

EGR Valve Application

A German supplier to the automotive industry reduces failures and saves money by switching lubricants.

German manufacturer of EGR valves enhances reliability of critical component

A manufacturer of gear-operated exhaust gas re-circulation (EGR) valves for the automotive industry wanted to improve the reliability of its product by eliminating the excessive separation of grease and oil, and the failures that were occurring at low temperatures and heavy vibrations.

The Challenge

This EGR valve is used in an oscillating application (270° rotation) under extreme pressure. The manufacturer needed a lubricant that would provide superior lubricity, despite this harsh operating environment, which included exposure to temperatures ranging from -40-200 °C (-40-392 °F), as well as heavy vibrations.



The Solution

Krytox GPL 216 lubricant from Chemours easily met the challenges of this demanding application. Not only did it provide superior lubricity, even at the lowest temperatures, it showed no adverse effects after being subjected to a rigorous vibration test. What's more, the oil separation problems experienced with the lubricant previously used in the EGR valve application have now been eliminated. Since making this switch, the manufacturer estimates that it is saving 80,000 Euro annually.

Key Advantages

- Using Krytox™ GPL 216 lubricant, the manufacturer was able to eliminate the excessive oil separation problems experienced with the previous lubricant; thus, improving the reliability of its EGR valves.
- Krytox[™] GPL 216 lubricant is ideal for demanding applications that experience temperatures as low as -40 °C (-40 °F).
- Krytox™ GPL 216 can be used in other mechanical systems that are subjected to a wide temperature range, extreme pressure, and excessive vibration.

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