A major pulp and paper mill located in Western Canada wanted to improve the average operating life of its 3000 electric motors operating in a harsh environment—without incurring additional costs for equipment or manpower.

The Challenge
For this application, the pulp and paper mill needed a ball bearing lubricant that could last the expected lifetime of their electric motors, without the implementation of a cost-prohibitive re-lubrication process. The mill’s reliability superintendent knew he could not afford to implement a system that relied upon ongoing re-greasing because of the additional equipment needed, unavoidable downtime and labor costs. However, he also realized that a more sophisticated greasing program was necessary to meet the increasing recommendations of industry experts and to avoid rebuilding and/or replacing failed motors.

The Solution
After researching available options, the reliability superintendent turned to DuPont for help. Working with the DuPont™ Krytox® lubricants technical service team, the mill implemented the use of Krytox® grease AUT2E45 on 100 motors as a pilot—and the mill is now able to run its electric motors for their expected lifetime with no bearing failures attributed to lubrication. Switching to Krytox® lubricants also avoided having to implement a re-lubrication process all together, saving significant manpower and downtime. The end result was a cost-effective, simplified process that not only met, but exceeded their expectations.

Key Advantages
- Using Krytox® lubricant AUT2E45, the pulp and paper mill was able to extend the service life of its electric motors and help ensure long-term reliability of the motor’s ball bearings
- Krytox® lubricant AUT2E45 enabled the mill to avoid implementing a costly re-lubrication process
- Krytox® lubricants can be used in other electric motor applications to prevent oxidation and ensure no lubricant gum-up or breakdown for the lifetime of the motor. Excellent film-forming viscosity also enables the electric motors to spin with less resistant friction, leading to less maintenance and fewer bearing replacements.