



Protecting Medical Imaging Devices Against Corrosion

Application: HDMI Connector

Location: USA

Challenge

Medical device issues are not only costly to the practitioner, but can also delay patient care. A leading fertility and women's health company was experiencing early failure of their handheld diagnostic imaging device due to corrosion of the micro HDMI connector. Connectors in medical devices are often exposed to hostile conditions, including cleaning agents and sterilization cycles that can accelerate corrosion. Corroded connections can impact signal transmission and the overall reliability of the device. The company needed a biocompatible lubricant with a long shelf life that would withstand Ethylene oxide sterilization (ETO) and protect the HDMI connector in service against corrosion to extend the life of the device.

Solution

NYEMED® 7560 is a medium viscosity, UV-dyed, synthetic hydrocarbon grease formulated for medical applications that may require a biocompatible connector lubricant. This grease contains additives proven to protect electrical contacts against moisture and corrosive substances, and reduce mating force of connectors, ensuring signal transmission.

- Very good resistance to oxidation and moisture
- Does not swell [most plastics and elastomers](#)
- Wide temperature range (-40 to 120°C)

Results

A sample of NYEMED® 7560 was sent to the customer for internal performance testing and ETO exposure. FUCHS then provided a lab evaluation to verify the integrity of the product was uncompromised. NYEMED® 7560 met all of the customer's test requirements, protected the connectors against corrosion thus extending the life of the device, and remained stable following terminal sterilization conditions.

Advantages

Biocompatible

Extends life of connection

Protects against corrosion