



Custom Testing for Window Shades

Application: Window Shade Brake

Location: USA

Challenge

A global manufacturer of light control technologies such as dimmers, switches, shades, and sensors, came to us with a new brake design within their window shade systems. The company already used RHEOLUBE® 368AXF in another product and wanted to verify that it was the best lubricant for their new design. For many of our customers, in-house testing is not feasible given the time, cost, and equipment required. This customer needed us to test RHEOLUBE® 368AXF against other PTFE greases to see which performed best in their new shade.

- Determine which grease has the lowest oil separation under specified conditions
- Determine which grease can operate for 400,000 brake cycles with less than a 25% change in torque.

Solution

New Application & Validation Test Rig

We built a custom fabricated test stand which held the brake unit in place, while a servo motor with torque feedback capabilities cycled the internal greased components and monitored operating torque in real-time. We then compared the torque results of RHEOLUBE® 368AXF against the torque results of other PTFE greases.

Results

After the testing data was analyzed, plotted, and supplied to the company, they concluded that RHEOLUBE® 368AXF was the best solution for their application and implemented it into their design. RHEOLUBE® 368AXF is a rust inhibited, PTFE fortified grease that exhibits excellent friction reduction and load carrying capabilities while meeting the customer's low oil separation requirements.

Advantages

Custom testing

Application test data

Technical support