

Press Brake Bend Angle Variables

1. Tooling

Tolerances of the tools:

- Height of the die
- Height of the punch- tip to shoulder
- Angle on punch and die
- Shoulder radii on die

Seating and Alignment

Wear of Punch and Die

2. Press Brake Hydraulic System

- Ram Repeatability
- Temperature Compensation
- Feedback System

3. Press Brake Deflection:

- Bed and Ram Deflection
- Side Plate Deflection
- Off-Center Forming Deflection

4. Material:

- Thickness Variations
- Yield Strength Variations
- Grain Considerations
- Protective Coatings
- Spring Back
- Type
- Hardness