

SC 200⁺ / SC 400⁺ | E⁺ Container Type

Container design

The SC 200⁺ container and SC 400⁺ container is a unique high-stiffness prestressing tool system in which the winding core is made of tungsten carbide. The use of a carbide core as the inner ring of the stripwound container system ensures a tool stiffness up to 400 GPa. A normal compression ring has an E module of approx. 225 GPa. In addition to the high-stiffness feature, the container itself can take a radial load that is up to twice the level of a normal compression ring. The prestressing container concept is also known as STRECON E⁺ Container Type, which refers to the high level of Young's Modulus.

The SC 200⁺ container is made with the Strip200 material, and the container itself can take up to 200°C for remaining fully elastic. The temperature limit for the SC 400⁺ container is 400°C.

The specific container design is adjusted to the specific purpose in respect to the production process, tool layout, product materials, hardness, taper angle, etc.

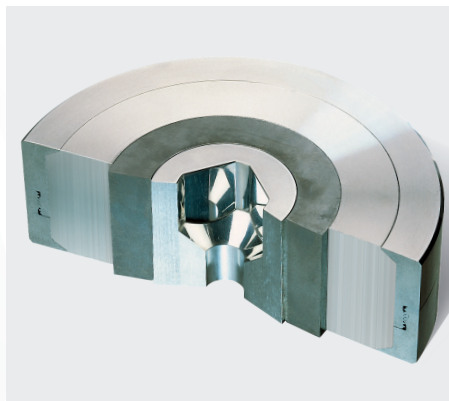
Use in Industry

This high-stiffness container type is suitable for cold and warm precision forging and other precision metal forming applications, for example high-precision dies with complex cavities and/or sharp corners. The container system is designed for achieving an optimal balance between radial prestressing and reduced die deflection under process load. The high-stiffness feature can reduce the deflection of the production die by up to 30%.

The STRECON container system has proved to be very cost-effective in mass production, and usually delivers 25-30% reduction of the tool costs.



The stripwinding process



STRECON E⁺ Container



Examples of parts suitable for the STRECON E⁺ system