

Composite Bearings Help Robotic Subseas Detect Pipeline Leaks

■ A partnership with TriStar gives you a competitive edge.



Ultracomp Composite Bearings



A subsea remote vehicle

Subseas are robotic devices that are used to detect leaks in underwater oil and gas pipelines. Powered by remote control, they are regularly called on to patrol the 25,000+ miles of pipes throughout the Gulf of Mexico.

But the challenge for some subsea manufacturers is in finding oil and gas bearings that can withstand the salt and extreme temperatures of sea water, which can corrode traditional metals.

Over time, the metal wheel assemblies can rust and fail. And with each failure, the robots must be pulled from service, which can cost oil companies millions.

Composites resist corrosive sea salt and low temperatures

Materials like CJ and [Ultracomp](#) composites use galvanic insulators to resist corrosion. They remain dimensionally stable when submerged, won't easily rust, and give subseas longer service life without regular maintenance. Ultracomp bearings are even certified by the [American Bureau of Shipping \(ABS\)](#) for diverse marine applications.

Choose composite oil and gas bearings based on:

- Submersion and corrosion resistance
- Low-temperature tolerance
- Impact resistance
- Thin wall design
- Up to 40% savings over metal

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
- 54,400 PSI Compressive Strength
- Exceptional Resistance to Vibration and Impact



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



Enhanced Materials Division

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



TriStar



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