

# The Ensat<sup>®</sup> in the workpiece ...

# Installation recommendation

The Ensat<sup>®</sup> should be rocessed appr. 0,1 – 0,2 mm recessed (Fig. 5). After processing, the Ensat<sup>®</sup> can be immediately subjected to load. If the component material permits subsidence of the Ensat<sup>®</sup> under load, the Ensat<sup>®</sup> can only execute an axial movement of 0,1 to 0,2 mm. In other words, the pretension of the screw union is largely retained, loosening of the screw connection under dynamic load is impeded

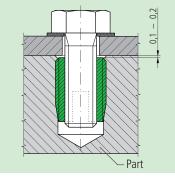


Fig. 5

In case of processing problems (e.g. markedly increased screw-in torque levels) there is generally no harm in selecting diameter data in the next highest column. In case of doubt, we advise carrying out a test.

#### **Retaining hole**

The retaining hole (L) can be simply drilled or integrated into in the casting.

Countersinking (N) the borehole (Fig. 6) is recommended in order to:

- Prevent the workpiece surface frombeing raised
- Permit screwing in to a greater depth
- Ensure improved initial cutting characteristics

### Material thickness:

Length of the Ensat<sup>®</sup> = smallest admissible material thickness M.

### Depth of the blind hole:

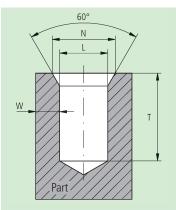
Minimum depth – (T) see Works Standard page 7 to 21.

#### Borehole diameter:

Brittle, tough and hard materials call for a larger borehole than soft or elastic materials. For guideline values, see Works Standard page 7 to 21.

# Edge distance:

The smallest still admissible edge distance W (Fig. 6) depends on the planned stress level and the elasticity of the material into which the Ensat® is screwed.



Guideline values for countersink: N = 0,06 to  $0,08 \times E + E$ 

**Guideline values for light alloys:** W 0,2 to 0,6 x E

Guideline values for cast iron: W 0,3 to 0,5 x E

 $E = Outside diameter of the Ensat^{
ensuremath{\scriptscriptstyle \mathbb{B}}} [mm]$