

Rulon[®] 945 Outperforms in Dry Gas Piston Compressors



A large manufacturer of onboard dry gas compressors was looking to improve the wear life of their piston seals and wear rings. With operating pressures that reach 3000 psi, it was important to source a material that could handle that, cycle rates, speeds, and reliability of service.

Historically, inert nitrogen/oxygen compressors such as these would use filled PTFE for the seals and wear rings, but change-outs due to worn parts were frequent and costly.

TriStar discussed all the parameters with the customer and determined that a Rulon material that was developed just for compressor applications could be a good solution.

■ A partnership with TriStar gives you a competitive edge.



Dry gas piston compressor

Rulon 945 – A Very Low Deformation Material Designed for High Pressure Applications

Rulon 945 is an outstanding wear material with the lowest thermal expansion and deformation under load rates of any filled PTFE. Other benefits of [Rulon 945](#) include:

- Self-lubricating composition to eliminate greasing operations
- Extreme temperature range [-400/+550°F]
- Possesses excellent chemical resistance
- Tolerant of corrosive chemicals and hard mating surfaces

Testing showed that service life compared to traditional glass/moly and carbon/graphite PTFE material was 5-6 times longer.

With the lower thermal expansion rates and a different polymer make up, the new combination of materials allowed for tighter tolerance controls and better heat dissipation, which helped extend life and ensured consistent seal-ability of the piston rings.

We're ready to put our engineering expertise to work for you from prototype to production.

Engineering | Custom Fabrication | Manufacturing



CJ Composite

- Self-Lubricating
- Low weight | High Strength
- Chemical Resistance
- Direct replacement for Bronze



Ultracomp[®]

- Self-Lubricating
- High Load | Low Speed
- High Compressive Strength
- Vibration & Impact Resistance



TriSteel[™]

- Self-Lubricating
- High Load | High Speed
- Metal Backed Bearing System
- 100% Lead Free



Rulon[®]

- Self-Lubricating
- Low weight | High Strength
- Low Coefficient of Friction
- Chemically Resistant



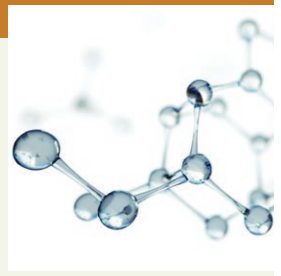
Meldin[®]

- High Performance Materials
- High Temp Dimensional Stability
- Chemical Resistance
- Withstands Thermal Shocks



Enhanced Materials

- Plasma Surface Treatment
- Filtration Membranes
- Specialized Primers & Coatings
- Material ID & Selection



TriStar



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