



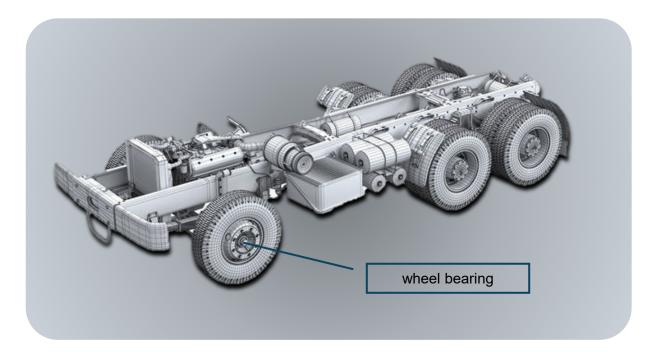
A Vision of the Future for Latin America



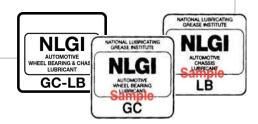
Gear, Wheel bearing and Chassis (ASTM D450)



Traditional NLGI specification for automotive greases, focusing on wheel bearings (GA, GB and GC) and chassis (LA and LB).



GC-LB is the most stringent combined grade indicating that the grease meets the performance requirements for both applications. It is widely used in light and heavyduty vehicles, as well as agricultural and construction equipment.





Timeline – NLGI Specifications

NLGI begins certifying greases to new specifications

ASTM D4950 published

2012

Creation of a
Working Group
responsible for
updating the GC-LB
or creating a new
specification

2019

HPM specifications released

1966

Initial discussions for development of automotive service grease specification NGLI, ASTM, SAE 1989



Discussion begins on review/correction of tests within ASTM D4950 2015

NLGI decides to move forward with proposal for new set of specifications in parallel with existing G&L service specifications

2021





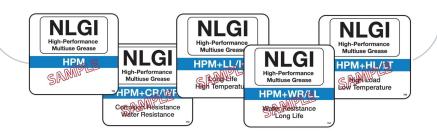
HPM (High-Performance Multiuse)



Introduced **to replace** or **complement** GC-LB, with a focus on more demanding industrial and fleet applications. HPM is a modern, more stringent specification with additional testing and **more restrictive limits**.

HPM has a **higher** base (core) specification than GC-LB.

And additional performance labels, which indicate specific capabilities.



SpecificationFocus onHPM+CR/WRCorrosion Resistance / Water ResistanceHPM+LL/HTLong Life / High TemperatureHPM+HL/LTHigh Load / Low TemperatureHPM+WR/LLWater Resistance / Long Life



Comparative Analysis - GC-LB x HPM

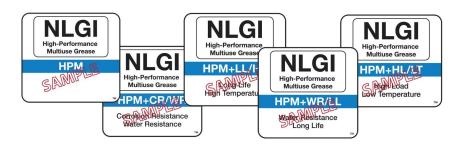
| Test | GC-LB | HPM Core | | | |
|-----------------------------------|-------------------------|--------------------------------|--|--|--|
| Worked Penetration (60 strokes) | (D217) 220 - 340 dmm | (D127) 220 - 340 dmm | | | |
| 4-Ball Wear | (D2266) < 0,6 mm | (D2266) < 0,6 mm | | | |
| Oil Separation | (D1742 – 24h/25°C) < 6% | (D1742 – 24h/25°C) < 5% | | | |
| Low Temperature Torque | not included | (D1478) 100 - 1000 m.Nm | | | |
| EMCOR Corrosion (Distilled Water) | not included | (D6138) no rust / light traces | | | |
| Water Washout | (D1264 - 60m/79°C) 15% | (D1264 - 60m/79°C) 10 - 5% | | | |
| Roll Stability | not included | (D1831) +/- 10% | | | |

Main Differences: More tests on the HPM (low temperature torque, rust resistance, rolling stability);

More demanding limits for existing tests (4-ball wear, oil separation, water wash);

Wider application: in addition to the automotive sector, it covers industrial uses and harsh environments.

NLGI Certification Approvals













More than 270 products with different certifications!



Over 25 HPM certified products!



Check which products are certified Certifications – Product | NLGI

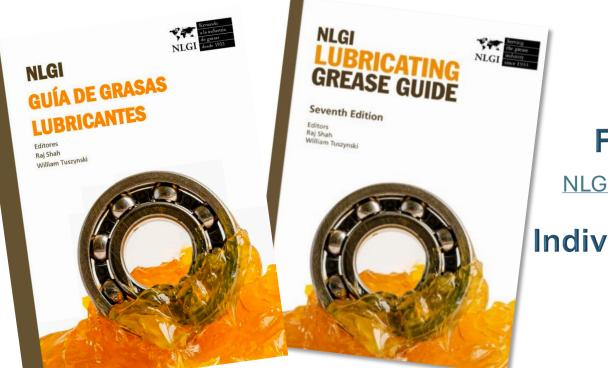


Lubricating Grease Guide

Ideal for both beginners and experienced professionals

The **seventh edition** includes **four new chapters** on Formulation, Food Machine Lubricants, NLGI Certifications and Environmentally Acceptable Greases.

The Spanish Version is now available on NLGI's website!





NLGI Store

<u>Amazon</u>

Individual Chapters

NLGI Store





Provide the relevant resources to meet the needs of global lubricating grease manufacturers and consumer industries.



To be recognized as the leading source of support for consumers, researchers, manufacturers, suppliers, marketers and other key stakeholders in the global lubricating grease industry.

NLGI Mission and Vision





The NLGI is a non-profit trade association comprised primarily of companies that manufacture and market all types of lubricating greases.



The Institute is continually working to strengthen its partnership by providing services to lubricating grease manufacturers as well as the end user of these greases.



Membership is offered on a company-by-company basis, not an individual basis. Many of the members are companies associated with manufacturers who supply equipment, raw materials and services.



In addition, there are research and training groups for affiliated companies whose interests are primarily technical.

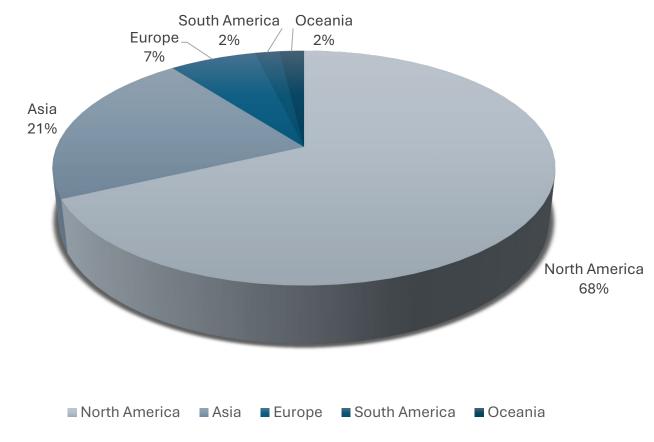


Another membership category is Consumer, which is offered to organizations that use lubricating greases.

Purpose and Type of Association



NLGI: A Global Organization





The Institute's member organizations are located in over 30 countries on 5 different continents.



Our technical magazine, the NLGI Spokesman, has 3,000 readers represented in more than 30 countries.



This international representation is indicative of the universal interest in knowing more about lubricating greases.



NLGI International Subcommittee

Established in 2023, it brings together the following members:

Wayne Mackwood

Head of Detergents and Grease Business/ Lubricant Additives
LANXESS Canada Co./Cie
President of NLGI

Cecilia Mancero

Vice President / International Sales STRATCO, Inc. & Stratford Engineering, LLC

Alex Saldana

LATM Channel Manager
Dupont

Xavier Carrillo

Director of Sales & Business LATAM at TRCC

Daiane Spadari

R&D Manager ICONIC

Olga Mendez

CEO Proquimes

Proquimsa

Anoop Kumar

Senior Staff Scientist Chevron Products Company

Raj Shah

Director
Koehler instrument Company



The International Subcommittee focuses on providing specific benefits and services to international members. Since its inception, the subcommittee has focused primarily on communicating and presenting specific benefits and services for the Latin American region, with plans to expand to other regions in 2025 and beyond.



One of the subcommittee's goals is to help create general and technical literature in other languages to promote and discuss growth initiatives at a global level.





NLGI commissioned annual confidential grease production survey



Through the **voluntary** submission of annual data on grease production



All production data is kept confidential, consolidated and anonymous

What is the NLGI Grease Production Survey?





Benefits of Participation

Access potential market trends (growth vs. declines)



Analysis of possible changes in the market for thickener types by region



Potential new market opportunities

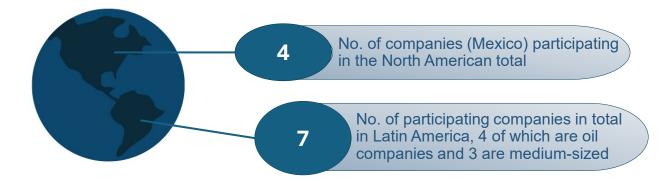


Business Performance Assessment vs. Reporting



Access to a copy of the Final Tabular Report





NLGI Grease Production Survey



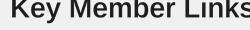
NLGI Grease Production Survey



THE NLGI

Surveys dating back to 2010 can be found in the members section of the website in PDF and Excel versions.





High-Performance Multiuse Grease

Annual Grease Production Surveys

- 2024 Documents
- 2024 NLGI Grease Production Survey Excel
- 2024 NLGI Grease Production Survey PDF
- 2023 NLGI Grease Production Survey Excel
- 2023 NLGI Grease Production Survey PDF
- 2022 Documents
- 2022 NLGI Grease Production Survey Excel
- 2022 NLGI Grease Production Survey PDF
- · 2021 Documents
- 2021 NLGI Grease Production Survey Excel
- 2021 NLGI Grease Production Survey PDF
- 2020 Documents
- 2020 NLGI Grease Production Survey Excel
- 2020 NLGI Grease Production Survey PDF



NLGI Grease World Highlight

lubrication industry. Our quest, Gary Dudley, a veteran with over 27 years at ExxonMobil and now an independent consultant, shares insights about the evolution of grease specifications, the detailed criteria of HPM (High certification involved, and what it means for end users and manufacturers Additionally, we discuss the potential future enhancements in the field of lubrication specifications and the importance of creating a standard for energy-efficient greases. Tune in to close the knowledge gap on HPM





INVOICE/TRANSACTION

Free Member Benefit

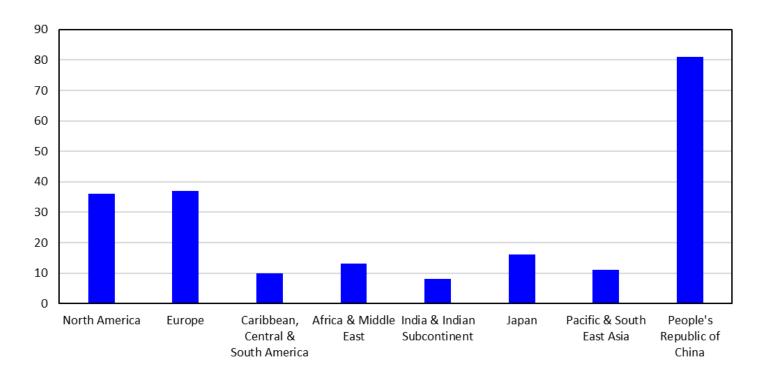
DIRECTORY

MY PROFILE

NLGI Grease Production Survey



2024 Participation by Region- 212 Companies







India & Indian Subcontinent – 3.8%

Japan – 7.5 %

Pacific e Southeast Asia: 5.2%

PCR – 38.2%





NLGI Grease Production Survey



Tabular Report – A Detailed Analysis of Grease Production

Geographic Region

Type of Thickener

Type of Base Oil

Estimated Production

Producers by Region

Annual Analysis

| | | | NLGI 2024 Calendar Year Annual Production Surve | | | | | ion Survey | |
|------------------|---|------------------|---|------------------------------------|-------------------------|--|----------------|--------------------------------|---------------------------------|
| Production Year | 2024 | | | | | | | | |
| Company Name: | | | | | | Put your data in the | ne green cells | | |
| Submitter Name | | | | | | | | | |
| Phone Number: | | | | | | | | | |
| eMail Address | | | | | | | | | |
| Mailing Address: | | | | | | | | | |
| | | | | | | | | | |
| Company ID | | | | | | | | | |
| | | | | | | | | | |
| | | North America | <u>Europe</u> | Carribean, Central & South America | Africa & Middle East | n Data in Kilogram India & Indian Subcontinent | <u>Japan</u> | Pacific & Southeast Asia | Peoples Republic of China |
| | | | | | | | | | |
| | Number of Plants | | | | | | | | |
| | | | | | | | | | |
| | Grease Production By Type Of Thickener | | | | | | | | |
| | Aluminum Thickener: | | | | | | | | |
| | Conventional (Dropping Point below 350F or 180 C) | | | | | | | | |
| | Complex (Dropping Point above 350F or 180 C) | | | | | | | | |
| | Total Aluminum Thickener | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Calcium Thickener: | | | | | | | | |
| | Hydrated (Dropping Point below 250F or 120 C) | | | | | | | | |
| | Anhydrous (Dropping Point above 250F or 120 C) | | | | | | | | |
| | Calcium Sulfonate Thickener | | | | | | | | |
| | Complex (Dropping Point above 350F or 180 C) | | | | | | | | |
| | Total Calcium Thickener | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Lithium Thickener | | | | | | | | |
| | Conventional (Dropping Point below 400F or 210 C) | | | | | | | | |
| | Complex (Dropping Point above 400F or 210 C) | | | | | | | | |
| | Total Lithium Thickener | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | |
| | Lithium Calcium Thickener: | | | | | | | | |
| | Sodium Thickener: | | | | | | | | |
| | Other Metallic Thickener: | | | | | | | | |
| | Polyurea (Including Complexes) | | | | | | | | |
| | Organophilic Clay Thickener: | | | | | | | | |
| | Other Non-Soap Thickeners (All non-soap thickeners except clay) | | | | | | | | |
| | | | Ц | | | | | | |
| | Grand Total Of Lubricating Greases: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | Н | Ц | Ц | | | _ | 1 |
| | Reporting by base fluid type: | | | | | | | | |
| | Sub-total utilizing conventional base fluid | | | | | | | | |
| | Sub-total utilizing synthetic base fluid | | | | | | | | |
| | Sub-total utilizing semi-synthetic base fluid | | | | | | | | |
| | Sub-total utilizing bio-based base fluid | | | | | | | | |
| | | | | | | | | | |
| | Grand Total of Base Fluids: | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | |



Benefits and Opportunities for NLGI Members



Accessible Resources

- ▶ HPM Testing Webinar Library
- Access to research, including full reports
- "NLGI Spokesman": our members-only technical magazine
- NLGI 'Grease World' Enewsletter
- Educational and Technical Resources
- CLGS Certification (Lubricating Grease Specialist Certification)



Member Discounts

- Annual Global Lubricating Grease Production Survey (free)
- Annual Meeting Registration (40% discount)
- Discounts on certification logos
- Free Technical Articles (1941-present)
- Opportunities and sponsorships for exhibitors
- Free job advertisements on the NLGI website





NLGI Member Benefits



Recognition and Influence

- Exclusive sponsorship and advertising opportunities
- Become an HPM presenting company
- Webinar Series
- Become a host company for NLGI practical training
- Increase your company's visibility among a community of grease industry experts



Expand your Network

- Access to the full NLGI Member Directory
- Network of contacts
- Building long-term relationships within the industry
- Participate in the different NLGI committees

There are over 30 committees including: Technical, Educational, Sustainability, Women in Grease and many more!





Scan for more information

