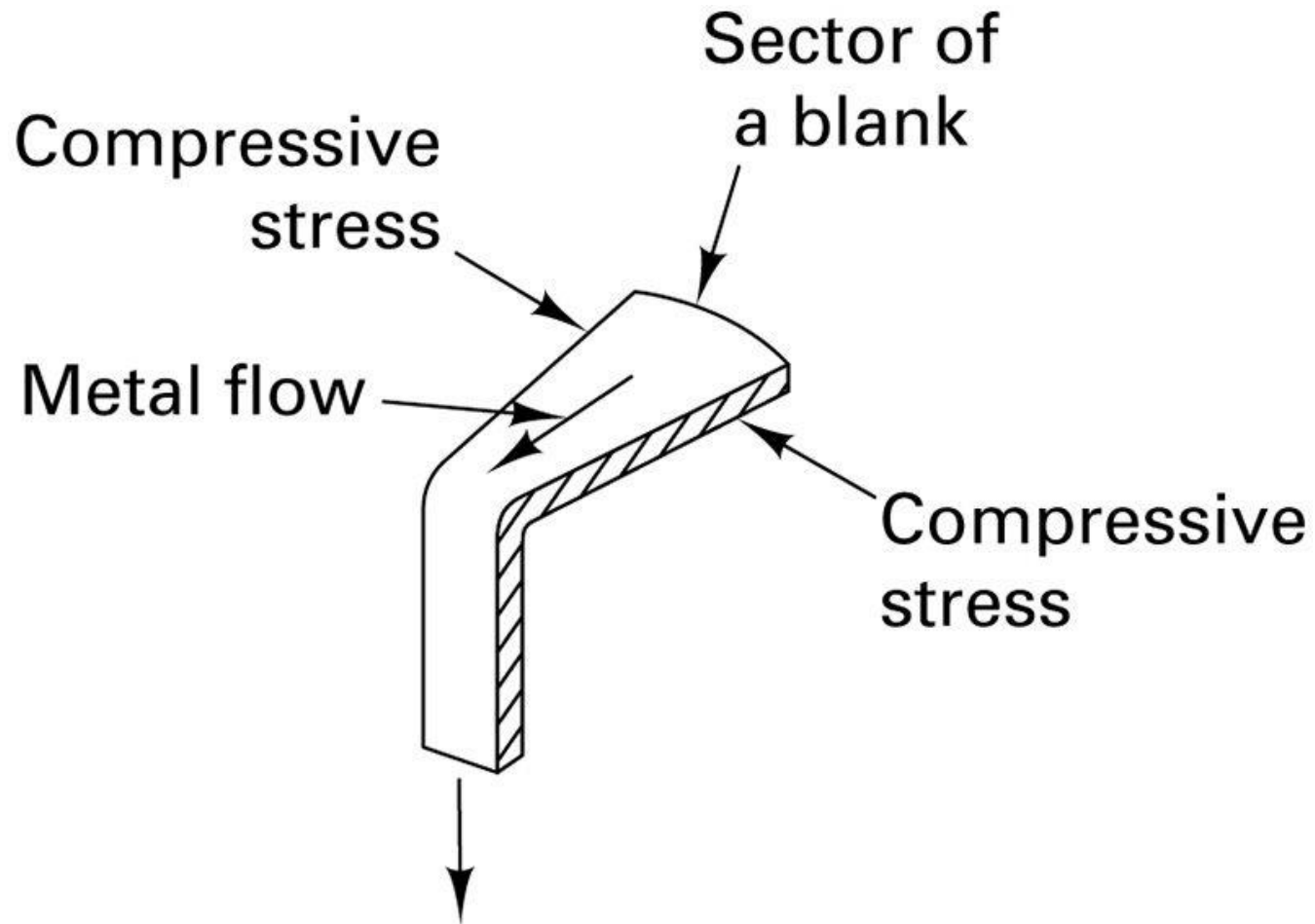
# Stretch Forming



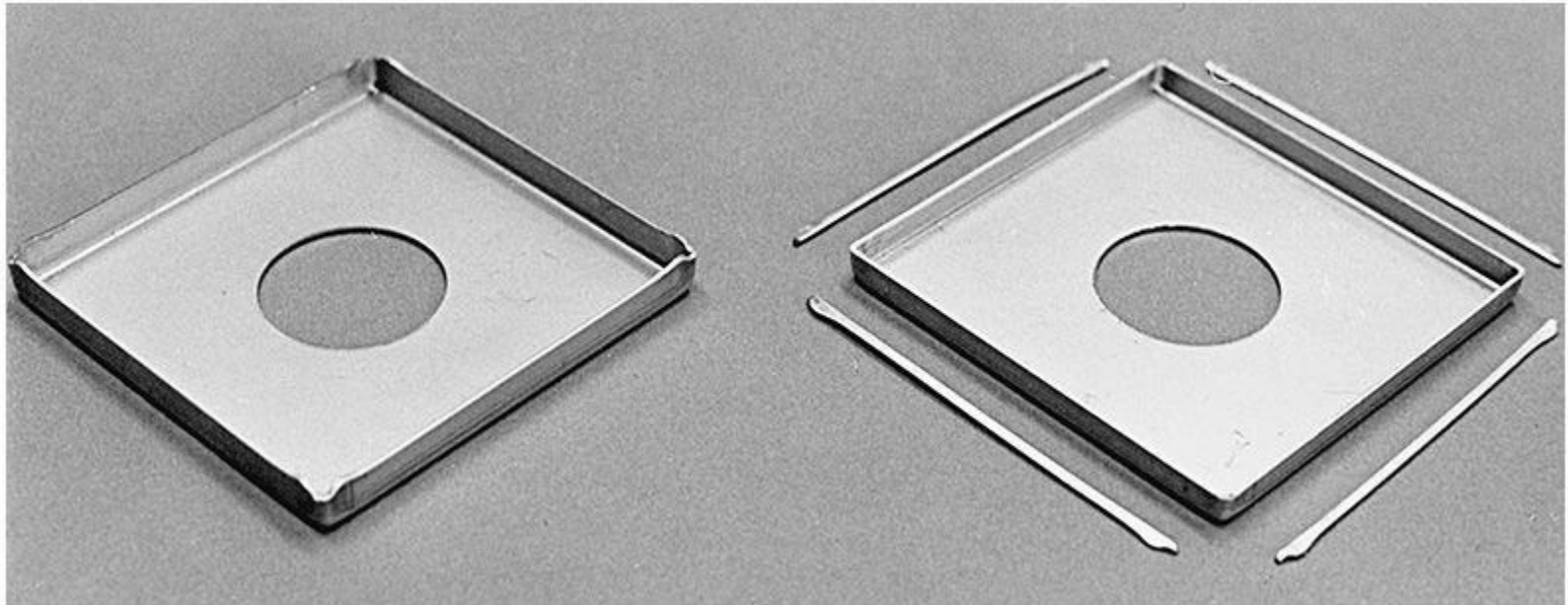
# Deep Drawing



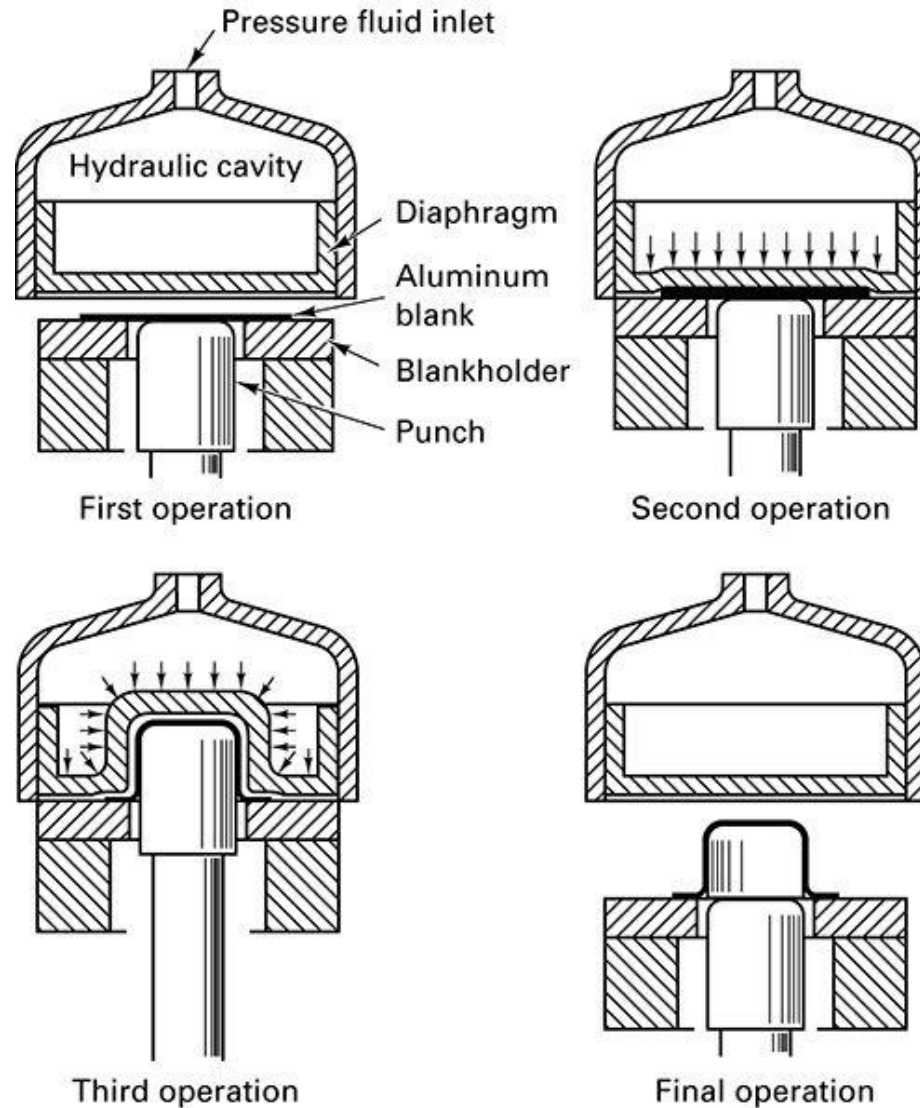
# Metal Flow in Drawing



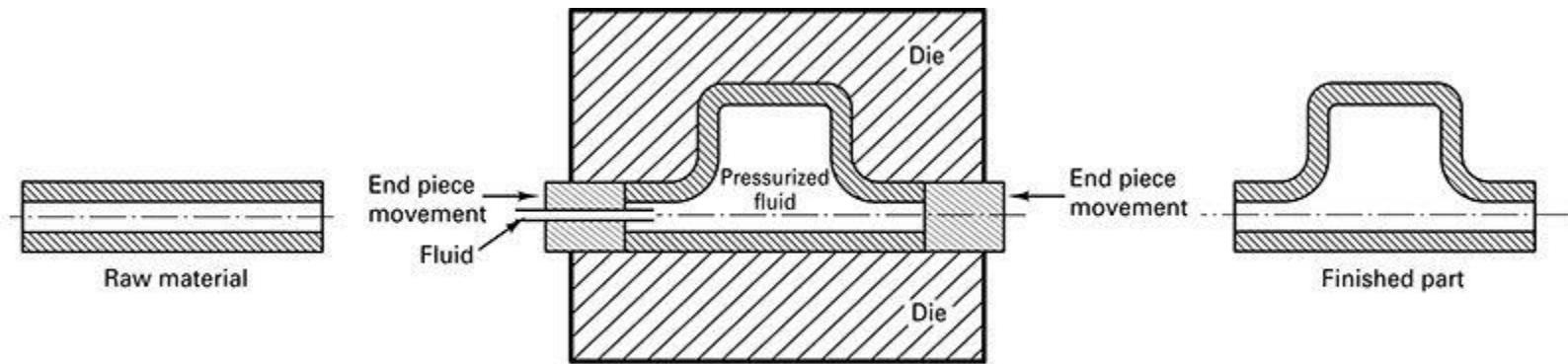
# Piercing, Blanking, Drawing and Trimming



# Hydroforming Sheets

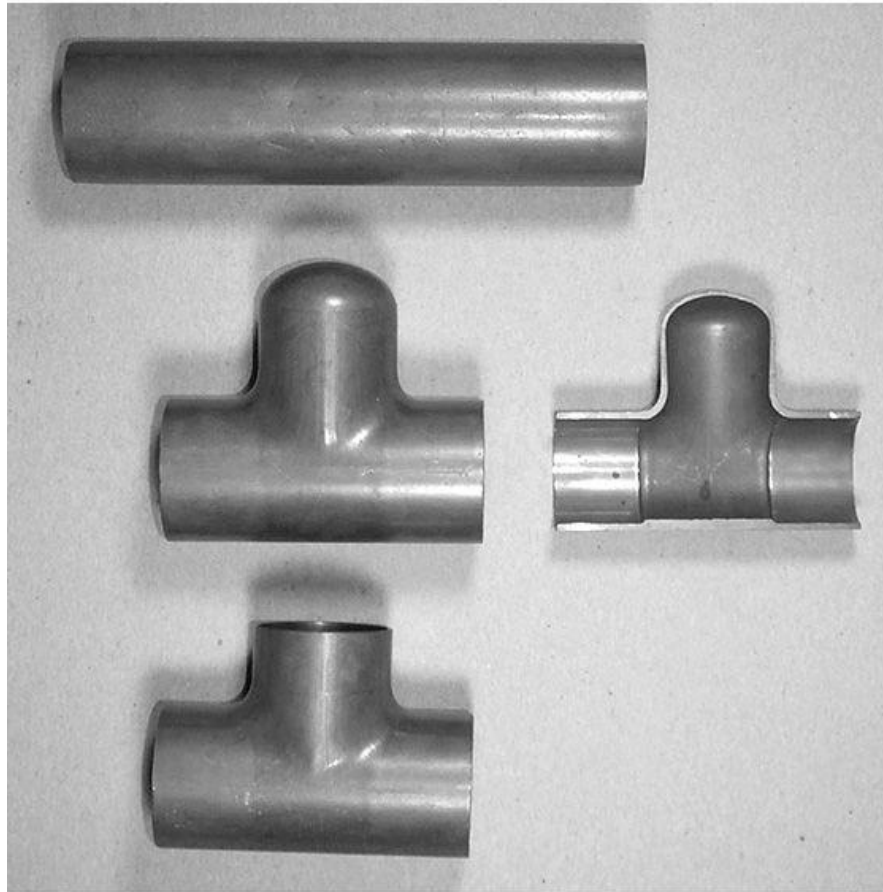


# Hydroforming Tubes



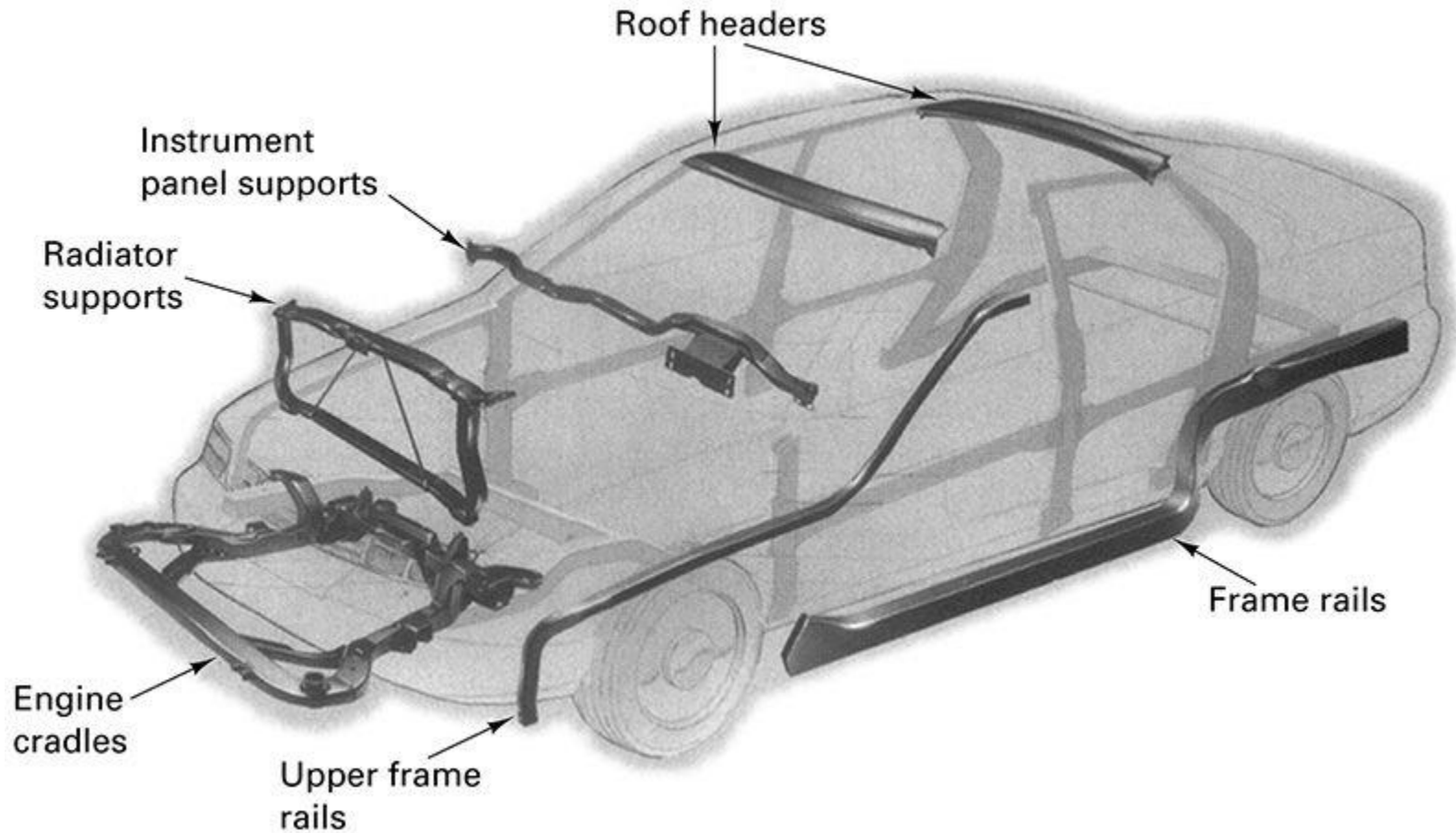
(a)

# Cross-section of Formed Tube



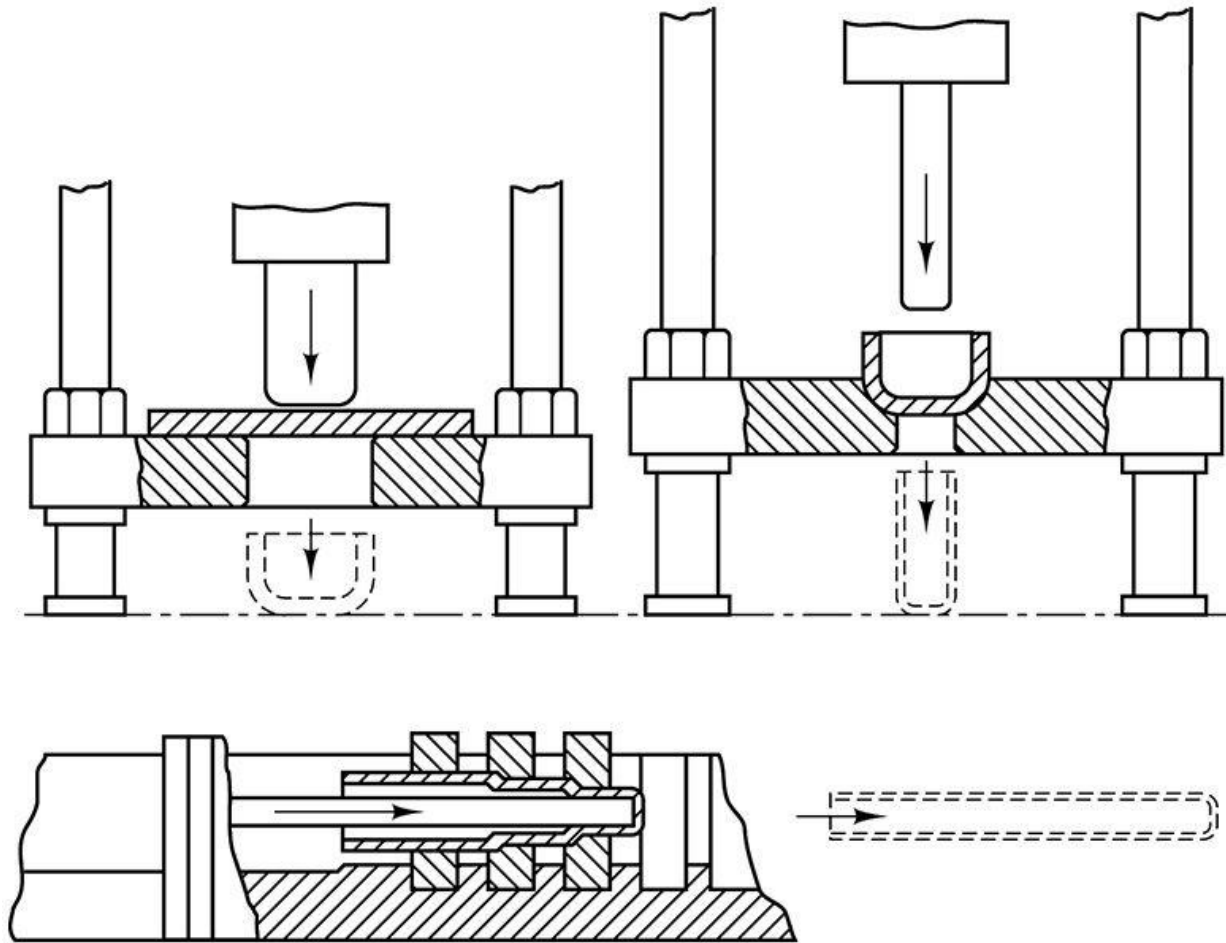
(b)

# Formed Tubes in Auto Bodies

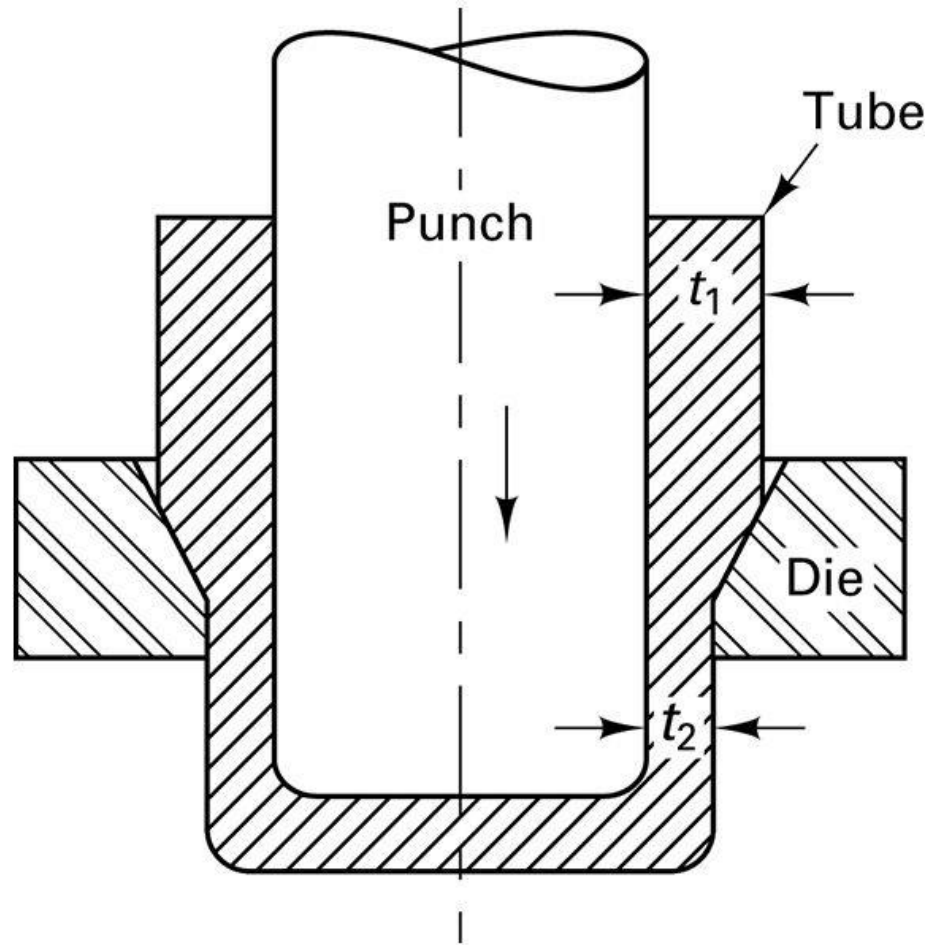




# Hot Drawing



# Ironing



# Embossing

