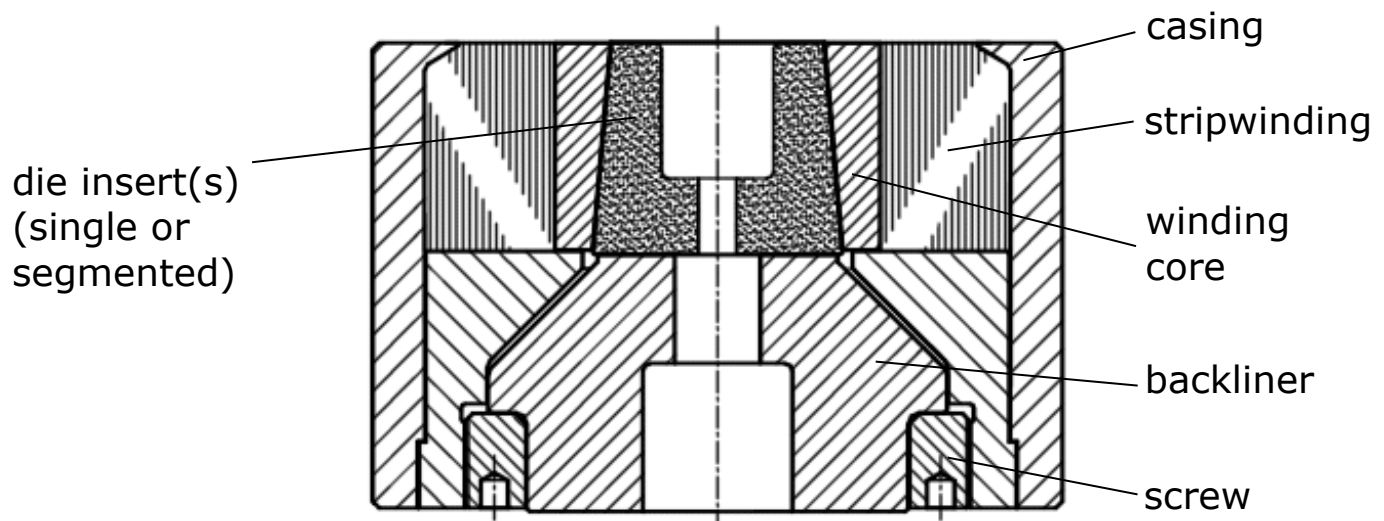


Assembly instructions for STRECON® AXI-FIT prestressed containers with a conical angle $> 1.5^\circ$

Principle design of a STRECON® AXI-FIT container

Conical angle $> 1.5^\circ$



Check die insert(s) and tool elements before assembly

- Are the dimensions correct? Check the outer diameter, conical angle, height.
- Are the outer edges rounded and free of burrs?
- Is the transition from the radius to the taper angle polished?
- Are the outer contact surfaces of the die ground ($R_a < 0.4$), free of scratches or grooves, and free of surface coating?

¹ Remark: For conical angles $> 1.5^\circ$, there is a risk of uncontrolled shooting-out of the die if the assembly and disassembly instructions are not obeyed. For smaller conical angles, see STRECON instruction 4404.

Assembly of die inserts in a STRECON® AXI-FIT

1 Cleaning

- Use a degreasing solvent
- Clean the outer surface of the die and the inner bore of the STRECON container



! Fitting of the die without cleaning may cause it to shoot out!

2 Lubrication

- Dub a thin layer of MoS₂ powder (e.g. *Molykote*) evenly on the contact surfaces
- Avoid local accumulations of lubricant, wipe off surplus



! Excessive lubrication may cause the die to shoot out!

3 Insertion of die insert(s)

- Place the STRECON container on the press table, the larger bore diameter on the top
- Place the die insert(s) in the STRECON container
- Check the correct orientation and position of the die insert(s)



! If the die is divided into **two or more inserts**, they **must be pressed in together**. Otherwise, the insert may shoot out, or the inner bore may get damaged by an uneven press fit.

4 Positioning of backliner and screw

- Insert the backliner

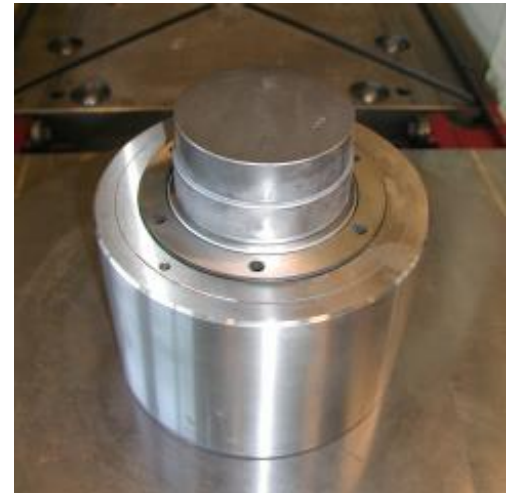
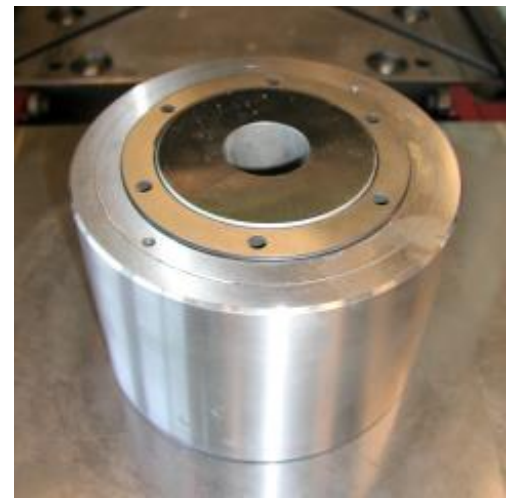


- Apply the screw and tighten it by hand



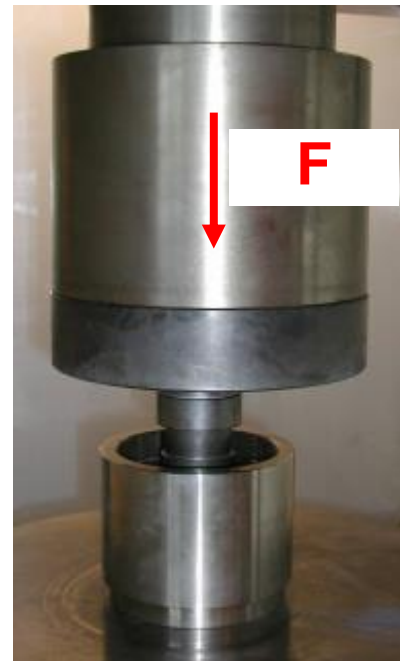
5 Positioning of the tooling system on the press table

- Put a plug onto the back of the backliner (not onto the screw!)
- Place the whole assembly in the press



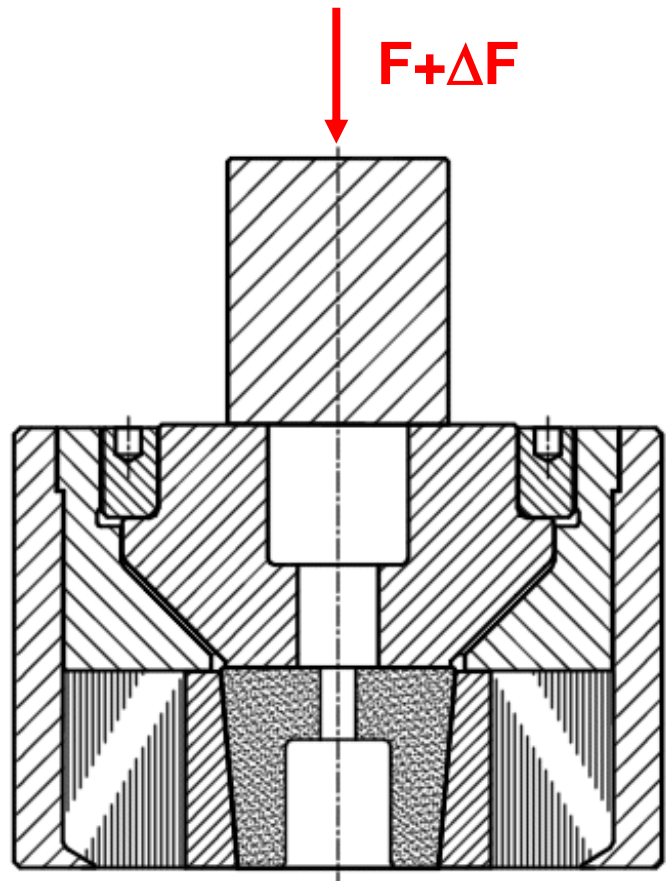
6 Press fitting of the die insert(s)

- A slow-running hydraulic press is recommended.
- Make sure that the container is fully supported.
- Press down the plug and the die insert(s) by the assembly force **F**

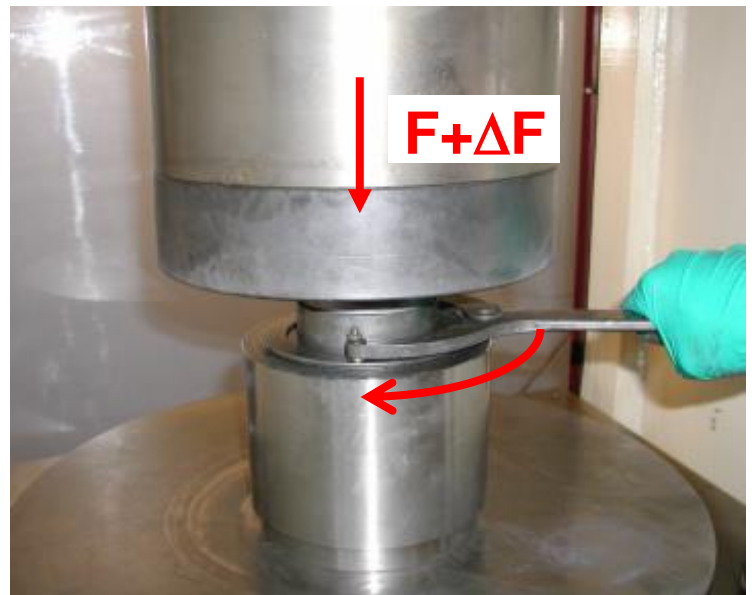


7 Axial prestressing

- Apply an additional force ΔF in order to adjust the axial prestressing



- Tighten the screw while the press force $F + \Delta F$ is applied
- Release the press



The assembly is READY.

Please pay also attention to the following instructions for disassembly.

1 Loosening the screw under press force

! The screw may (and can) only be loosened while the backliner is loaded in the press!

- Place a plug on the backliner
(not on the screw!)
- Place the assembly in the press
- Press down the backliner by

the assembly force F

plus

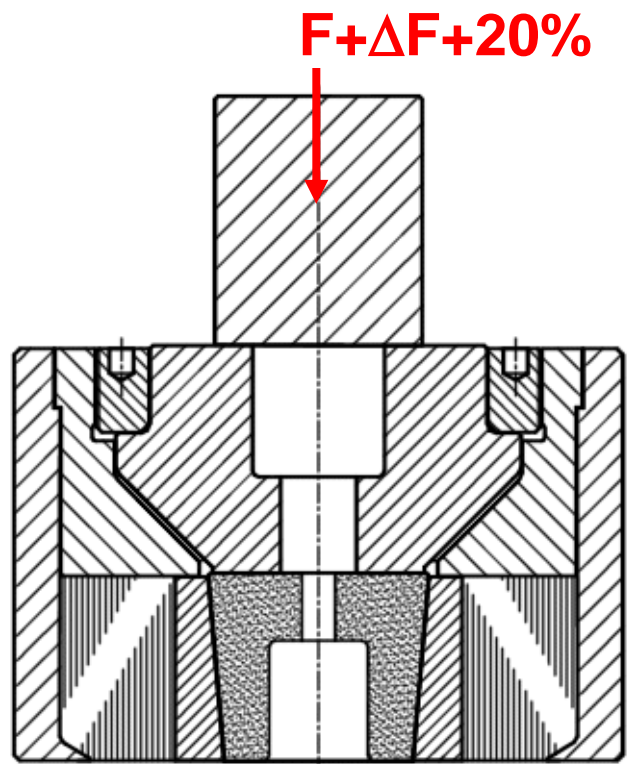
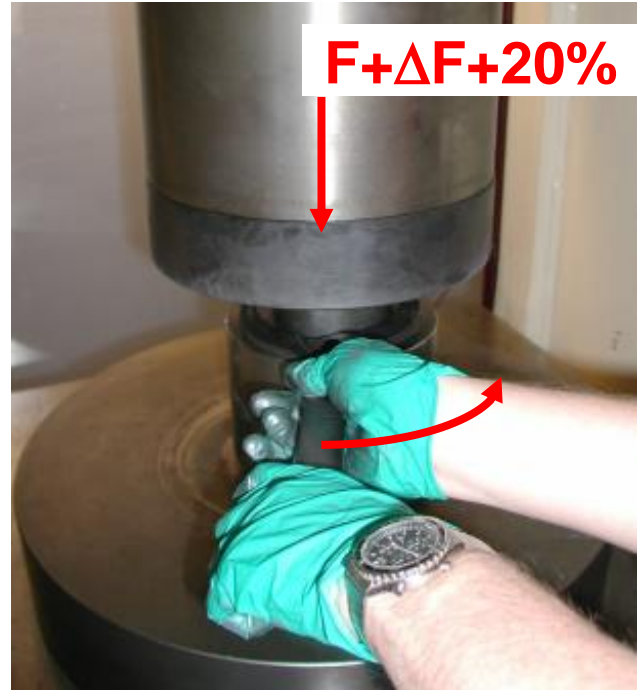
the additional force ΔF
for axial prestressing

plus

an additional force
(approx. 20%)

(see notes from assembly)

- Loosen the screw by a few turns (not completely!)



! Before opening the screw completely, it is important to ascertain that the die insert(s) are really released!

2 Release the press

- Release the press and observe whether the backliner moves as well



3 Check if the die insert(s) are fully released

- Turn the tool assembly and check whether the die insert(s) slide back and forth

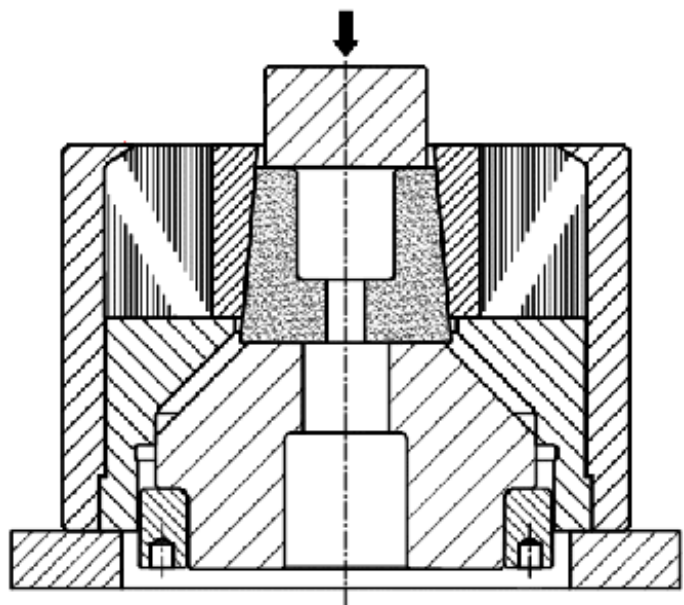


! If the die inserts are not released yet:

- Repeat steps 1 to 3. Loosen the screw by additional turns (not completely!)

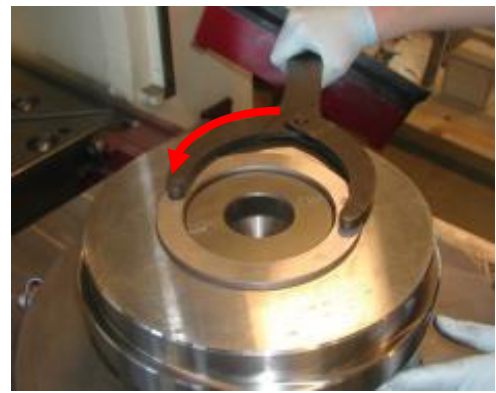
It may be necessary to press out the die insert:

- Place the tool assembly on a ring, supporting the casing (but not the screw!)
- Press down the die insert until it is released



4 Take out the screw and the backliner

- After having ascertained that the die inserts are already released, loosen the screw and take it out



- Take out the backliner



- Take out the die insert(s)
The disassembly is READY.

Technical Support

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