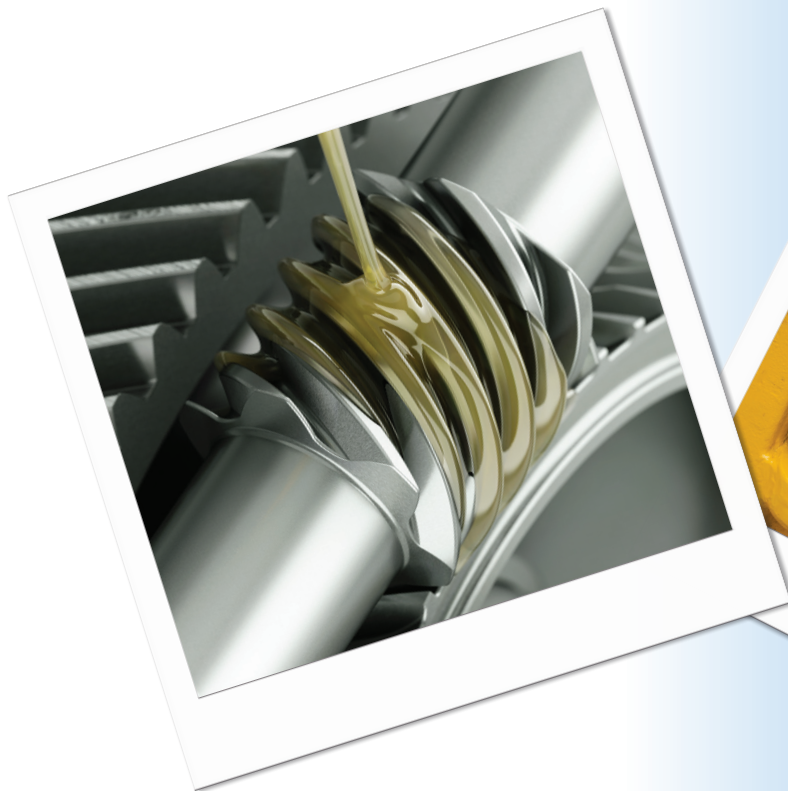


Lubricants for Hydraulic, Slideway, and Spindle Components



Dramatically extend the life of your equipment with Chemetall's line of Gardolube® AW oils, designed to lubricate your machine tools, circulating oil systems, turbines, and air compressors. Gardolube way oils are designed for use on slideways in planers, grinders, CNCs, and any equipment with a horizontal or vertical axis that requires smooth movement.

For equipment with high speed bearings, Tech Cool® spindle oils are the ideal lubricant solution. OEM specifications are the best place to start. These are typically given in terms of ISO viscosity grade or AGMA.

 **BASF**
We create chemistry

Chemetall
expect more⁺

Lubricants for Hydraulic, Slideway, and Spindle Components

Features and benefits chart

Features	Benefits
Separation from Water/Coolant	Machining centers are easier to keep clean and efficient to increase productivity, operator acceptance, and overall value.
High Oxidative Stability	Keep nozzles free and clear, delivering higher productivity through fewer oil changes and freedom from sludge.
Highly Refined Oils	Minimize wax content to prevent servo valves from sticking and keep applicators running smoothly to prevent wear and reduce consumption.
High Load Carrying Capability	Reduces maintenance costs and ensures long life of ways and gears.
Excellent Metal Adhesion	Keeps the oils where you want them, on the slideways, gear teeth, and pump impellers, but not in your coolant, to extend tool life and reduce operating costs.
Zinc and Sulfur Free Options	Lower maintenance with increased metal compatibility, easier rejection from coolant, ease of waste treatment, and environmental compatibility.
Rated to High Pressures	Provides flexibility and ease of use, as one product fulfills the operating needs instead of many.
High Viscosity Index	Increases efficiency, lowering energy consumption.
Corrosion Inhibition Yellow and Ferrous Metals	Extend production time by avoiding repairs to slideways and fittings.
Low Foam	Minimize foam so the oil can lubricate effectively, extending pump life, and maintaining hydraulic pressure.
Controlled Lubrication	Make more parts with fewer defects through a higher viscosity index, which prevents stick-slip, allowing for the operation of high speed machining at maximum output.

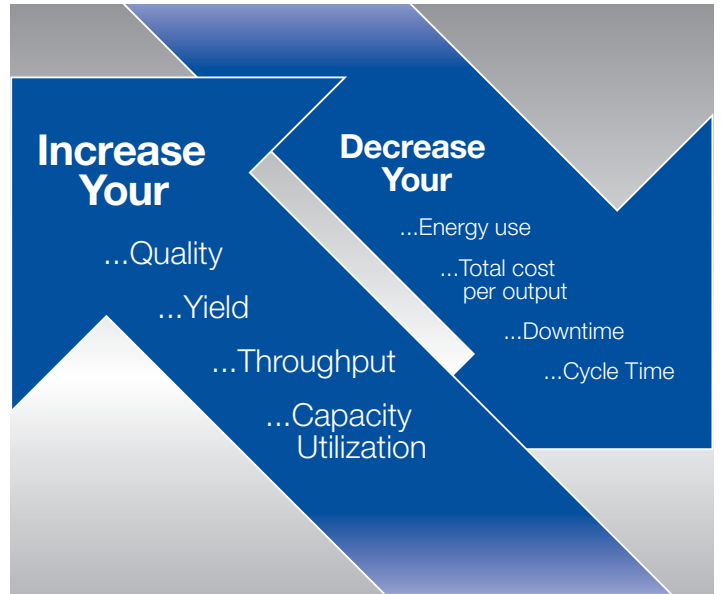
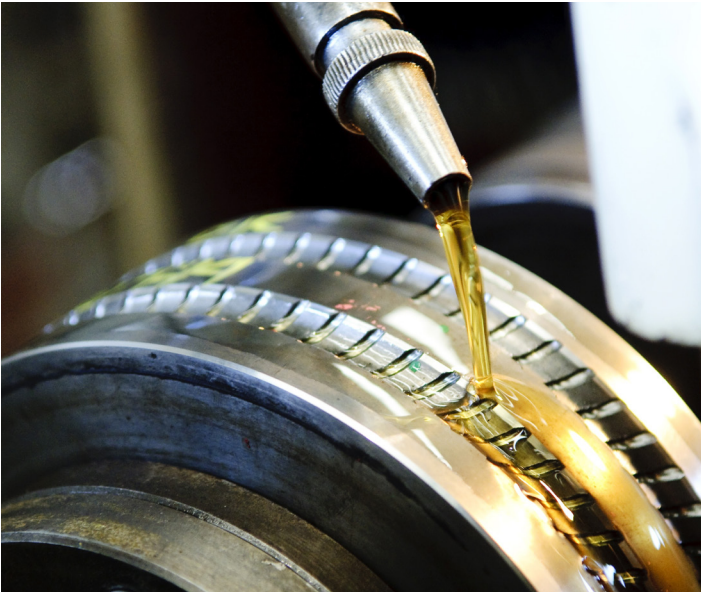


Lubricant cross-reference chart

	ISO viscosity grade	MOBIL	SHELL	CHEVRON	CASTROL
HYDRAULIC OIL					
Gardolube® AW 22	22	DTE 22/Nuto H 22	Tellus S2 MX 22	Rando HD 22	Hyspin AWS 22
Gardolube AW 32	32	DTE 24/Nuto H 32	Tellus S2 MX 32	Rando HD 32	Hyspin AWS 32
Gardolube AW 46	46	DTE 25/Nuto H 46	Tellus S2 MX 46	Rando HD 46	Hyspin AWS 46
Gardolube AW 68	68	DTE 26/Nuto H 68	Tellus S2 MX 68	Rando HD 68	Hyspin AWS 68
HYDRAULIC OIL ZF (ZINC FREE)					
Gardolube AW 32 ZF	32	DTE EXCEL 24/DTE 10 EXCEL	Tellus S2 V/Tellus S3 V 32	Clarity AW 32	Hyspin ZZ 32
Gardolube AW 46 ZF	46	DTE EXCEL 25/DTE 10 EXCEL	Tellus S2 V/Tellus S3 V 46	Clarity AW 46	Hyspin ZZ 46
Gardolube AW 68 ZF	68	DTE EXCEL 26/DTE 10 EXCEL	Tellus S2 V/Tellus S3 V 68	Clarity AW 68	Hyspin ZZ 68
WAY OIL					
Gardolube WAY 68	68	Vactra-2	Tonna S2 MX 68	Vistac (D) 68	Magna BD 68
Gardolube WAY 220	220	Vactra-4	Tonna S2 MX 220	Vistac (D) 220X	Magna BD 220
SPINDLE OIL					
Tech Cool® Spindle 10	10	Velocite 6	Spindle Oil/Morlina 10	AW Mach Oil 10	Hyspin Spindle Oil 10
Tech Cool Spindle 22	22	Velocite 10	Spindle Oil/Morlina 12	AW Mach Oil 22	Hyspin Spindle Oil 22



Cut it. Clean it. Coat it. Control it. Conserve it.® with us!



Our focus is you, our metalworking customer!

At Chemetall, we are dedicated, so you can expect more. Our global specialists are locally available. Our experts provide focused, passionate, and accountable support. You can expect the highest quality from our integrated portfolio of innovative products. Our labs are fast and accurate. We will collaborate with you to increase the efficiency of your process performance.

We are the Surface Treatment global business unit of the Coatings division of BASF, operating under the Chemetall brand, a leading supplier of applied surface treatments and services for metal, plastic, and glass substrates in a vast range of industries and end markets. As process innovators, fully dedicated to your success, we develop, manufacture, and provide best-in-class technologies, systems, and expertise.

Cut it. Clean it. Coat it. Control it. Conserve it.® with us!

North American Headquarters

675 Central Avenue
New Providence, NJ 07974
Tel: 908-464-6900
Toll-free: 800-526-4473
Fax: 908-464-7914

Chemetall Canada Limited

5025 Creekbank Road,
Building A, Floor 2
Mississauga, Ontario, Canada
L4W 0B6
Tel: 905-791-1628
Toll-free: 877-311-1471

Chemetall Mexicana, S.A. de C.V.

Avenida El Tepeyac No. 1420-B
Parque Industrial O'Donnell-Aeropuerto
El Marqués, Querétaro
C.P. 76250, México
Querétaro Tel: +52 (442) 227 2000
Monterrey Tel: +52 (81) 8371 2517

Chemetall U.S.

1100 Technology Drive
Jackson, MI 49201
Tel: 517-787-4846
Toll-free: 877-941-3800
Fax: 517-787-5538

www.ChemetallINA.com

The product information contained in this brochure has been compiled to the best of our knowledge on the basis of thorough tests and research work and with regard to the current state of our practical experience in the industry. This product information is non-binding. Our statements relating to possible uses of the product do not constitute a guarantee that such uses are appropriate in a particular user's case or that such uses do not infringe the patents or proprietary rights of any third party. The user should undertake sufficient verification and testing to determine the suitability of the product for its particular purpose. We assume no risk or liability whatever in connection with any particular use, if not expressly confirmed by us in writing. Therefore, Chemetall grants no warranty and does not accept any liability in connection with this product information or its use. Except where noted otherwise, all registered trademarks are owned by Chemetall or its affiliated companies. The reproduction of any or all of the information contained in this brochure is expressly forbidden without Chemetall's prior written consent.