



MOLYKOTE® G-N Plus Paste reduces friction and failures in turbine pedestal

Lubricant application story: Turbine pedestal

MOLYKOTE® product

MOLYKOTE® G-N
Plus Paste

Market segment

Electricity generation

Component/application

Turbines (e.g., Pelton)

Major market

Maintenance,
repair & overhaul

Customer's area of concern

Customer's description of component

Turbine pedestal

Previous solution/product previously used

Standard extreme-pressure grease

Operational parameters (LETS)

Load

The total weight of the rotating part of the turbine is carried by the pedestals; surface pressure is relatively high

Environment

Very clean and dry environment

Temperature

Ambient maximum 40°C

Process description

The grease is manually pumped with a grease gun; prior to installation, the surfaces are coated using a brush.

MOLYKOTE®

Customer's critical requirements

Problem category

Vibration

Problem details

The application experienced excessive friction levels due to metal-to-metal contact. Heat was generated, causing the rotating shaft to expand. In extreme cases, this caused the shaft to bend, resulting in high costs and downtime. The customer also observed high levels of vibration.

Root-cause analysis

The previously used grease was not the right product for the application, as it did not prevent metal-to-metal contact. A product containing lubricating solids is most effective in this situation for slow operating speeds.

MOLYKOTE® *Smart Lubrication*™ solution selected

Our product/differentiators

MOLYKOTE® G-N Plus Paste contains a high concentration of lubricating solids and significantly reduced the friction caused by metal-to-metal contact. This change allowed the rotating shaft to expand and contract easily without any stick-slip. The customer also saw a significant reduction in observed vibration levels.

Result: Our solution

Using this paste eliminated failures due to bent shafts, resulting in cost savings.

Learn more: Contact us

To learn more about the advantages of using MOLYKOTE® G-N Plus Paste for turbine pedestals – or other tough lubrication challenges – contact your MOLYKOTE® technical representative or visit molykote.com.



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