

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 a threaded ring screw, which is mounted on the bottom side of the STRECON container.

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

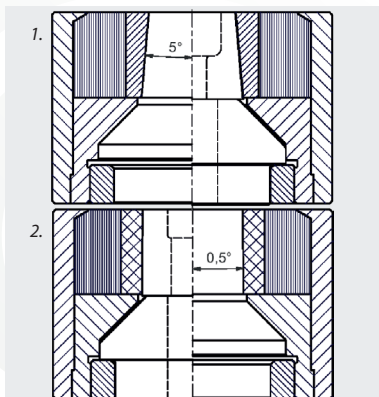
The SC AXI-FIT container is available with both Strip200 and Strip400 materials and selected in respect of the temperature of the production process.

Use in Industry

The SC AXI-FIT container is designed for achieving an optimal balance between radial prestressing and compressive die support in axial direction. When added with the carbide winding core, the container system does also provide reduced die deflection up to 30% during the forming process.

The SC AXI-FIT container has proved effective in preventing transverse and horizontal cracking in high-loaded dies, high-precision dies with complex cavities, and in 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 prestressed
by STRECON Axi-Fit