



ENDURO™ LF10 COATING

Improves Component Performance

PROVIDES LOW STICTION AND LOW FRICTION

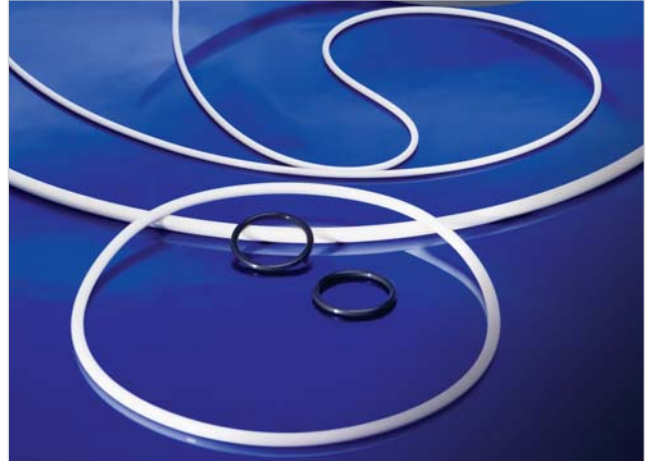
Greene, Tweed's Enduro™ LF10 Coating is a thin conformal, PTFE based coating that can be applied to a variety of components within manufacturing equipment including elastomeric, thermo-plastic or metal components to enhance their performance. Enduro LF10 improves the performance by reducing the sticking force between component interfaces or wear caused by friction, both of which will reduce particulate generation. The coating exhibits excellent adhesion, high purity and excellent conformality to thoroughly cover complex surface features. With deposition at low temperatures, it can be applied to many types of surface materials. For aqueous chemical environments, Enduro LF10 can also render surfaces from hydrophilic to hydrophobic. The coatings work well for both static and dynamic applications.

FEATURES & BENEFITS

- Continuous use at high temperatures equal to PTFE (up to 550°F/288°C) meets the thermal needs of most processes
- Excellent purity, adhesion and conformality allows the coating to provide process benefits thus enhancing yield
- High conformality enables coating of complex surface features
- Friction and sticking force reduction extends lifetime of components, especially in dynamic and semi-dynamic applications
- Deposition occurs at low temperatures allowing coating of delicate structures and temperature sensitive materials
- Low friction properties minimize particulate generation between moving components
- Changeable surfaces from hydrophilic to hydrophobic enhance process equipment process efficiencies

APPLICATIONS

- Reduced coefficient of friction for static and dynamic elastomeric seals
- Reduced sticking force (separation force) for seals including vacuum seals
- Reduced coefficient of friction for plastic and metal components
- Conversion of surface property from hydrophilic to hydrophobic



Enduro applied to Chemraz® seal

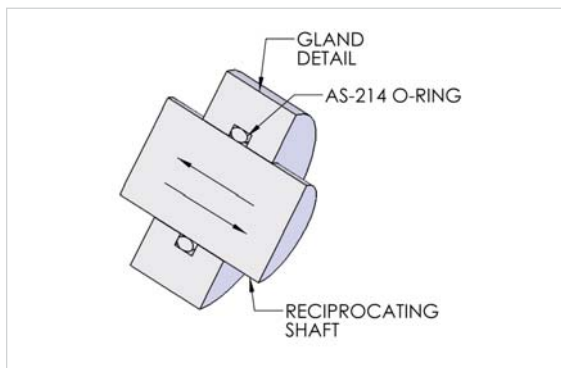
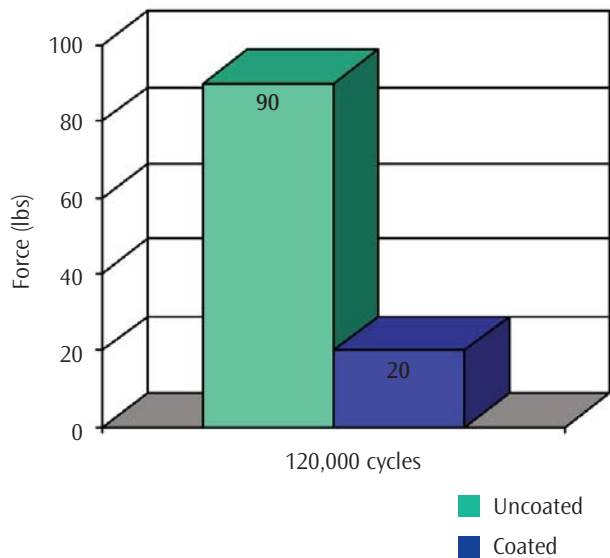
COATING THICKNESS

Enduro LF10 is applied at the micron level for:

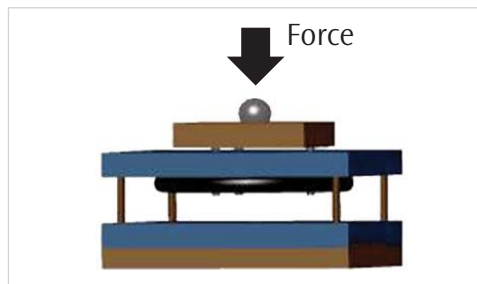
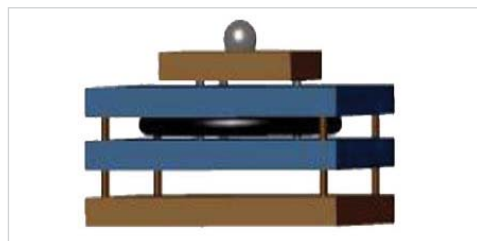
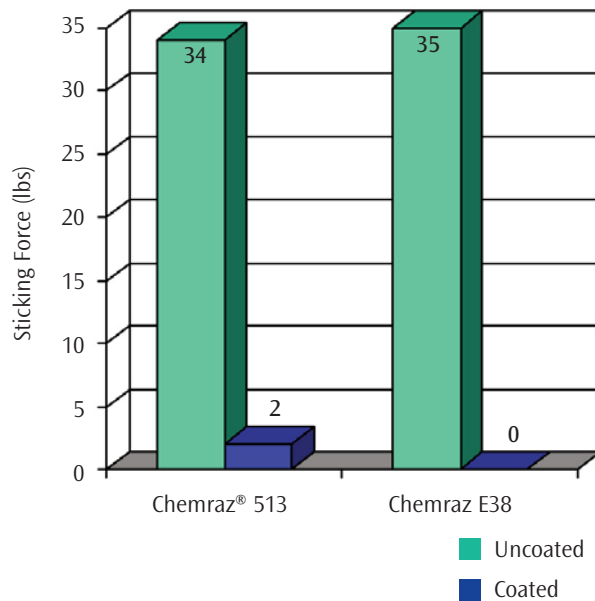
- Solid substrates
- Flexible substrates (elastomers)
 - Low particulation applications



FRICITION FORCE ON CHEMRAZ® 505 AS-214 O-RINGS



STICKING FORCE ON AS-214 O-RINGS



The illustrations above show an AS-214 O-ring compressed between SS plates. After the assembly is aged at the determined time and temperature, the fixture is removed from the oven and cooled to room temperature. The maximum force required to push the blue plates apart is recorded as the sticking force.

Statements and recommendations in this publication are based on our experience and knowledge of typical applications of this product and shall not constitute a guarantee of performance nor modify or alter our standard warranty applicable to such products.

Prior to actual use it is recommended compatibility tests be run to determine suitability in a specific application. This is critical where failure could result in injury or damage. A regular program of inspection and replacement should be implemented. Greene, Tweed technical personnel are available to help with a recommendation.



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