

## SC AXI-FIT Container

### Container design

The SC AXI-FIT Container is a 2-directional prestressing tool system that offers compressive support for the die system: Radial prestressing and axial prestressing. The radial prestressing is obtained by press fitting the forging die, whereas the axial prestressing is ensured by locking the tool system under high axial loading during tool assembly. The locking mechanism is normally a threaded ring screw, which is mounted on the bottom side of the container.

The SC AXI-FIT Container is available with a winding core made of tool steel or tungsten carbide. The carbide container design offers a stiffness of approx. 400 GPa, and a tool system loadability that is 50-100% higher compared to a normal compression ring.

The key merits of the SC AXI-FIT Container are:

- 1) Higher service life of the forming die, and
- 2) A prestressing tool that can be reused numerous times at full capacity.

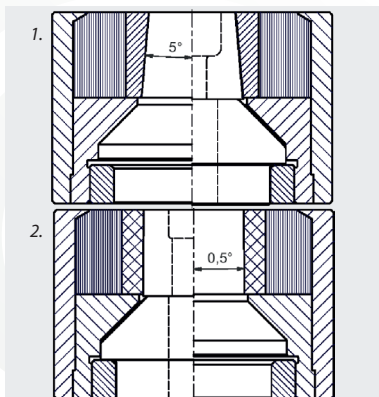
The SC AXI-FIT container is available with both Strip200 and Strip400 materials and selected with respect to the temperature of the production process.

### Use in Industry

The SC AXI-FIT container is designed to achieve an optimal balance between radial prestressing and compressive die support in the axial direction. When used with the carbide winding core, the container system also provides a reduced die deflection of up to 30% during the forming process. Therefore, it is suitable for high-loaded dies with significant changes in cross-section that need support both in radial and axial direction.

For example, the SC AXI-FIT container has proven effective in preventing transverse and horizontal cracking in high-loaded dies, high-precision dies with complex cavities and split-die designs.

The SC AXI-FIT Container is suitable for cold, warm, and hot precision forging as well as in other metal forming applications involving a high internal process pressure.



1. Taper angle 3 - 5°
2. Taper angle 0.5 - 1.5°



Principle of STRECON Axi-Fit Container:  
Main tool body, pressure pad, and ring screw



Examples of parts produced with  
STRECON Axi-Fit