

Steel

Forward Together™

QH Quantol™
Maintenance Lubrication

Precision-Formulated Lubricants
for the **Steel Industry**

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Brought to you by





The Steel Industry's Long-Standing, Trusted Partner

For decades, Quaker Houghton has been helping steel plants throughout the world produce the highest-quality metal while reducing operating costs. We focus on understanding each mill's specific production processes and use advanced chemistry, engineering, and digital technologies to optimize operations.

With deep industry expertise, robust supply chains, and genuinely innovative solutions, we keep our customers ahead in a changing world.

500+
steel mills supplied globally

35
manufacturing locations worldwide

3%
of revenue invested in R&D annually



Our extensive portfolio supports every step of your steel production process:



Hot rolling fluids



Pickling additives



Casting release agents



Cold rolling fluids



Grinding fluids



Rust prevention



Surface treatments



Hydraulic fluids



Industrial lubricants



Greases



While You Switch Off, Everything Keeps Running

Steel production is among the world's most demanding industrial environments, with extreme conditions and around-the-clock operations pushing equipment to its limits. Our teams have extensive hands-on experience working in the steel industry, so we know what's at stake – and what it takes to keep you ahead.

QH Quantol™ maintenance lubricants build confidence into your operations, protecting equipment, preventing failures, and driving long-term productivity. Our products are not only developed and supported by specialists, but they're also validated by robust data and real-world performance. That's why QH Quantol™ delivers reliable, consistent results and resilience for every stage of steel production, including your most critical applications.



Did you know
that around **50%**
of bearing failures are
caused by improper
lubrication?

The Power of Four in Action in the Steel Industry

The Power of Four

Our unique methodology centers on the Power of Four: temperature, load, speed, and water resistance. By analyzing these core demands, we match the right QH Quantol™ product to your application, so you can enjoy:

- A straightforward and consistent approach to product selection.
- Solutions that precisely fit your operational realities.
- User confidence through transparent recommendations.

We can also advise you on how much product to apply and relubrication intervals, helping you avoid under- or over-lubrication, cut waste, and lower costs.



- Temperature resistance
- Load carrying capacity
- High speed applicability
- Water resistance



Transfer Table Bearings

- Very high temperature
- Medium-high load
- Low speed

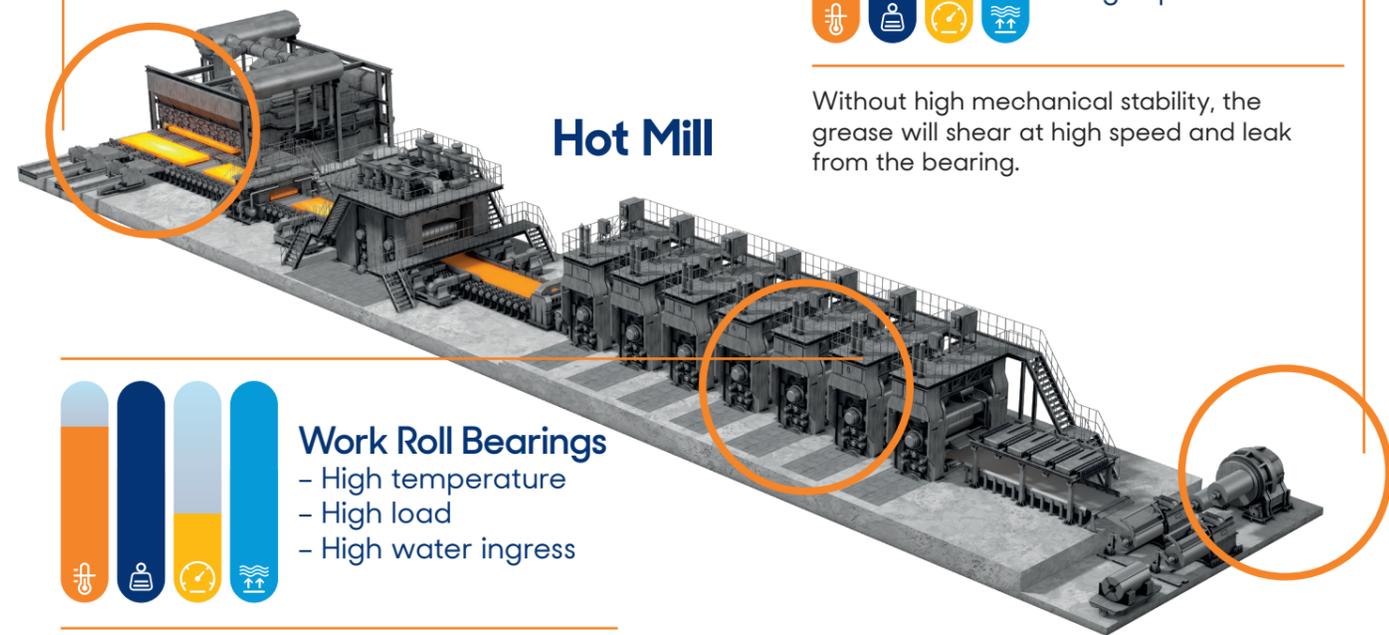
If the grease can't withstand the heat, it will dry out, crack, and burn, causing bearing failure.



Coiler Mandrel

- High temperature
- Medium-high load
- High speed

Without high mechanical stability, the grease will shear at high speed and leak from the bearing.



Hot Mill



Work Roll Bearings

- High temperature
- High load
- High water ingress

Without sufficient load protection or water resistance, the bearing will wear prematurely and could seize.

Essential Products for the Steel Industry

From your cast house to your coating line, wherever you are and whatever your equipment – we keep your operations running.

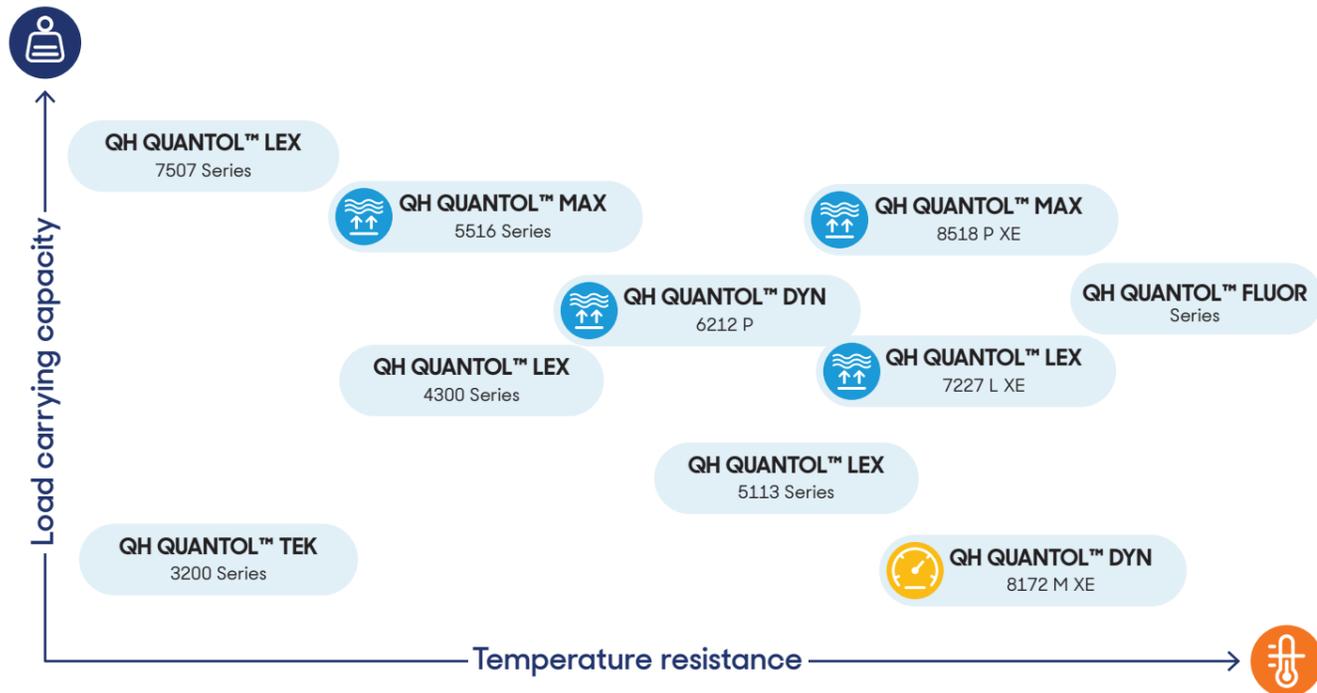
To explore our full portfolio and application information, ask us for our product line card. We also offer complementary services and technology solutions tailored to local markets. Your Quaker Houghton representative will gladly provide more details.

Our rigorous quality testing exceeds industry standards, ensuring consistent performance with every order.

QH Quantol™ products meet the specifications of **all recognized steel OEMs.**

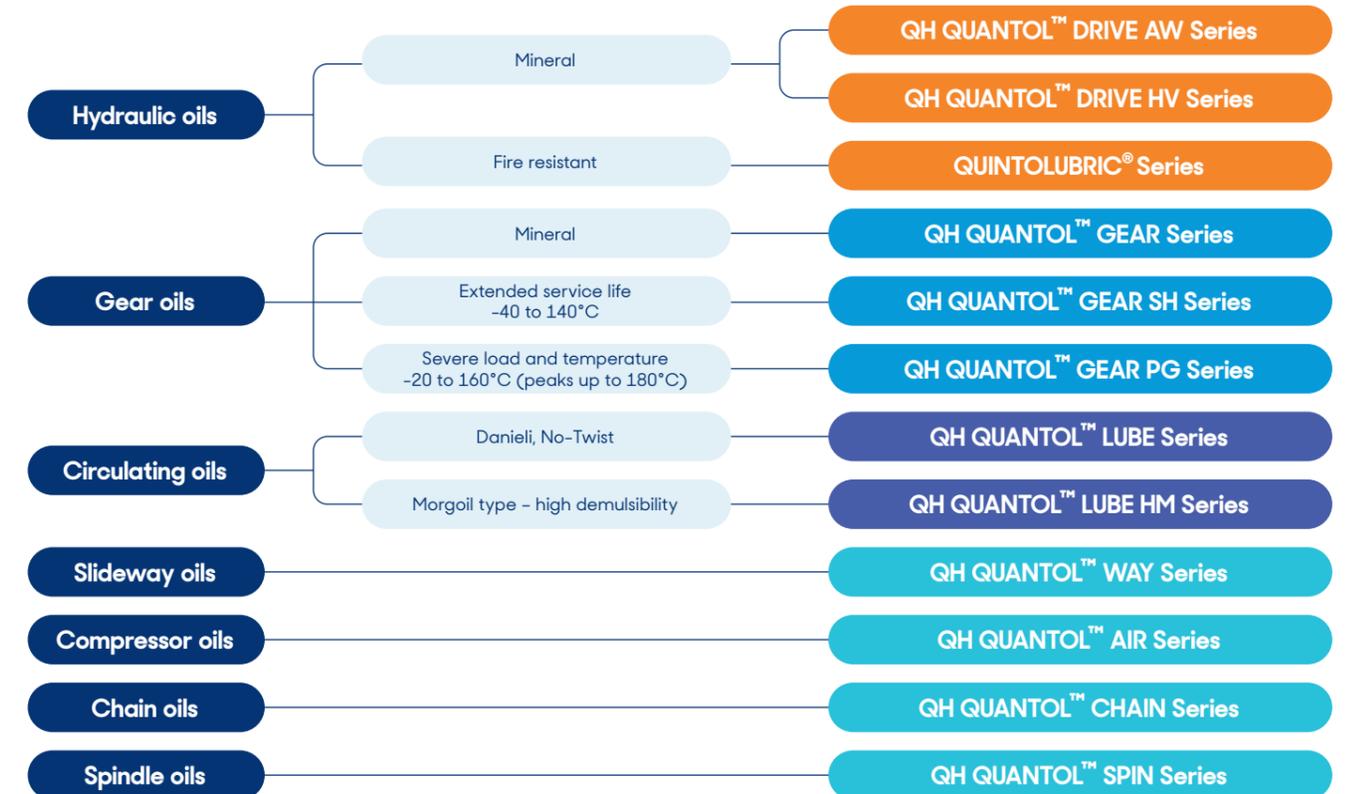


Our Greases



- Temperature resistance
- High speed applicability
- Load carrying capacity
- Water resistance

Our Oils



Performance Where It Matters Most

In steel mills, the most critical lubrication points are those posing the highest risk of downtime, quality loss, or process bottlenecks. QH Quantol™ products meet those hazards head-on and deliver dependable performance. Browse our curated selection for these sensitive applications.

Hot Mill Spotlight: Work Roll Bearings

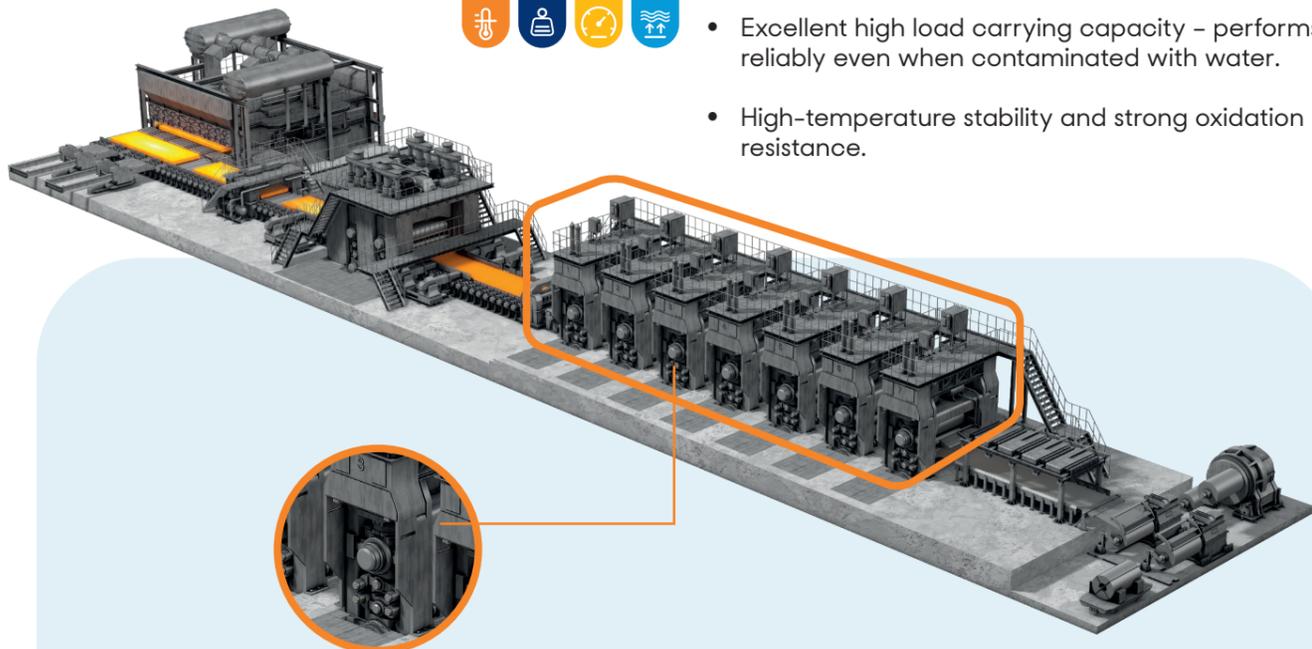
This is the most demanding lubrication point in a hot mill, as the bearings endure high temperatures, severe water ingress, and high loads, all while operating continuously.

Our Recommendation



QH QUANTOL™ MAX 5516 P
High Performance Calcium Sulfonate Complex Grease

- Outstanding resistance to water washout – maintains consistency at up to 20% water contamination.
- Excellent high load carrying capacity – performs reliably even when contaminated with water.
- High-temperature stability and strong oxidation resistance.



Casting Spotlight: Continuous Caster Segment Bearings

These bearings are in continuous operation and must withstand some of the harshest conditions in the mill – extreme temperatures, heavy loads, low speeds, and constant risk of water ingress and washout from the cooling process.

Our Recommendations



QH QUANTOL™ LEX 7227 L XE
Synthetic Lithium Complex Grease

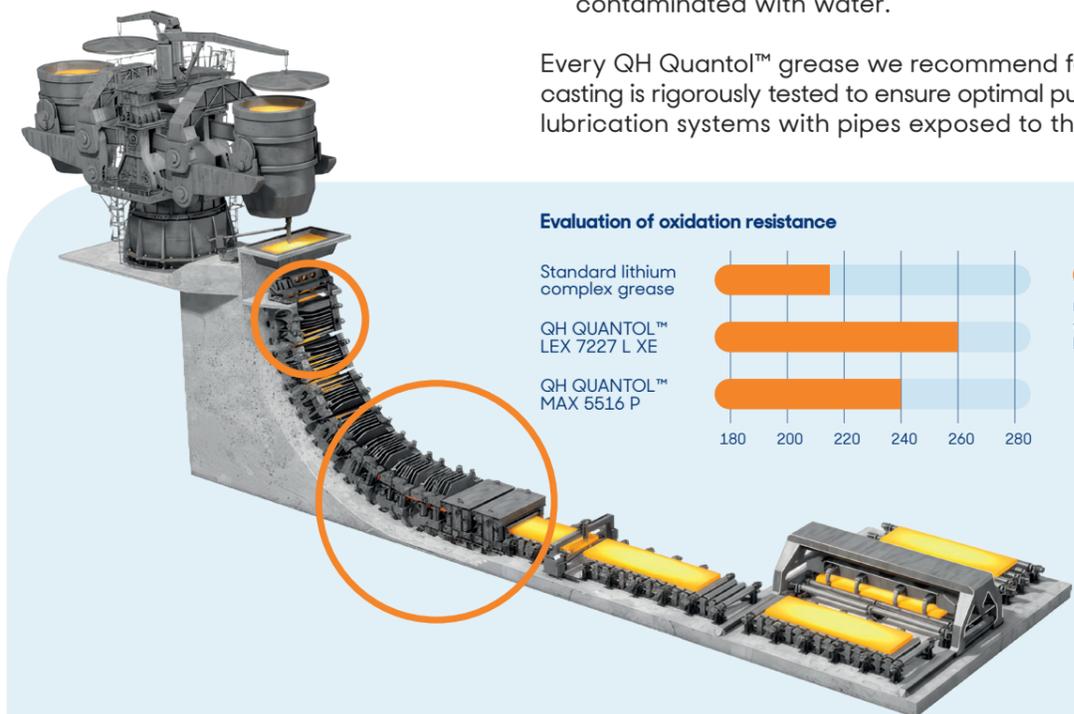
- Maintains a uniform film thickness, maximizing relubrication intervals and reducing product consumption in caster segments 1-2.
- Outstanding water repellency prevents changes in consistency, even when exposed to very large volumes of water.
- Delivers high oxidation resistance and shear stability.



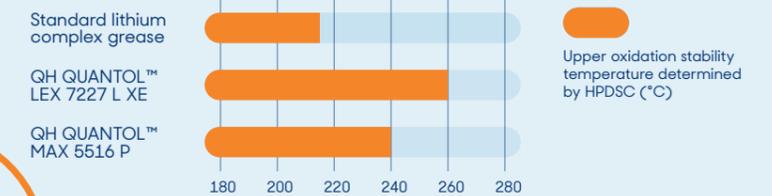
QH QUANTOL™ MAX 5516 P
High Performance Calcium Sulfonate Complex Grease

- High temperature stability and oxidation resistance for caster segments 3-9+.
- Exceptional resistance to water washout – retains consistency even with 20% water contamination.
- Maintains excellent high load carrying capacity when contaminated with water.

Every QH Quantol™ grease we recommend for continuous casting is rigorously tested to ensure optimal pumpability in central lubrication systems with pipes exposed to thermal radiation.



Evaluation of oxidation resistance



Hot Mill Spotlight: Transfer Table Bearings

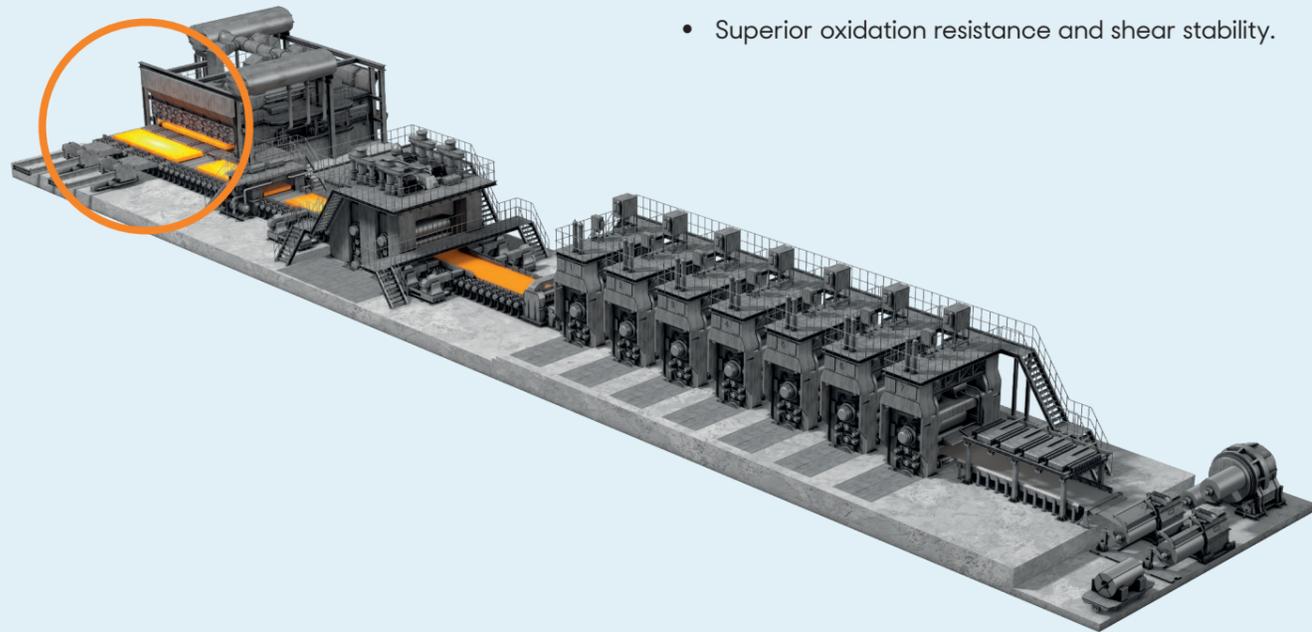
The grease must withstand very high temperatures, water ingress from cooling systems, and high shear forces generated by roller action and centralized pumping.

Our Recommendation



QH QUANTOL™ LEX 7227 L XE Synthetic Lithium Complex Grease

- Maintains a uniform film thickness in extreme conditions, maximizing relubrication intervals and reducing consumption.
- Outstanding water repellency, with no change in consistency even when exposed to large volumes of water.
- Superior oxidation resistance and shear stability.

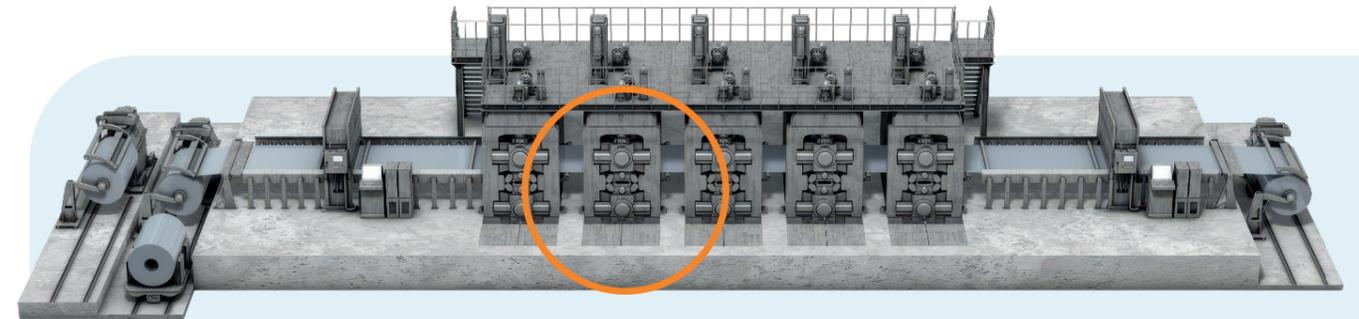


Don't Let Contamination Halt Production

Chemical incompatibility can cause the grease to soften and wash out. The knock-on effects can be serious: contaminated rolling fluid, disrupted process equilibrium, and compromised strip quality. Our deep expertise in product technologies and extensive testing capabilities enable us to recommend solutions for clean, reliable, and optimized cold rolling.

Cold Mill Spotlight: Work Roll Bearings

Here, the grease must deliver high film strength and extreme-pressure performance to withstand the high reduction forces. Large volumes of rolling fluid demand high water resistance, and it's essential to ensure chemical compatibility between the grease and emulsion.



Our Recommendations



QH QUANTOL™ MAX 5516 P High Performance Calcium Sulfonate Complex Grease

- Outstanding resistance to washout.
- Retains consistency at 20% water contamination.
- Exceptional load-carrying capacity.



QH QUANTOL™ DYN 6212 P Heavy Duty Polyurea Grease

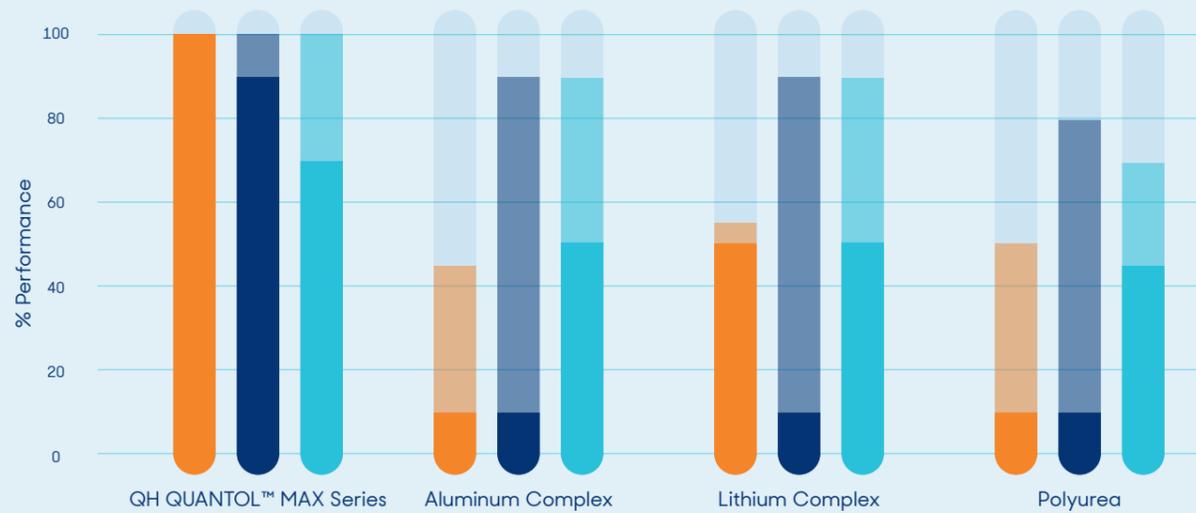
- Polyurea chemistry prevents contamination in emulsion systems that are sensitive to metallic grease thickeners.
- Excellent high temperature protection with minimal residue formation.
- Superior shear stability and corrosion protection.

How QH QUANTOL™ MAX Stacks Up Against the Alternatives

QH QUANTOL™ MAX calcium sulfonate complex grease comprises flat, stacked platelets that slide over one another, providing excellent lubrication and protection against shock loading.

Grease performance before (transparent color) and after (solid color) 20% water contamination

● Mechanical stability ● Wear protection ● EP protection



For high-temperature, high-load applications in wet environments, QH QUANTOL™ MAX outperforms traditional lithium complex greases. At 20% water contamination - and unlike other grease technologies - QH QUANTOL™ MAX maintains **100%** mechanical stability while retaining **90%** wear protection and **70%** extreme pressure protection.

QH QUANTOL™ MAX Case Study

After a large steel mill switched to QH QUANTOL™ MAX 5516 P for its work roll bearings, its maintenance team enjoyed:

- 70% reduced grease consumption.
- Cleaner machinery and lower grease contamination in cooling water.
- Extended lubrication intervals, which improved operational efficiency.

Lithium Complex vs. Calcium Sulfonate Complex

Property	Calcium Sulfonate Complex	Lithium Complex
High temperature stability	● ● ●	● ● ●
Extreme pressure properties	● ●	● + additives
Corrosion protection	● ●	● + additives
Water resistance	● ● ●	● ●
Low temperature pumpability	●	● ● ●
High speed applications	● ●	● ● ●



Fire-Resistant Lubricants For High-Risk Environments Safety Without Compromise

QUINTOLUBRIC® 888
An HFDu-type polyol ester hydraulic fluid

- Reduces fire risk and provides excellent lubrication and corrosion protection.
- Long service life, with outstanding thermal and shear stability.
- Factory Mutual Approved and OEM endorsed.

QUINTOPLEX™ LXS 1002 EP
A fire-resistant, multi-purpose grease

- Reduces fire risk and protects equipment from extreme pressure, shock loading, and corrosion.
- Formulated with QUINTOLUBRIC® fluid technology.



Watch how QUINTOLUBRIC® resists fire.

The Quaker Houghton Difference

At Quaker Houghton, we're much more than a supplier to the steel industry – we're your collaborative partner, deeply invested in your long-term success. We build lasting connections by being proactive, accessible, and responsive. That's why you'll always reach real people with real expertise – whether it's a routine question or a production-stopping emergency, you'll speak to a knowledgeable colleague, not a chatbot.



Ready to Move Forward?

From a fresh perspective and troubleshooting to a supported trial, our specialist team brings not only experience but passion.

Contact us to arrange a face-to-face or online meeting and experience the Quaker Houghton difference for yourself.

Your QH Quantol™ Eight-Step Plan to Maximum Uptime

