

ORD Problem Solved!

E0962-90

Superior temperature, steam and chemical resistance



Parker is the only manufacturer that offers a high-performance ethylene propylene polymer tough enough to endure the extreme temperatures, steams and chemicals found in the Energy, Oil and Gas Industry. This EPDM, known as E0962-90, is specifically recommended for geothermal applications and is ideal for use in pumps, valves and crude delivery systems.

For more information on this or any of Parker's 200+ rubber compounds, contact one of our Territory Sales Managers or Applications Engineers.

Chemical Compatibility

E0962-90 is recommended for a wide range of chemicals including:

- Water/Steam
- Water Based Drilling Fluids
- Amines
- Alkalines
- Hydrogen Sulfide
- Silicone Oil/Grease
- Gaseous CO₂
- Petroleum Fluids < 10% Mixtures
- Ketones
- Phosphate Esters
- Alcohols
- Dilute Acids
- Ozone
- Cleaning Agents

*E0962-90 is not recommended for mineral oil products, greases, oils or fuels.

Application Story

Application:

Down hole tool for a steam injection well.

Problem:

The customer was developing a new down hole well tool where a seal was needed to withstand a 595°F steam environment, for 168 hours at a pressure of 2000 psi. These temperatures forced the customer to initially look at very expensive FFKM polymers that are known to withstand temperatures of up to 600°F. The customer had tested competitor FFKM's, but all parts had failed to maintain sealing past 80 hours and showed signs of severe seal degradation and compression set.

Parker Solution:

Parker recommended our E0962-90 material developed specifically for high pressure, high temperature steam resistance (+500°F). The EOG market typically does not consider EPDM's for their applications due to the materials historically poor performance in saturated hydrocarbons. In applications where the fluid mixture contains less than 10% of saturated hydrocarbons, and high temperature steam resistance is required, E0962-90 is an excellent choice.

Outcome:

The customer placed the E0962-90 samples on test and were able to maintain a seal past the 168 hour requirement. The seals were removed from the test fixture and they showed no signs of seal degradation. (The customer stated that the parts looked so good that they would be willing to use the parts again.) The customer was able to approve this material as a sealing solution for their application which has allowed them to continue with the launch of their new tool. The E0962-90 material exceeded the customers requirements at a reduced cost compared to the FFKM materials originally being considered.