



## PRECISION BENDING

contact person  
**Dittmar Klein**

### FEATURES OF PERFORMANCE

- CNC bending of small and micro parts out of different material
- swing folding as well as press brake bending
- production of own bending cheeks, devices or inserts
- in-house calculation of component specific unbend length or development
- component inspection by optical and tactile measurements with 3D coordinate measuring system

### TYPICAL APPLICATIONS

- EMC-compatible housings, caps and coverings for example made of polyimide foils or CuSn6
- punch-bending parts for prototypes, pilot production or tool repair
- power rails, contact bridges, injection moulding inserts, lead frames, connectors, pins
- spring elements, flat springs, leaf springs
- component holders, mountings

### POSSIBILITIES OF PROCESSING

- min. material thickness: 0,1 mm
- bending radii: 0,2 / 0,5 / 1,0 / 1,5 / 2,0 mm (others upon request)
- min. side length spring-hard: 4,0 mm
- min. side length soft: 2,0 mm
- max. bending angle: 135°
- minimum distance between bending edges typically 3,0 mm (depends on material and contour)

#### bending tolerances DIN ISO 2768 fine

| material                   | max. material thickness | max. length of bending line |
|----------------------------|-------------------------|-----------------------------|
| spring-hard                | 0,5 mm                  | 80 mm                       |
| light / non-ferrous metals | 1,0 mm                  | 80 mm                       |
| light / non-ferrous metals | 2,0 mm                  | 50 mm                       |
| steel                      | 1,0 mm                  | 80 mm                       |

- > max. side length: 150 mm
- > min. inner side width at U-profiles: 2,0 mm (= side length)

#### bending tolerances DIN ISO 2768 medium

| material                   | max. material thickness | max. length of bending line |
|----------------------------|-------------------------|-----------------------------|
| spring-hard                | 2,0 mm                  | 500 mm                      |
| light / non-ferrous metals | 4,0 mm                  | 500 mm                      |
| steel                      | 3,0 mm                  | 500 mm                      |

- > max side length: 150 mm
- > min. inner side length at U-profiles: 125 mm