

# Rulon<sup>®</sup> Seal Materials Make Water Out of Air

■ A partnership with TriStar gives you a competitive edge.

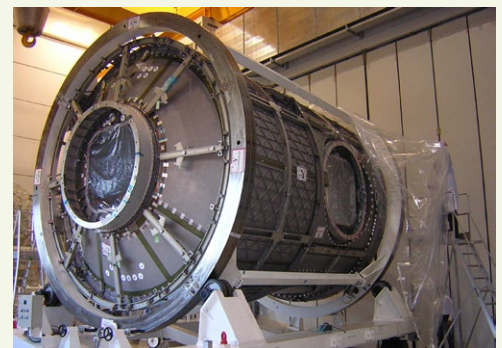


*Supplying fresh water to astronauts on orbiting spacecraft has always been a challenge. And with the end of regular space shuttle flights, also came the end of fresh water delivery. But water which once cost \$25,000 per gallon to deliver by resupply shuttle is now produced right onboard from recycled waste products.*

*NASA engineers designed a compressor based on the [Sabatier system](#). It uses a chemical reaction to scrub air from cabin surfaces. As methane is expelled from the station, water returns to purification units onboard. The compressor delivers these waste products to the Sabatier reactor. After cycling, the waste is turned into fresh water that is suitable for drinking.*



Rulon LR



Node 3 [Tranquility] module of the International Space Station

## **Rulon LR Compressor Seals are Grease-Free and Space Age**

With such a unique design, NASA required all materials to be oil free. [Rulon LR](#) was the ideal solution as it resists chemicals and moisture, and gives high-temperature/low-friction service.

The seals have surpassed all testing without any leaks over a two-year [7,000 hour] testing period with 180,000 on/off cycles.

Do you have an application that requires a space-age solution? Connect with the [Seal and Bearing Experts](#) for a consultation.

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<sup>®</sup>

- Self-Lubricating
- High Load | Low Speed
- 54,400 PSI Compressive Strength
- Exceptional Resistance to Vibration and Impact



## TriSteel<sup>™</sup>

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



## Rulon<sup>®</sup>

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



## Enhanced Materials Division

- Plasma Surface Treatment
- Specialized Primers & Coatings
- Material ID & Selection
- Process Engineering | Analysis & Testing



TriStar



Engineered Plastic Solutions<sup>™</sup>

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