

58 Garnock Avenue Toronto, Ontario Canada M4K 1M2

Phone: 416 466-3144 toll free 1-888 442-5008 Fax: 416 466-3807 www.fluidcenter.com

# "VSG" VANE SPINDLE GREASE GENERAL INFORMATION

#### THE NEED

This product has been specifically formulated to meet the needs of utilities and other users who intend to reduce the environmental impact of lost grease. More specifically, grease from once through lubrication systems that will either directly or indirectly enter the waterways. For example, the grease used for the regular lubrication of bronze bearings on hydraulic turbine wicket gates. VSG can also be used for bearings, cables and mechanisms for trash racks and stop gates and for pump shaft packing lubrication. Please note that 'readily biodegradable' greases are not usually recommended for bearings that require better heat stability. For these applications use one of our 'environmentally better' products that have no added lead or zinc or chlorinated compounds.

#### THE PRODUCT

Based on accepted tests the VSG product is not only biodegradable, but it is considered nontoxic and meets the performance requirements of the current specifications for Ontario Hydro and Hydro-Québec.

In fact, this formulation with the calcium sulphonate thickener and biodegradable base oils is such that for many tests it will exceed the performance of greases currently used. This is important for plant operators because there will be few if any trade-offs in performance. The oils used are also compatible with elastomers normally used on the greasing systems.

## **DETAILS**

In tests done according to CEC L-33-T-82, the product is more than 80% biodegradable that by the German Blue Angle criteria makes it 'readily' biodegradable. Further, VSG passes the Daphnia magna test at concentrations of 93 cm²/L and for tests on trout, it is considered essentially nontoxic. In addition, compared to traditional extreme pressure greases VSG provides the same performance with little or no additives. This is desirable because additives may be harmful. Also the relative density of the grease is equal to or greater than 1.0 whereas for many other greases it is 0.9. VSG is less likely to form floating globs.

### **PERFORMANCE**

VSG grease has superior resistance to water washout, the oils used are less likely to separate from the thickener, it has excellent corrosion protection for mild steel journals and it has inherent extreme pressure characteristics without the need for special additives. VSG also has excellent pumpability that can mean fewer plugged grease lines.

No warranties, express or implied, including warranties of merchantability or fitness for a particular use, are made with respect to the products described herein. Nothing contained herein shall constitute a permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent.