



Bend Angle Measurement

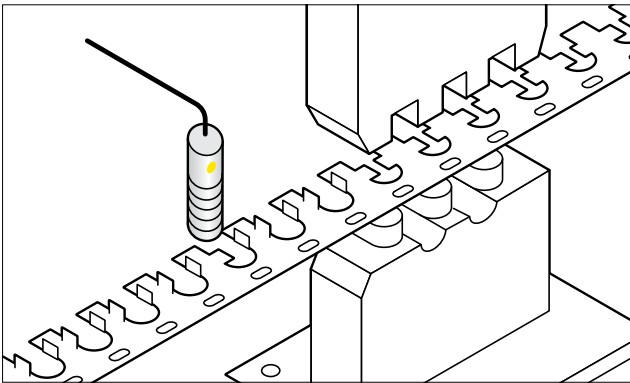
Metal forming application note

Accurate measurement of component bend angles is critical, especially in progressive stamping procedures. Each bend angle can affect the accuracy and tolerances of the next metal forming step. Highly accurate, durable, and repeatable sensors can monitor the quality of each process step in the metal forming operations, verifying that certain profiles, angles, or features have been properly made.

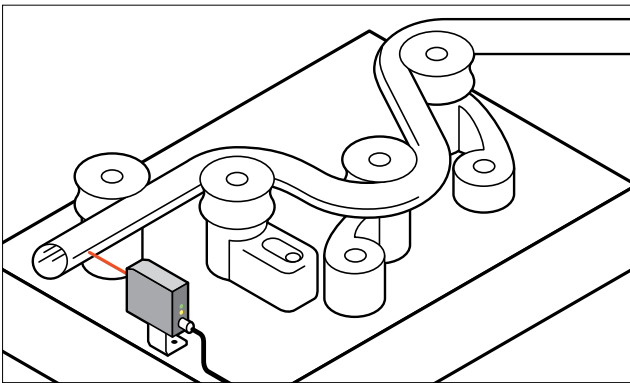
Need:

Verification that angles on parts produced by the stamping die are within specification.

Balluff bend angle solutions



Balluff BAW inductive distance sensors are simple, yet highly accurate analog sensors. They are perfect low-cost solutions for measuring bend angles, verifying formed features, or checking for die or press parallelism. With voltage or current output equating to the distance of a metal target to the sensing face, these sensors are so accurate; they can even measure thermal growth. Over 13 models are available to meet most any metal forming measurement requirement. Here a BAW has spotted an incorrectly formed angle on a microchip bracket progressive die.



Balluff's BOD 26K analog distance sensors are highly accurate, as low as 20 micron resolution, Class II laser measurement devices. With operating ranges between 45 and 85 mm, they are perfect for use where high precision, tight tolerance and longer distance measurement is required. Bend angles, weld seams, metal-formed feature detection and validation, plus other quality inspection steps can be reliably accomplished with the BOD 26K.