



MOLYKOTE® G-N Metal Assembly Paste used to avoid microwelding of pipes in rock-drilling machines

Lubricant application story: Threaded connections

MOLYKOTE® product

MOLYKOTE® G-N Metal Assembly Paste

Market segment

Mining

Component/application

Threaded connections

Major market

Maintenance, repair & overhaul (MRO)

Customer's area of concern

Customer's description of component

One of the first stages of the mining industry is to drill the ground. The rock-drilling machines are the ones that drill over 20 mts of rock and need a lubricant to stop seizure in the threaded connections of the pipes.

Previous solution/product previously used

Zinc-based thread compound

Operational parameters (LETS)

Load

High

Environment

Moist and dusty

Temperature

>200°C

Speed

1,000 RPM

Process description

Before starting to drill, MOLYKOTE® G-N Metal Assembly Paste is applied over the threaded connection, letting the solid lubricants act and avoiding microwelding of the connections. After this, the pipes are assembled, and drilling begins.

MOLYKOTE®

Customer's critical requirements

Problem category

Wear/failure

Problem details

The lubricant the customer was using was not suitable for the application and was not able to provide the correct protection to the threaded connections. It was a zinc-based thread compound unable to provide the correct torque when disassembled.

Root-cause analysis

Microwelding on the threaded connections due to high temperature, loads and pressure

MOLYKOTE® *Smart Lubrication*™ solution selected

Result: Our solution

MOLYKOTE® G-N Metal Assembly Paste is not a compound or a grease; it is a lubricant paste capable of supporting extreme drilling conditions because the MoS₂ and other solid lubricants can avoid microwelding in applications above 400°C, with a high load.

Learn more: Contact us

To learn more about the advantages of using MOLYKOTE® G-N Metal Assembly Paste on threaded connections in rock-drilling machines – or for other tough lubrication challenges – contact your MOLYKOTE® technical representative or visit molykote.com.



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