

The global leader in process fluid solutions for the **aluminum industry.**



Aluminum companies face challenges today as never before. Pressure on prices, a heightened focus on safety and environmental issues, growing competition, and the demand for new, innovative products mean that aluminum producers must operate more efficiently than ever. At this critical point in time, we are the long-term partner for aluminum companies seeking to anticipate—and overcome—these challenges. Our highest commitment is helping our aluminum customers run even more efficiently, and with greater innovation, whatever comes next.

Applied Intelligence: The Quaker Houghton Difference

Our highly experienced aluminum experts will work closely with your team to solve complex manufacturing challenges. In an increasingly competitive, cost-conscious industry, we are the partner you can trust to prepare you for the future based on extensive knowledge of your unique operating environment and business goals. We provide on-site expertise that maximizes quality, performance and safety.

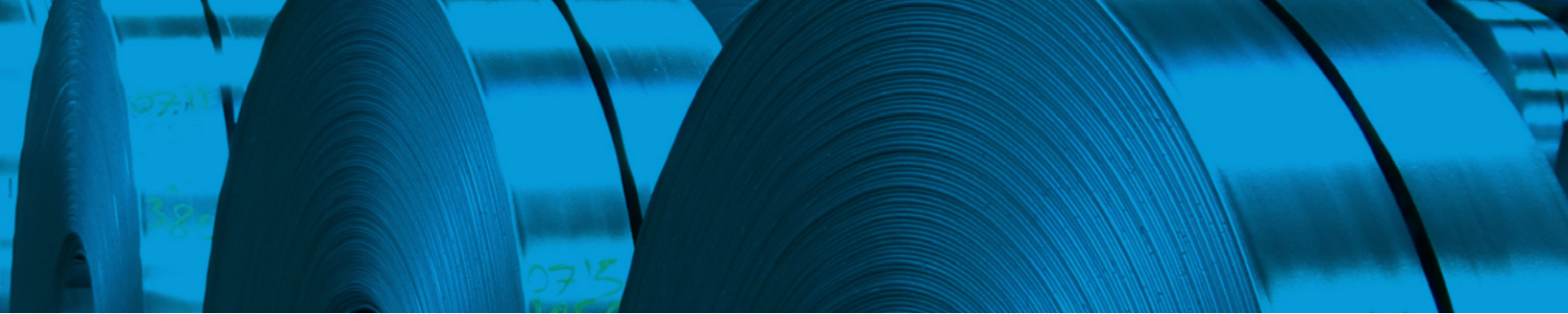
With Quaker Houghton products and people at work in your mill, you can:

- Increase productivity, throughput and utilization through improved surface quality, decreased scrap rate and extended roll life
- Reduce fluid usage and waste treatment
- Lower maintenance and energy costs

We Never Stop Improving. So You Can Continue to Succeed

Quaker Houghton is a partner in progress to the world's most successful aluminum companies. Whether optimizing existing product quality or developing ever stronger and lighter products, aluminum companies need to constantly evolve in order to continue to grow and deliver even greater value to their customers. With R&D labs on three continents, Quaker Houghton continually refines our products, and creates new solutions, so that our aluminum customers can stay ahead in a changing world.





Solutions That Optimize Performance

Quaker Houghton solutions are the aluminum industry standard, proven reliable in the most demanding environments.

Our complete range of solutions includes:

- Cleaners
- Cold rolling oils
- Corrosion preventives and post lubes
- Fire-resistant hydraulic fluids
- Hot rolling oils
- Metal forming fluids
- Metal removal fluids
- Quenchants
- Rod rolling lubricants
- Surface treatments
- Twin roll casting lubricants
- Wire drawing lubricants

Partners in Success

22% REDUCTION IN TOTAL OIL CONSUMPTION: By incorporating our hot rolling oils, a conventional three mill hot line eliminated biocide additions, improved lubricity, and minimized coolant maintenance.

SIGNIFICANT ENERGY SAVINGS: Employing our newest generation of hot rolling technology, an aluminum hot rolling mill achieved \$500,000 reduction in energy costs at one site and a \$700,000 reduction at a second site.

50% INCREASE IN ROLL LIFE: A rod mill was immediately able to improve surface quality, cleanliness and mill uptime with conversion to our rod rolling lubricant.

40% REDUCTION IN ROLLING LUBRICANT COSTS: By using our next generation technology, an aluminum rolling mill producing extremely critical surface quality was able to simplify its rolling oil management process and dramatically reduce used oil volumes.

We offer a range of services to help the world's most forward-looking aluminum companies run even more efficiently and effectively.



QH FLUIDCARE™
Managed Services



QH Technical
Services



QH Engineering
Services



QH Equipment
Solutions

