

# DuPont Reliability

## Krytox® Technology Improves Turbine Frame Expansion Bearing Performance and Reliability



### The Problem

Turbine trunnion, thrust plate and gib key expansion bearings require lubrication to facilitate smooth thermal expansion and contraction of the turbine frame. In this high temperature environment, degradation of conventional lubricants results in:

- Operational Issues
  - Turbine shutdown due to excessive vibration
  - Turbine shutdown to allow for relubrication
- Maintenance Issues
  - Frequent relubrication
  - Employee exposure to extreme component temperatures
  - Oxidation of the conventional lubricant
  - Pluggage of lubricant feed lines
  - Increased turnaround time to clean, break apart and replace components

### The Solution

DuPont Krytox® lubrication technology has been demonstrated to provide the best available expansion bearing performance and lowest available life cycle cost. Krytox® grease will not oxidize or break down. The benefits include:

- Operational Benefits
  - Improved turbine uptime
  - Reduced turbine vibration
  - Reduced operating expense
- Maintenance Benefits
  - Extended component life
  - Extended relubrication interval
  - Safer work environment
  - Reduced effort and cost
- DuPont Reliability
  - Demonstrated in field application
  - OEM recommended
  - Thermally stable Krytox® XHT-BDZ grease



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## OEM Specifications

Krytox® is specified for use by SiemensWestinghouse for mechanical components requiring lubrication in high temperature environments on Steam Turbine, Gas Turbine, and Generator systems. Refer to Siemens Specifications M-Spec 53701Y6, M-Spec 537001TT and M-Spec 53701VH.

## Demonstrated Solutions

For over 20 years, Krytox® technology has provided state-of-the-art performance for mechanical systems under harsh conditions. From gearboxes, bearings and chains — to seals, actuators, valves and more — Krytox® serves the specialized needs of:

- Pulp and paper mills and converting plants
- Automotive components
- Military and commercial aircraft
- Chemical plants
- Power plants
- Turbine generators and other critical industrial applications.



For more information or technical assistance, call DuPont:  
or visit DuPont on the Web:

(800) 424-7502  
[www.krytox.com](http://www.krytox.com)

the Krytox® hotline in the **United States** 800-424-7502, E-mail: [krytox@usa.dupont.com](mailto:krytox@usa.dupont.com)  
**Canada** 800-387-2122, E-mail: [products@can.dupont.com](mailto:products@can.dupont.com)  
**Europe, Mideast, and Africa** +32.3.543.1267, E-mail: [lubricants@lux.dupont.com](mailto:lubricants@lux.dupont.com)  
**Asia/Pacific**—Including India 65 6586 3073, E-mail: [krytox.lubricants@twn.dupont.com](mailto:krytox.lubricants@twn.dupont.com)  
**Mexico and Central America** at 011-52-55-5722-1150, E-mail: [ceac@mex.dupont.com](mailto:ceac@mex.dupont.com)  
**South America**—All Countries at 55-11-4166-8601, E-mail: [produtos.brasil@bra.dupont.com](mailto:produtos.brasil@bra.dupont.com)

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