INDUSTRIAL LUBRICANTS

PRODUCTS AND PROGRAMS



al and













Capabilities

CHESTERTON's lubrication program provides you the expertise and support for your entire production process and maintenance operations. Our team of experts develop lubricants optimized for your specific industrial applications.

- Power generation
- Pulp and paper
- Water and wastewater
- Chemical processing
- Refineries
- Food, beverage, and pharmaceutical
- Wood processing
- Steel, aluminum, and metal processing
- Mining
- Textile

Chesterton lubrication programs will:

- Extend equipment life
- Improve reliability
- Increase productivity
- Reduce costs
- Increase profitability



Lubrication Technology

Extending Chain Life



Chain "stretch" is a result of wear on the pin and bushing, requiring costly chain adjustments or replacement. Conventional lubricants do not penetrate tight tolerances and, therefore, provide minimum benefit. Chesterton's chain lubricants are formulated

to penetrate pin and bushings, providing critical lubrication.

Chesterton offers a broad range of lubricants specifically designed for chains.

- Doubles chain life
- Reduces energy consumption
- Reduces lubricant consumption
- Increases load carrying capability
- Acceptable in food, pharmaceutical and beverage industries

Primary Chain Lubricants

601 Chain Drive Pin & Bushing Lubricant

Uniquely formulated, premium, low viscosity oil that penetrates to the pin and bushing to provide critical lubrication and wear resistance

-23°C to 150°C (-10°F to 300°F)

610 Synthetic Lubricating Fluid—ISO VG 68 **610MT Plus Synthetic Lubricating Fluid**—ISO VG 220 **610 HT Synthetic Lubricating**—ISO VG 460

Full-synthetic technology for optimum high temperature and oven chain lubrication with low evaporation and minimum residue Up to 270°C (520°F)

690 FG Lubricant

A clear, non-staining formula for use in food processing, beverage, and pharmaceutical plants; NSF registered for direct food contact

-9°C to 120°C (15°F to 250°F)

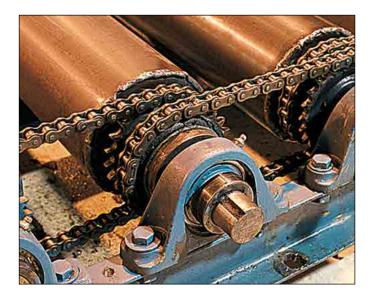
636 FG SLF-220 Synthetic Lubricating Fluid

636 FG is an ISO-grade 220, high performance, synthetic lubricant. It is NSF H1 registered, and specifically designed for high temperature bearing, and chain lubrication throughout the food, beverage, and pharmaceutical industries.

-25°C to 260°C (-13°F to 500°F)

660 Silicone Lubricant

A clear, silicone fluid that provides a continuous film lubrication for mechanical parts and sliding surfaces constructed of plastic, rubber, or metal; will not stain or leave gummy residues -40°C to 205°C (-40°F to 400°F)



Special Condition Chain Lubricants

715 Spraflex® and 715 Spraflex® Gold

Seals surface protecting against wet/high wear conditions

787 Sliding Paste

Up to 538°C (1000°F)

785 Parting Lubricant Up to 1204°C (2200°F)

725 Nickel Anti-Seize Compound Up to 1425°C (2600°F)

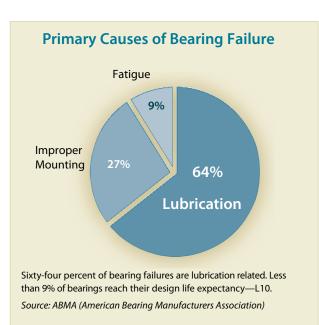
Lubrication Technology

Improving Bearing Performance



Chesterton's bearing lubrication solutions address the primary causes of bearing failure, offering you the ability to significantly improve operational reliability and lower your maintenance and production costs.

- Excellent corrosion protection
- High load carrying ability
- Best-in-class water and chemical washout resistance
- QBT[™] Quiet Bearing Technology
- Automatic grease dispensing
- Reduced lubricant consumption



Automatic Single Point Lubricators

Automatically dispense Chesterton grease to critical areas, eliminating over and under greasing.

Lubri-Cup[™] EM

- Microprocessor controlled, "pulse" delivery system
- Operates up to 12 months
- Replaceable service packs
- Lubricates up to 8 bearings up to 6 m (19 feet) away
- Sealed microprocessor
- -15°C to 60°C (5°F to 140°F)

Lithium ion battery for temperatures down to -40 $^{\circ}\text{C}$ (-40 $^{\circ}\text{F}$)

Special Models

Lubri-Cup[™] EM-X

 UL and ATEX Certified for equipment used in potentially hazardous locations

Lubri-Cup[™] EM-S, EM-SP

 Synchronized to lubricate only when machine is operating

> Lubri-Cup™ VG Mini – 250cc

Lubri-Cup[™] VG – 250cc

- Microprocessor-controlled, "pulse" delivery system
- Nitrogen gas-operated unit
- Variable timer
- Disposable unit
- High performance
- Easy to set up and operate

Lubri-Cup[™] VG Mini – 120cc

Lubri-Cup[™] S

- Low feed pressure prevents bearing seal failure
- Increases time interval for re-greasing by six times
- Reduces labor cost for re-greasing by over 80%
- Transparent reservoir—easy-to-see grease level
- Simple to refill in place



LUBRI-CUP VI

Lubri-Cup™ VG Mini – 120cc



Advanced Grease Technology Selection Guide

Chesterton's industrial greases offer extended bearing life and reliability even under the harshest conditions of load, temperature, water and corrosion.

INDUSTRIAL GRADE												
Name	Thickener	Base Oil	NLGI Grade	Dropping Point ASTM D2265	Service Temp	Four Ball Wear Weld Load, ASTM D2 596	Water Washout Resistance ASTM D 1264, @79°C (175°F)—% loss	Corrosion Resistance ASTM B 117				
615 HTG #1	Sulfonate Complex	Mineral	1	288°C (550°F)	-45 to 204°C (-50 to 400°F)	620 Kg	<1.0	>1000 hours @50 microns				
615 HTG #2	Sulfonate Complex	Mineral	2	318°C (604°F)	-40 to 204°C (-40 to 400°F)	620 Kg	< 0.05	>1000 hours @50 microns				
615 HTG #2 460	Sulfonate Complex	Mineral	2	>300°C (572°F)	-40 to 204°C (-40 to 400°F)	620 Kg	< 0.05	>1000 hours @50 microns				
633 SXCM	Sulfonate Complex	Synthetic—PAO	1	288°C (550°F)	-50 to 250°C (-58 to 482°F)	800 Kg	< 2.0	>1000 hours @50 microns				
635 SXC	Sulfonate Complex	Synthetic—PAO	2	318°C (604°F)	-40 to 240°C (-40 to 464°F)	800 Kg	< 0.05	>1000 hours @50 microns				
613 Moly Grease	Lithium	Mineral	2	199°C (390°F)	-18 to 138°C (0° to 280°F)	400 Kg	6.2	50 hours @50 microns				

FOOD, PHARMACEUTICAL, BEVERAGE GRADE												
Name	Thickener	Base Oil	NLGI Grade	Dropping Point ASTM D2265	Service Temp	Four Ball Wear Weld Load, ASTM D 2596	Water Washout Resistance ASTM D 1296, @79°C (175°F)—% loss	Corrosion Resistance ASTM B 117				
630 SXCF	Sulfonate Complex	Synthetic—PAO	2	318°C (604°F)	-40 to 240°C (-40 to 464°F)	620 Kg	< 0.05	>1000 hours @50 microns				
625 CXF	Sulfonate Complex	Mineral	2	318°C (604°F)	-30 to 204°C (-22 to 400°F)	620 Kg	< 0.05	>1000 hours @50 microns				
629 HTWG	Synthetic Polymer	Mineral—PAO Blend	2	260 °C (500 °F)	-34 to 204°C (-29 to 400°F)	160 Kg	< 0.2	50 hours @50 microns				
622 White Grease	Aluminum Complex	Mineral	2	245°C (473°F)	-23 to 170°C (-10 to 338°F)	250 Kg	2.45	500 hours @50 microns				

Mounting/Assembly

787 Sliding Paste

Ease mounting of press fit assemblies, minimizing galling, scoring, and misalignment



Bearing Protection

33K Split Bearing Protection Seal

Eliminate the need and cost for equipment disassembly while improving seal performance of conventional lip seals





Lubrication Technology

Maximizing Wire Rope and Cable Performance



Chesterton's unique 2-shot treatment for close metal to metal tolerances provides long lasting, nondrying lubrication, allowing wire rope and cable to run smoothly with less wear and reduced energy costs.

- Increase the life of wire rope and cables
- Reduce stretch and strand breakage
- Eliminate lubricant squeeze out and wipe off

601 Chain Drive Pin & Bushing Lubricant Penetrates to the core for critical internal lubrication

715 Spraflex® or 715 Spraflex® Gold

Seals surface protecting against wet/high wear conditions

Protecting Open Gears



Chesterton's open gear lubrication solutions provide excellent wear resistance and load carrying capability.

- Best-in-class water and chemical washout resistance
- No lubricant squeeze out
- Reduced lubricant consumption

715 Spraflex[®] Black, cohesive, high film strength

715 Spraflex® Gold Synthetic, clear, bonds to wet metal, corrosive resistant

Trouble-Free Threaded Assemblies

Microscopic solid lubricants—do not wipe off

Solid lubricants withstand extreme pressure—

Balanced coefficient of friction—supports



prevents galling

proper bolt tension

Chesterton's threaded assembly lubrication solutions keep bolts from seizing, allowing proper assembly and easing disassembly.

725 Nickel Anti-Seize Compound

Chemical resistant, hard nickel particles lubricate under most extreme industrial conditions Up to 1425°C (2600°F)

783 ACR

Exceptional corrosion protection, water wash-out resistance Up to 900°C (1650°F)

785 Parting Lubricant

Proprietary solid lubricants, no heavy metals Up to 1204°C (2200°F)

Special Condition Bolt Lubricants

710 Anti-Seize Compound

Copper based 1100°C (2000°F)

785FG Parting Lubricant

H1, white for incidental food contact 1204°C (2200°F)

772 Premium Nickel Anti-Seize

For nuclear applications



Optimizing Pneumatic Reliability

Chesterton's pneumatic lubrication solutions dramatically improve the reliability of your pneumatic equipment and can reduce maintenance costs by as much as 80%.

- Advanced petroleum based technology
- Absorbs condensed water
- Lower friction—faster cycle time, reduced heat, and lower air cost
- Prevents clogged solenoids and sticking air tools
- Removes rust, sticky residues, and dirt
- Reduces lubricant consumption

652 Pneumatic Lubricant & Conditioner

Direct replacement for existing pneumatic oils, compatible with all oil-based systems, ashless, contains no heavy metals



Minimizing Friction and Wear in Extreme Pressure Applications

Chesterton's lubrication solutions for extreme pressure applications will not liquefy under extremely high loads and temperatures.

- Microscopic solid lubricants—do not wipe off
- Low coefficient of friction
- Prevent wear, galling, and seizure

787 Sliding Paste

Microscopic graphite and molybdenum disulfide solid particles lubricate under most extreme industrial conditions of pressure and temperature

23°C to 538°C (-10°F to 1000°F)

Stabilizing Control Valves



Chesterton's control valve lubrication solutions ensure reliable valve actuation.

- Long-term stability
- Excellent corrosion protection
- Best-in-class water washout resistance
- Unsurpassed anti-wear and extreme pressure resistance

615 HTG

Outstanding extreme pressure capabilities, oxidation inhibited for motor-operated valves

652 Pneumatic Lubricant & Conditioner

Provides critical liquid lubrication for air operated valves

787 Sliding Paste

Lubricates under extreme industrial conditions of pressure and temperature

625 CXF

Food grade, mineral oil, extreme pressure, and corrosion resistant grease

630 SXCF

Food grade, synthetic, extreme pressure, and corrosion resistant grease

635 SXC

Synthetic, extreme pressure, and corrosion resistant grease





Global Solutions, Local Service

Since its founding in 1884, the A.W. Chesterton Company has successfully met the critical needs of its diverse customer base. Today, as always, customers count on Chesterton solutions to increase equipment reliability, optimize energy consumption, and provide local technical support and service wherever they are in the world.

Chesterton's global capabilities include:

- Servicing plants in over 100 countries
- Global manufacturing operations
- More than 500 Service Centers and Sales Offices worldwide
- Over 1200 trained local Service Specialists and Technicians



Technical data reflects results of laboratory tests and is intended to indicate general characteristics only. A.W. Chesterton Company disclaims all warranties express or implied, including warranties of merchantability and fitness for a particular purpose. Liability, if any, is limited to product replacement only. Any images contained herein are for general illustrative or aesthetic purposes only and are not intended to convey any instructional, safety, handling or usage information or advice respecting any product or equipment. Please refer to relevant Safety Data Sheets. Product Data Sheets. and/or Product Labels for safe use, storage. handling, and disposal of products, or consult with your local Chesterton sales representative. ChemLast[™] is a trademark of A.W. Chesterton Company.

© 2016 A.W. Chesterton Company.

[®] Registered trademark owned and licensed by A.W. Chesterton Company in USA and other countries, unless otherwise noted.



A.W. Chesterton Company 860 Salem Street Groveland, MA 01834 USA

Telephone: 781-438-7000 Fax: 978-469-6528 www.chesterton.com

Form No. EN88841 Lubricants Brochure – English 03/16

Visit our website at

Chesterton ISO certificates available on www.chesterton.com/corporate/iso

Distributed by: