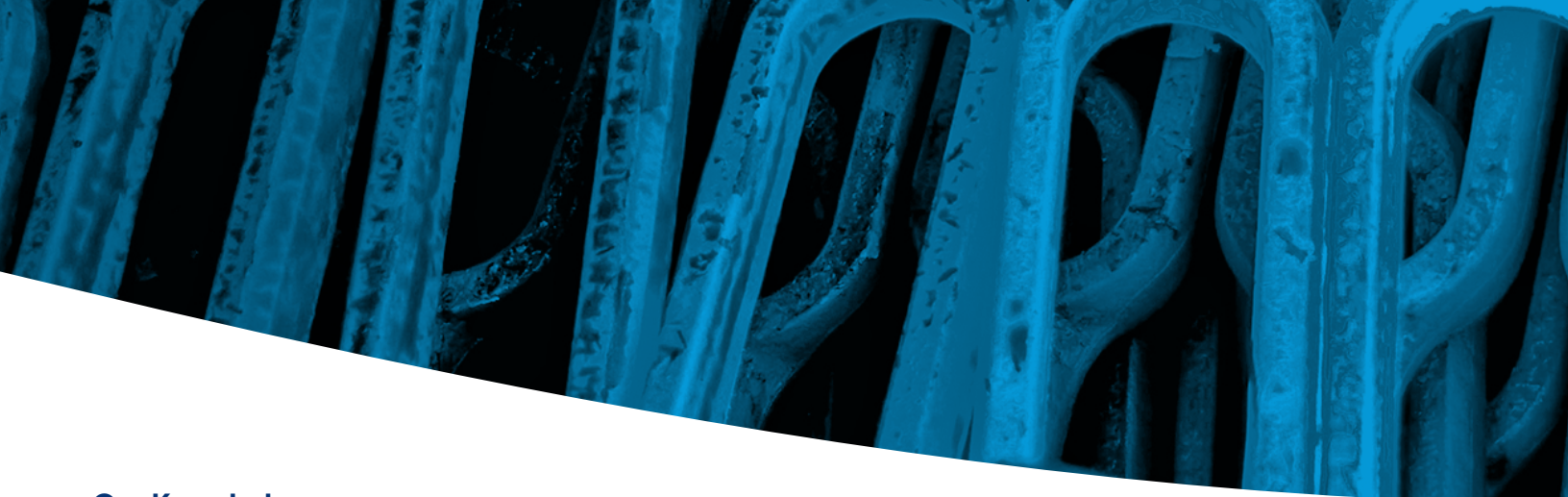




Forging the Future. Together.

Solutions for the Forging Industry





Our Knowledge

Since the 1970s, Quaker Houghton has been a significant supplier of forging process fluids. With every transition, we have been there: solving problems, reducing costs, and improving every step of the process – in plants worldwide.

In recent years, the Forging industry has been influenced by many challenges. On one side, national and international regulations require near-zero carbon footprint and greener production. On the other side, the economic factors result in productivity enhancement and increased efficiency of the whole process chain. All these challenges result in continuous development and evolution of the process to meet more customer requirements, such as:

- Near net shape forging
- Increased shape complexity
- High tensile strength
- Lightweight forging
- Environment, Health & Safety requirements (BIT/MIT free, HAP free, etc.)

All while increasing productivity and reducing costs.

To meet all the above-listed requirements, having a tailored lubrication solution for each specific process and a fundamental increase in the performance of forging fluids is mandatory. Particular requirements and skills are becoming increasingly necessary to address today's customer needs and follow industry trends. With decades of experience in the forging industry, Quaker Houghton is your reliable partner to support your forging process and meet all your requirements. Our experts strive to address common concerns such as metal flow, residue build-up, and die lifetime, as well as helping to provide a cleaner and safer working environment. We will work with you to find the tailored forging fluids which optimize your process while reducing waste, rejects, downtime, and overall production costs.

Products & Solutions

State of the art tailored solution to customer requirements and processes

On-Site Support

Dedicated service teams of experts at a customer site

Knowledge & Expertise

Long term experience and strong background in all process and production related subjects

Responsiveness

Fast and on-time response to customer needs such as delivery time, product modification, or sample testing



The Value We Can Offer

Every forging operation is unique. We believe that to propose the right optimal solution to your forging process, We need to review and understand the process parameters, outputs, and constraints. We aim to support our partners with state of the art solutions:

- Versatile forging fluids compatible with a wide range of water quality, materials, and process parameters
- Dispersion technology designed for very low foam formation for modern high-pressure spray systems
- New lubricity packages result in extended die lifetime, improve component quality and reduce cycle time
- Meet the latest Environment, Health, and Safety chemical regulations, e.g., Ammonia-free products
- Stable dispersion technology with less machine downtime and improved productivity
- Graphite-free products for cleanliness of machines and parts in use

From Our Lab to Your Business

Our laboratories are designed to leverage the unique strengths of our partners. In order to optimize the trial cost and reduce the product development path, we created a methodology and product development roadmap, which enable us to examine and test the performances of our products under different conditions before an actual trial.



The benefits of using these performance tests are:

- Optimize die life by regulating temperature and applying sufficient protection in cold and hot areas
- Increase productivity through better cooling performance
- Reduce product consumption by applying the necessary dilution rate
- Improved work environment

Forging Products for Every Situation

We offer our partners forging fluids in a wide and varied range of solutions. We have unique solutions for all kinds of forging processes, materials, and applications.



Our forging fluids cover all families of products.

QH PRESSMAX™ FWG Series:

Dispersions of graphite in water are ideal for impact-type applications in closed dies. Typical applications include mechanical and hydraulic presses, hammers, and drop forging of automotive parts, aerospace, and medical applications.

QH PRESSMAX™ FWW Series:

These water-based products are free from graphite and offer cleaner working conditions and cleaner components, respectively. Typical applications include closed die forging, extrusion of ferrous and non-ferrous alloys, and hot stamping.

QH PRESSMAX™ FGO Series:

Graphite in oil forging fluids are available in various viscosities and additive content for numerous applications, ranging from heavy-duty deep extrusions to light forming of ferrous and non-ferrous alloys.

QH PRESSMAX™ FWO Series:

Graphite-free oil-based products deliver cleaner working conditions and cleaner components, available in various viscosities and additive content for numerous applications ranging from heavy-duty deep extrusions to light forming for ferrous and non-ferrous alloys.

QH PRESSMAX™ FSL Series:

This family of forging fluids are tailored solutions to specific processes and applications, from aerospace to hot stamping of high-strength alloys. The products in this family are designed specially to meet customer requirements.

One Partner For Your Process Chain

Quaker Houghton understands that your operation consists of a flow of different processes using different metalworking fluids, and our products are designed to work together. Quaker Houghton's forging fluids are compatible with HOUGHTO-SAFE® and COSMOLUBRIC® fire-resistant hydraulics and HOUGHTO-CLEAN® wash chemicals. The HOUGHTO-CLEAN® range is the perfect partner to our forging fluids, delivering energy savings through powerful soil removal at ambient temperatures. We have a full range of compatible fluids for the forging industry, including:

- Fire-resistant hydraulic fluids
- Heat treatment fluids
- Soluble cutting fluids
- Neat cutting oils
- Cleaners
- Metal protection fluids
- Hydraulics & slideway fluids
- Cold deformation fluids

QH FLUID INTELLIGENCE™ Solutions

The QH FLUIDCARE™ program provides the peace of mind that our expertise is on-site to solve any issues quickly and keep fluids in top condition. If active on-site service is a step too far, one of our many equipment options can help overcome specific problems. Dosing and mixing, Spraying equipment with service, equipment, or both, Quaker Houghton can support improved tool life and maximized quality output. All while supporting a safer work environment.

Forward Together™

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