LUBRICANTS.
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CHALLENGE

SOLUTION

Reduced failure risk & extended electrical connector lifespan in mining with NYOGEL 760G

CASE STUDY

Industry: Mining

Location: Europe

CASE

At one of our client's facilities, inadequate lubrication practices triggered a cascade of critical operational challenges: persistent cable disconnection failures, electrical conductivity disruptions causing system downtime, premature connector corrosion compromising signal integrity, and elevated insertion forces during assembly – all of which significantly increased the risk of component damage and escalated maintenance costs.

CHALLENGE

In mechanized longwall supports used in mining, electrohydraulic control systems require absolute reliability. One of the key elements is the electrical connectors. Their failure leads to downtime, production losses, and costly repairs.

FUCHS OIL CORPORATION [PL]
ul. Kujawska 102, 44-101 Gliwice
www.fuchs.com/pl
tel. +48 32 40 12 200
fax +48 32 40 12 255
gliwice@fuchs.com

SOLUTION

As part of preventive maintenance and workflow improvement, NYOGEL 760G — a lubricant dedicated for electrical connectors — was applied to approximately 20 lubrication points on all connectors in the electrohydraulic control systems of the mechanized support.

RESULTS

- **Extended service life and increased reliability of connectors, even in highly humid and dusty conditions.**
- **Protection against corrosion and fretting corrosion — especially important in the mining environment.**
- **Sealing of connectors from moisture, dirt, and other contaminants.**
- **Reduced insertion force, lowering the risk of connector damage during assembly and disassembly.**
- **Enhanced efficiency for service and maintenance teams.**

CONCLUSIONS

- The use of NYOGEL 760G significantly reduced downtime and increased the operational safety of control systems. This is an example of how a precisely selected lubricant can solve multiple technical challenges — especially in environments where reliability under extreme conditions is crucial.

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