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TYPE E

Assembling information RAMPA®-Inserts type E for HPL

RoHS conform

The values in the table are valid exclusively for HPL materials and are applicable to the **RAMPA®-Inserts** listed therin.

RAMPA®-Inserts | Type: E

Art. No.	Outer-Ø D (mm)	Length L (mm)	Inner thread-size d (mm)	Panel thickness	Pre-drill-Ø (mm)	Steel zinc-plated	Stainless steel 1.4305
008509001	9	4,8	M5	6	8,5	✓	
008605001	9	4,8	M6	6	8,5	✓	
00850903	9	4,8	M5	6	8,5		✓
00860503	9	4,8	M6	6	8,5		✓

Preparatory work:

- → Outer-Ø D = 9mm
- → t= 0,5mm
- → Tolerance range t_{tol1}=+0,15

Example: RAMPA®-Inserts | Type: E Art. No.: 008509001

- → Standard pre-drill-Ø =**D - t = d → 9mm - 0,5mm = 8,5mm**
- → Max. allowed-Ø = **D - (t-$t_{tol,1}$) = d → 9mm - (0,5mm - 0,15mm) = 8,65mm**

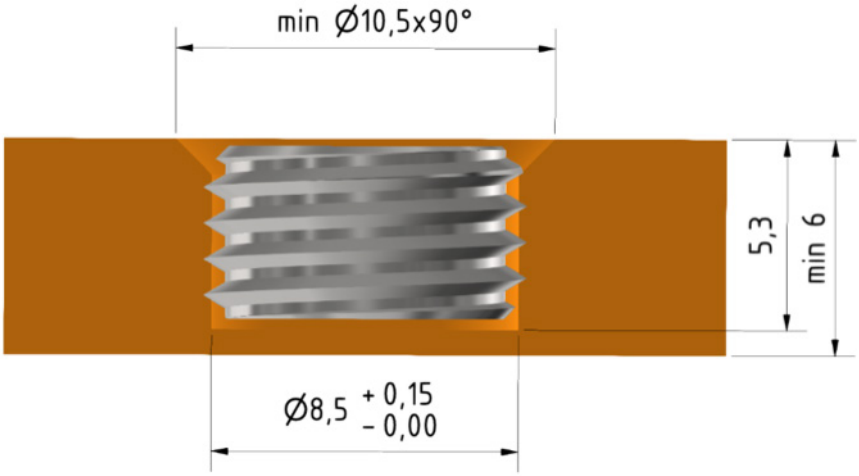

Figure 1

Always choose the smaller pre-drill-Ø. If there are problems during assembling, this can be adjusted in accordance with the tolerance range $t_{tol,1}$ listed above.
The pre-drill depth should be t_{min} = L + 0,5mm.
Starting from the outside-Ø D, the countersink (s) must be carried out min. 0,75x45°!

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TYPE E

Assembling information RAMPA®-Inserts type E for HPL

Example: RAMPA®-Inserts | Type: E Art. No.: 008509001

- Outer-Ø D = 9mm
- Counterbore-Ø **(d_1) = D + (2 x s) → 9mm + (2 x 0,75mm) = 10,5mm**

Make sure that the pre-drilled hole is clean or free of chips.

Assembling: The **RAMPA®-Insert** must be completely screwed on up to the sleeve before starting the assembling process.

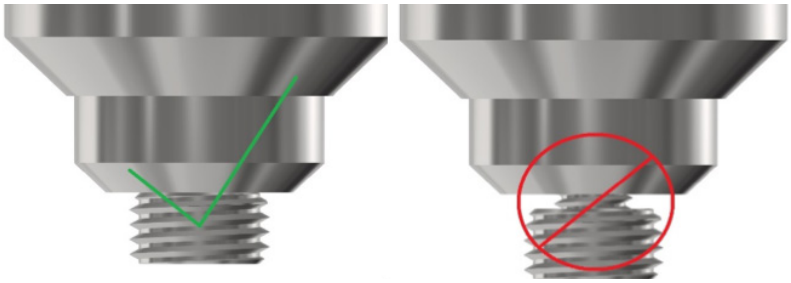

Figure 2

Ensure that the set screw of the driver isn´t longer (Fig.3) than the **RAMPA®-Insert** itself.

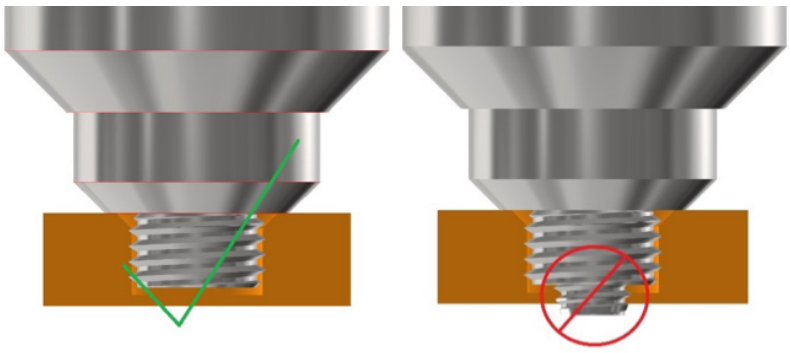

Figure 3

At the beginning of the assembling process, the **RAMPA®-Insert** must be applied into the pre-drilled hole with slight pressure to avoid bulging.

- Assembling-speed = max. $150min^{-1}$
- The switch-off range of the assembling torque is between 4Nm – 6Nm.
  The assembling torque depends on the HPL material type.
  The real value must be determined separately on the specific HPL material.

Excessive cut-off torque can cause damage to the internal thread or the HPL workpiece!

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