

High-Temperature Lubricants for Brake Caliper Pins

Application: Caliper Pins

Location: China

Challenge

When caliper pins are not properly lubricated, rotors and brakes can become misaligned which generates frictional heat and accelerates wear. To extend the life of brake pads, it is critical to select a lubricant that can withstand high temperatures during braking. Lubricants must also be compatible with all braking materials including EPDMs. An Automotive OEM was looking to replace their caliper lubricant after it failed to resist water washout and could not withstand high temperatures. They came to FUCHS for a solution.

Solution

FLUOROCARBON GEL 880

A PTFE-thickened, heavy viscosity dimethyl silicone grease

- Resists water spray
- Prevents corrosion and oxidation
- Compatible with EPDMs
- Excellent stability at high and low temperatures

Results

When selecting lubricants for caliper pins, a high viscosity grease with a temperature range of -40 to 200 °C is ideal. Lubricants with a high viscosity stay in place will not move away from the contact area and provide a strong lubricating film. FUCHS sent the customer a sample of FLUOROCARBON GEL 880. The grease met their temperature and water resistance requirements and was approved for use in their braking application.

Advantages

Resists water spray

Excellent stability at high and low temperatures

Compatible with EPDMs