



# IDS Sensor

## Technical specification

- ⊕ Measures amount of deformation in materials
- ⊕ Resolution  $1 \mu\text{M}$  ( $\times 10^{-6} \text{ M}$ )
- ⊕ Output 0 – 10 V
- ⊕ Does not require amplification, but
- ⊕ When used with Smart Amp will optimize signal automatically

## Typical applications

- ⊕ Levers in multi-spindle machines
- ⊕ Can work in stamping applications to measure distances (limited)





# IDS Strengths and limitations



## Strengths:

- ⊕ High resolution, can measure very small changes
- ⊕ No contact sensing
  - ⊙ easy & quick to install
  - ⊙ No damage to machine
  - ⊙ No wear

## Weaknesses:

- ⊕ Sensitivity to machining vibrations to trigger internal resonance
  - ⊙ Makes measurements invalid
- ⊕ Dimensions of sensor limits placement options

**General take-away; good for lever force measurement  
stay away from stamping with high force >200,000 kgf**