

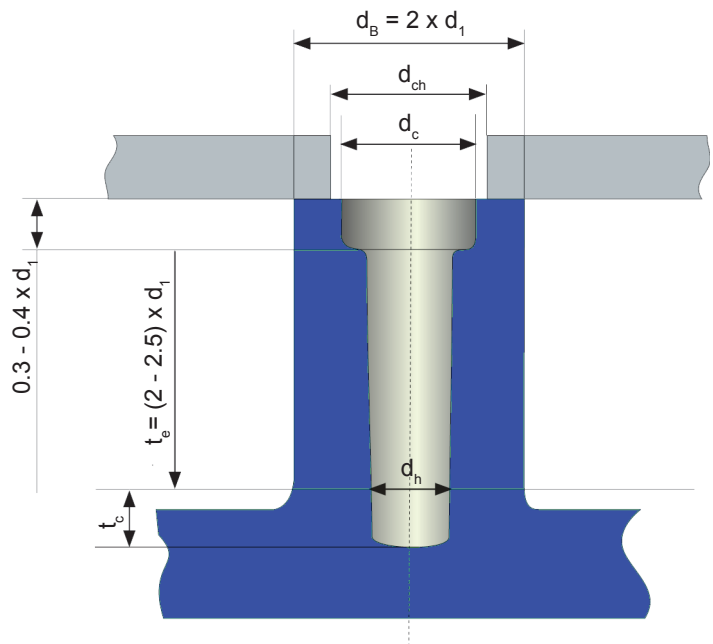
Some designs require the use of thermosets, which pose special demands on the direct assembly because of their hardness and brittleness.

In response to these challenging conditions, the DELTA PT[®] DS screw was developed. Special grooves which help to cut the female thread have been added to the thread geometry of the established DELTA PT[®]. These grooves are especially distinct at the tip of the thread and taper off towards the screw head. This thread forming zone enables a low tightening torque while maintaining high stripping torque.

Advantages of DELTA PT[®] DS compared to screws with machine milled cutting edge:

- *Smaller hole depth possible because less chip space is required compared to screws with a traditional cutting edge.*
- *Cost saving potential through standardization – only one screw for thermosets and thermoplastics.*
- *Removal of costly inserts possible due to the multiple reusability feature provided by the thread design.*
- *Wider production range regarding screw diameter and length.*
- *Larger thread engagement area for the same insertion depth.*

Boss Design Guide for DELTA PT[®] DS



$$d_h = \text{Hole-}\varnothing = 0.83 - 0.90 \times d_1$$

$$d_1 = \text{Nominal } \varnothing \text{ of the screw}$$

$$d_c = \text{Counterbore diameter} = d_1 + 0.2 \text{ mm}$$

$$t_c = \text{Chip space} = 0.8 - 1.2 \times d_1$$