

Product Information



Monolec® Industrial Lubricant (4700-4702)

Versatile Water-Resistant Grease Formulated Specifically for Centralized Lubrication Systems

Designed especially for use in centralized lubrication systems, Monolec® Industrial Lubricant ensures consistent pumpability for reliable equipment protection in a variety of industrial applications. This aluminum complex grease provides excellent water resistance and will not form permanent emulsions when moisture is present, further protecting equipment from the effects of rust and corrosion. It contains Monolec®, LE's proprietary wear-reducing additive that provides additional protection from wear, friction and heat; and it contains an extreme pressure additive for performance when heavy loads are present.



Beneficial Qualities

Lube System Compatibility

- Reliably pumpable for centralized lubrication equipment
- Can handle extreme cold; pumpable down to -40°C (-40°F)
- Exhibits low separation or "bleed" in centralized systems

Water Resistance

- Combats moisture
- Protects against rust & corrosion

Extreme Pressure & Wear Protection

- Protects equipment against metal-to-metal contact and scoring
- Performs well under heavy loads and shock-loading conditions

Long-Lasting Performance

- Maintains exceptional film strength
- Remains mechanically stable throughout its use
- Maintains consistency after being repeatedly heated and cooled
- Maintains excellent heat reversion
- Will not oxidize or harden with age; old grease is easily pushed out and replaced with fresh grease

Available Grades

- NLGI 1 (4701)
- NLGI 0 (4702)
- NLGI 00 (4700)

Proprietary Additives

LE's proprietary additives are used exclusively in LE lubricants. Monolec Industrial Lubricant contains Monolec.

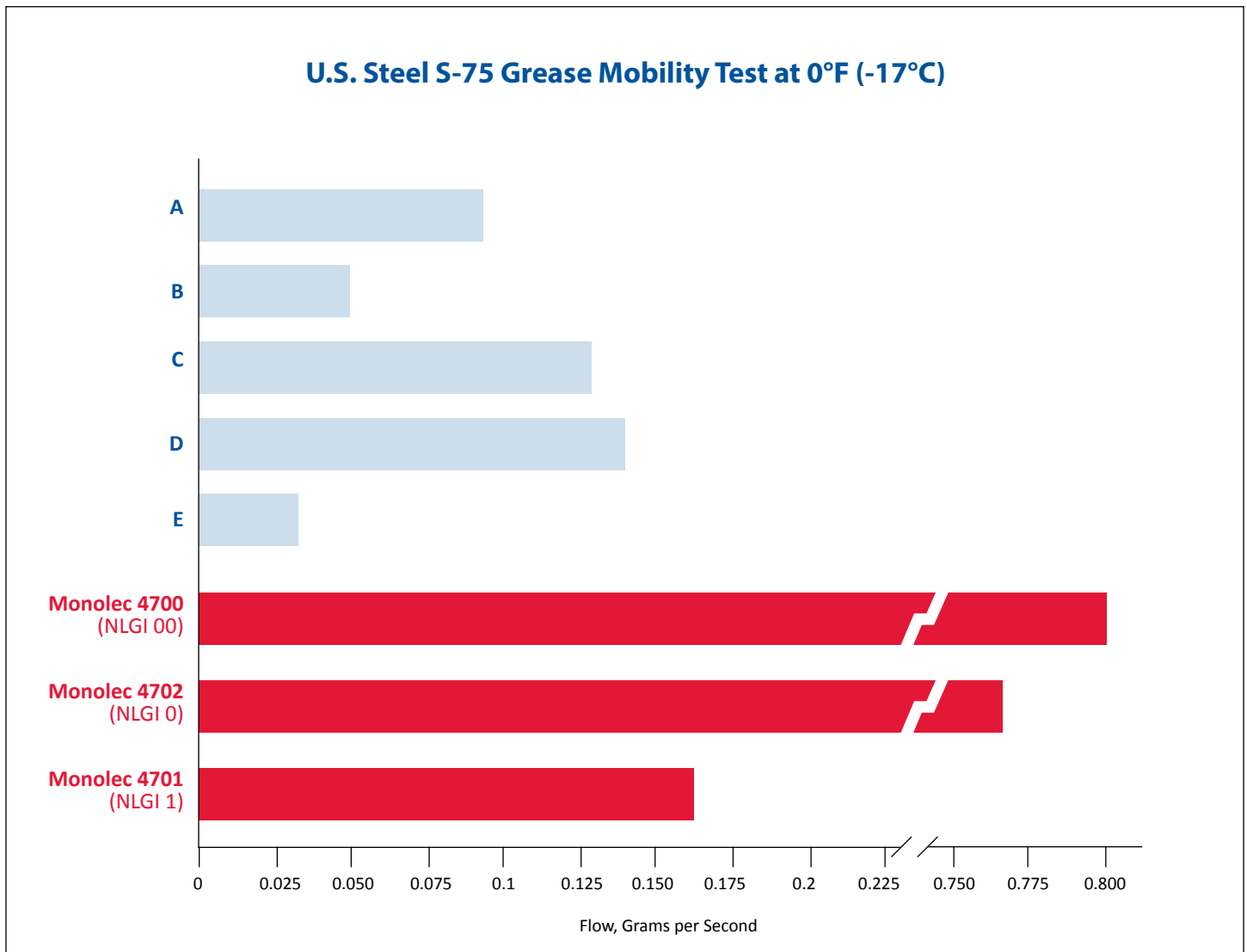
Monolec® wear-reducing additive creates a single molecular lubricating film on metal surfaces, vastly increasing oil film strength without affecting clearances. An invaluable component in LE's engine oils, industrial oils and many of its other lubricants, Monolec allows opposing surfaces to slide by one another, greatly reducing friction, heat and wear.





In Comparison Testing, Monolec Industrial Lubricant Shows Superiority in Low-Temperature Pumpability

Two important characteristics of NLGI 1, 0 and 00 greases are their low-temperature pumpability (below) and load-carrying capacity (next page). Of the comparable lubricants tested (see A-E below), only LE's Monolec Industrial Lubricant (4700-4702) showed superior characteristics in BOTH tests.

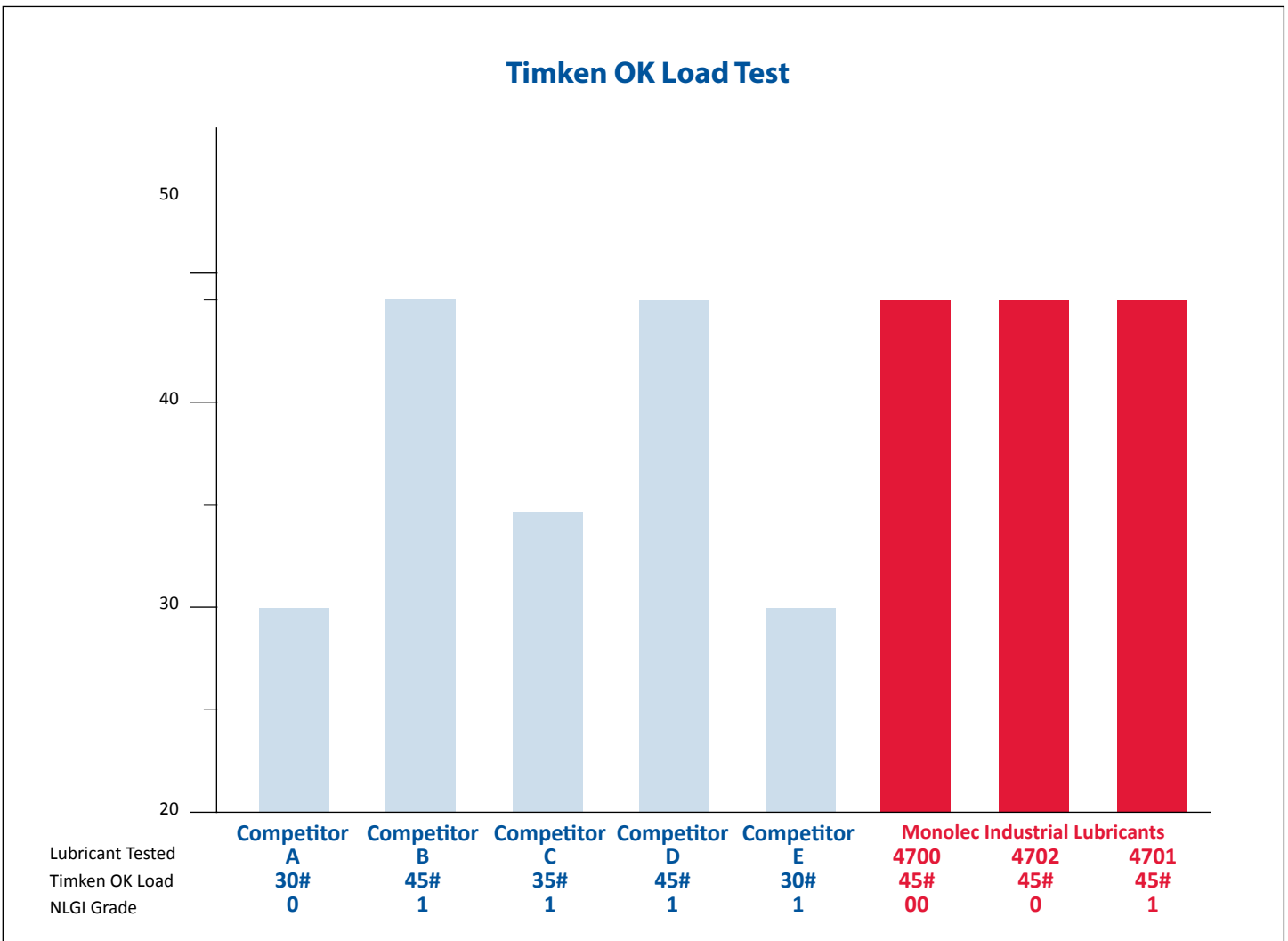


The U.S. Steel S-75 Grease Mobility Test is designed to demonstrate the low-temperature pumpability characteristics of a lubricant as would be seen in a centralized lubrication system. Higher flow rates indicate better low-temperature pumpability.



In Comparison Testing, Monolec Industrial Lubricant Shows Superiority in Load-Carrying Capacity

Two important characteristics of NLGI 1, 0 and 00 greases are their low-temperature pumpability (previous page) and load-carrying capacity (below). Of the lubricants tested (see A-E below), only LE's Monolec Industrial Lubricant (4700-4702) showed superior characteristics in BOTH tests.



The **Timken OK Load Test** (ASTM D2059) measures the load-carrying capability of a lubricant, an important consideration in selecting a lubricant for a heavily loaded bearing.



Monolec® Industrial Lubricant

	<u>4701</u>	<u>4702</u>	<u>4700</u>
Thickener Type	Aluminum complex	Aluminum complex	Aluminum complex
Texture	Smooth	Smooth	Smooth
Color	Red	Red	Red
NLGI Grade	1	0	00
Worked 60 Penetration ASTM D217	325	370	415
Dropping Point °C (°F), ASTM D2265	232 (450)	218 (425)	191 (375)
Base Fluid Characteristics			
Flash Point °C (°F) (COC), ASTM D92	260 (500)	260 (500)	260 (500)
Viscosity @ 100°C, cSt, ASTM D445	12.50	12.50	12.50
Viscosity @ 40°C, cSt, ASTM D445	120.0	120.0	120.0
Oxidation drop in psi @ 100 hrs, ASTM D942	5	5	5
Corrosion Prevention DI H2O, ASTM D1743	Pass	Pass	Pass
Timken OK Load lbs, ASTM D2509	45	45	45



Typical Applications

- Centralized automatic lubrication systems
- Use where pumpable medium-EP grease is required
- Especially good for low-temperature grease applications
- 4701: Angelus Sanitary Can Machine
- 4702: Diamond Power Soot Blowers

Recommendation

- Operating range: -40° to 149°C (-40 to 300°F)