## PROGRESSIVE DIE DESIGN



Progressive Die Design Introduction Dwell

Automatic Feeds Pitch

Pilot Holes & Slots Press Stroke

Tabs, Ribbons, & Bridges Operational Speed

Die Stations

Production Volumes Number Of Progressions

Part Complexity First Station Operations

Strip Development Piercing Distribution

The Shape Of Blanked Regions

Part Orientation Die Punches

Optimizing Material Usage Idle Stations

Use Of Cams Planning Forming Operations

Part Lift Anti-Friction Guideposts

Progressive Feed Balancing Cutting & Forming Operations

Multiple Strip Layouts

Part Transport Part & Scrap Ejection

Parts Carried By The Material Between Them

Die Clearances

Parts Carried By One Side Of The Strip

Parts Carried By Both Sides Of The Strip

Die Lubrication

Stretch Webs Minimizing Surface Contact

Ribbon Strips Workpiece Surface Quality

Bridges Extending Tooling Life

Carrier Rails & Pins Lubrication Types

Lubrication Methods

Stock Positioning

Direct Pilots

Indirect Pilots

Advantages & Disadvantages