



Triform's family of aerospace-focused forming products includes a line of hydraulic ring expanders for circular manufacturing of a variety of metal alloys, including cobalt and nickel-based alloys, specialty steels and titanium.

### Improving the Consistency of High-Strength Materials

Triform Ring Expansion Systems, which are used to form strong, symmetrical, ring-shaped parts, are commonly used in the aerospace industry for turbine engine manufacture. The ring expansion process helps minimize material thinning and virtually eliminates the stress point issues

associated with traditional rolling and machining of rings made from a variety of high-strength materials including Inconel, Hastelloy and Titanium, among others.

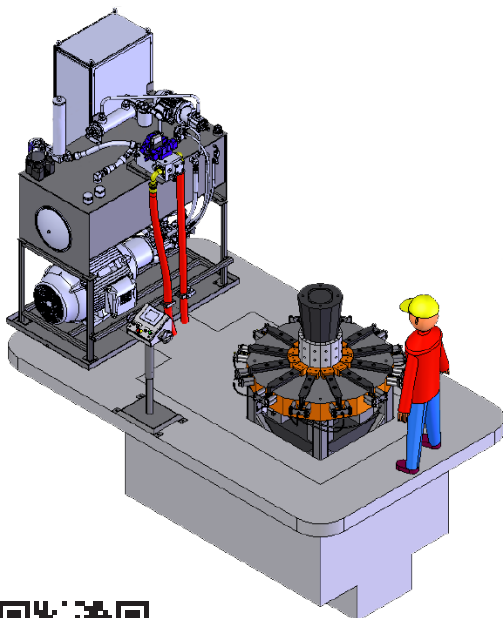
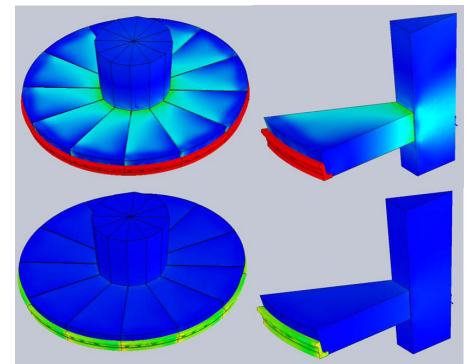
### Customizable for Ultimate Flexibility

Triform's ring expander solutions can be customized to the individual user's needs. This available customization includes jaw diameter, jaw height, jaw travel, tonnage capacity and other expander specifications. Leveraging a deep reservoir of experience with industrial machine control, Triform's ring expanders are provided with precision programmability and recipe functionality via an Allen Bradley control platform.

Systems are commonly provided with replaceable wear pads between the jaw segments and the draw cone, and are outfitted with Triform's PressLink system for remote connectivity to the factory, ensuring efficient support. Built-in redundancies, such as dual linear and pressure transducers, prevent unexpected downtime.

### Robust & Easy to Maintain

Every Triform ring expander structure is engineered for Infinite Life using finite element analysis (FEA) software. The designs are built to withstand the high forming and surface forces generated during the ring expansion process.



Learn more about our ring expanders:  
<http://beckwoodpress.com/triform-presses/ring-expanders/>

**Built for you. Built to last. Built in the USA.**

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