

ORD Problem Solved!

FF500-75

Broad Chemical Resistance

Parker's Parofluor ULTRA consists of high performance perfluorinated elastomers and was developed for use in harsh operating environments. Compound FF500-75 is a black, 75 durometer material offering outstanding performance in the widest possible range of chemical and steam temperatures up to 275°C (525°F). It is suitable for use in acids, bases, amines, steam, ethylene oxide, and many other aggressive chemicals. For more information on this or other O-ring topics, please contact a Parker Applications Engineer at 859-335-5101.

Application Success Story

Application:

A major petrochemical plant had standardized a leading competitor's FFKM. They were experiencing satisfactory performance within most of their mechanical seal, pump, and valve applications. Seals were exposed to a variety of chemistries throughout the process stream and included 50% caustic, 98% sulfuric acid, ethylene dichloride, hydrochloric acid, isopropyl alcohol, methanol, 68% nitric acid, toluene and xylene.

Problem:

The customer was content with the performance of their current FFKM but seeking cost improvements. The recommendation was to try the Parker FFKM product.

Parker Solution:

Based on a requirement for broad chemical resistance and temperatures up to 300°F, the customer was presented with Parker FF500-75 information. Samples were provided for testing within several of their key mechanical seal applications.

Outcome:

After testing Parker parts in the customer applications for one and a half years with no failures, the customer converted the entire plant (with over 900 pumps) to FF500-75. The success resulted in a program to convert other areas throughout the plant (consisting of mixers, valves, pumps, etc.) over to the perfluorinated material also. By replacing the leading competitor FFKM with Parker's FF500-75, the customer received improved performance and blanket conversion resulting in a 38% savings.

| FF500-75 | Market | General Application |
|---|---------------------|--|
| Color: Black Durometer: 75 +- 5 Temperature: -15° to 275°C (5° to 525°F) Features: Broad chemical resistance | Semiconductor | Wet Processes: Wet Etch, Stripping, Electro-Copper Plating |
| | Chemical Processing | Mechanical Seals, Pumps, Valves, Instrumentation, Flow Controls, Meters, Con- nectors, Sight Glasses, Blenders, Agitators, Mixers, Reactors, Transportation |
| | Oil field | Down Hole (Sour Gas), Drilling Mud, Amine- Based Fluids, Steam and other aggressive chemicals |
| | Industrial | Paint Spray, Fluid Handling |

