

# Worldwide Coverage... One Company.



*With over 2,000 employees located in 31 countries,*  
Houghton provides global coverage to companies in metal working, automotive, steel and a variety of other industries as the premier supplier of industrial fluids and chemical management services. We help our customers around the world find new ways to save on overall process chemical and disposal costs while continually improving their production and part quality.



**HOUGHTON™**

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**Americas**

USA | Canada | Mexico | Brazil | Argentina

**Europe**

UK | Germany | France | Italy | Spain | Benelux  
Denmark | Finland | Greece | Ireland | Norway  
Poland | Romania | Sweden

**Asia Pacific**

Japan | China | Thailand | Australia | Hong Kong  
Singapore | Taiwan | Malaysia | Korea | India

**Africa**

South Africa



**HOUGHTON™**

## Your Global Industrial Fluid Technology Partner





## One Partner Focused on You

*Houghton provides a global network of fluids experts with a singular purpose...*

improving your operations. We do that by delivering innovative technologies and chemistries, and by providing our highest-quality specialty chemicals, lubricants, services and all related process fluids to solve your toughest challenges.

We form Fluid Partnerships Making a World of Difference to:

- Implement new fluid technologies that reduce your operation costs and increase plant efficiency
- Develop innovative chemistries that extend the life and performance of your equipment
- Bring you new fluid processes that improve the quality of the parts you deliver to your customers
- Connect you to a global network of experts who help reduce your carbon footprint to create cleaner, healthier and safer environments and improve employee well-being
- Bring you available chemical management services that guarantee yearly cost savings



*Fluid Partnerships Making  
a World of Difference*





# Where Houghton Serves You

Houghton is the largest and fastest-growing company serving the worldwide metalworking and industrial fluids market. We are also the most experienced — enjoying the longest history of service success. Our unique combination of

advanced lubricant technology and 150 years of expertise in manufacturing engineering enables us to solve your toughest fluid challenges and reduce your operations costs. Our products and services will meet and exceed your requirements.

We serve customers in many different industries including:

• Aerospace	• Forging & Stamping	• Mining
• Automotive	• Hardware	• Non-Ferrous
• Bearings	• Heat Treatment	• Offshore Technology
• Cans	• Machine & Job Shop	• Packaging
• Construction	• Machinery	• Spring & Wire
• Defense	• Marine	• Steel
• Food & Beverage	• Medical Devices	• Wind Energy

## Product Lines

We have always listened carefully to our customers to develop innovative products that improve their operations. Houghton is the leading provider of industrial fluids including rolling fluids, lubricants, cleaners, fire-resistant hydraulic fluids, quenchants,

coolants, forming compounds, conversion coatings, and rust preventives. We maintain our industry leadership by continually growing our product portfolio to meet your needs.

• Fluid Power	• Metal Forging	• Non-Ferrous Processing
• Heat Treatment	• Metal Forming	• Offshore Technology
• Metal Cleaning	• Metal Protecting	• Specialty Additives
• Metal Finishing	• Metal Removal	• Steel Mill Products

Fluid Partnerships Making  
a World of Differences



## Metalworking

Meet metalworking challenges and maintain environmental compliance while protecting your operators' health and safety with the widest range of metalworking fluids available. Houghton's Heat Treatment, Metal Cleaning, Metal Forging, Metal Forming, Metal Protecting and Metal Removal products help your systems run longer and safer, thereby significantly reducing the need for costly sump-side additives. Our products offer superior performance in machine shops and manufacturing plants.

Houghton metalworking products help you do more than keep pace; they enable you to push the limits of speed and performance with increased feed rates and tool life, and reduced cleaning frequency, downtime and disposal costs. Houghton metallurgists and fluid engineers carefully assess your needs and select the best metalworking fluid for your specific application. We help:

- Keep your expensive manufacturing equipment well-lubricated during the various metal removal and metal forming processes. Our straight oils, water-soluble oils and synthetic fluids are specifically formulated for stainless steel, steel, aluminum, copper, brass, zinc, nickel and galvanized steel.
- Ensure your heat treating operation will experience superior cooling, improved part quality, and better metallurgical properties using our many breakthrough products.
- Eliminate premature sump dumps and significantly reduce waste and removal costs with our recyclable, ultra-filterable and biological-resistant cleaning solutions that do not require sump-side additives.
- Protect your equipment, plant, part quality and team during the forging process with our water synthetic, oil graphitic and water graphitic forging lubricants.
- Protect your finished product investment during production and storage with our oil- and water-based rust preventives. Our products reduce scrap rates and rework costs.
- Meet application-specific performance challenges, cost constraints and environmental requirements. Our neat oils, soluble oils and synthetic biostable metal removal fluids perform well in soft- and hard-water applications.

## Metal and Surface Finishing

Houghton is a worldwide leader in aluminum finishing including anodizing and paint pretreatment. Houghton also offers state-of-the-art paint pretreatment products for steel and other substrates.

Our products provide optimum surface preparation for paint adhesion and improved corrosion resistance.

Houghton is the leading developer of aluminum finishing and pretreatment

technologies. Our new products include a highly efficient and cost-reducing acid etch process prior to anodizing. On the pre-treatment side we offer room-temperature cleaners, iron and zinc phosphates, rinse aids, final seal and stripping and grain-refining additives.

We consistently exceed our customers' quality expectations and help them comply with health, safety and environmental regulations.





## Steel Mill

Houghton products serve all stages of steel making – hot rolling, cold rolling, fluid power, roll grinding, temper rolling, casting and tubular production. Our proprietary dispersion technology and synthetic formulations provide superior rolling lubrication and strip cleanliness.

Our experts in steel mill processes, system design, process optimization and troubleshooting provide excellent technical support to help you meet specific challenges and streamline your production process.

We help you achieve the cleanest possible surface quality, most cost-efficient production and lowest conversion costs.

## Non-Ferrous

Houghton offers specialized fluids and technical support for non-ferrous sheet and rod production – from casting to finishing. We understand that each mill has unique needs, and we provide tailor-made lubricant packages and engineering solutions to fit those needs.

We work with you every step of the way to solve problems and improve your production process, whether you have a single location or multiple

locations worldwide. We help you select the best fluids to reduce your overall production costs and improve the quality of your products.

Houghton is your one-stop shop for aluminum and copper flat sheet and rod rolling lubricants, and the many fluids that supplement these processes, including mold-release lubes, compatible hydraulic fluids, cleaners and post-lubricants.

## Offshore Technology

Houghton offers a complete package of OEM-approved, environmentally friendly offshore products including subsea control, blowout preventer (BOP), and motion compensator and tensioner fluids.

These products help you meet the stringent safety requirements for operating the high-compression and critical hydraulic systems used in offshore drilling. And our Houghto-Trend® web-based dashboard helps you track and trend your use of these critical fluids.

Houghton fluids are used in offshore environments to protect and lubricate threads and preserve stored drill pipe and risers. We supply the world's largest share of BOP and motion compensator fluids for deepwater offshore drilling applications.

Houghton technical specialists are available to answer field inquiries and visit your rigs to resolve specific challenges. That's why we have laboratories and specialists strategically located around the world.

## Technology Innovators

Houghton delivers the innovative fluid technology you'll need to stay competitive. With 173 chemists worldwide, we develop classic fluids and innovative formulations that meet the specific requirements of many industries.

Research and development teams in our Americas, Europe and Asia technology centers are available to evaluate your process and recommend the best products and technology for your material and application method. We conduct site evaluations, as well as troubleshoot and test to ensure compatibility with prior and subsequent processes.

Our customers around the world have benefited from the numerous new products and technologies we've developed over the years including:

- Hocut® 795 series coolants
- Hocut® TR2000 Phase Control Coolant
- Cut-Max® SH special neat finishing oils
- Houghto-Safe® hydraulic fluids
- Aqua-Quench® polymer quenchants
- Vegetable oil technology alternatives
- Cerfa-Kleen® energy-saving cleaners
- Cosmoline® rust inhibitors
- Rolkleen™ steel hot and cold rolling lubricants
- Houghto-Safe® high-compression fire-resistant hydraulic fluids
- Stack-Magic™ BOP stack hydraulic fluids
- Tandemol® non-ferrous hot rolling lubricants





# FLUIDCARE™ Chemical Management Service

Optimizing your chemical supply chain and fluid usage ensures your operation uses the right fluids, in the right amounts, and in the right way to streamline processes, increase plant efficiency, reduce downtime, improve tool life, prevent contamination, minimize waste, and control safety and environmental risks.

However, this effort requires significant time, energy and expertise. Many OEMs choose to outsource chemical management so they can concentrate on core competencies, but still achieve cost efficiencies across their supply chain.

Houghton's FLUIDCARE™ Chemical Management Service provides the technical resources of a well-rounded team of fluid experts – certified chemists,

engineers and project managers. This team is led by a Houghton on-site manager who works as a member of your staff but is on Houghton's payroll.

FLUIDCARE is driven by the concepts of overall cost savings and improving efficiency. Our metallurgists and fluid experts base-line your operation and cost per production unit and then systematically take steps to reduce that cost. We look at your situation from every angle to develop a chemical management program that meets your specific needs.

Simply put, FLUIDCARE saves you money year after year while reducing the environmental impact of your fluids by keeping your operation running like a well-oiled machine.



Fluid Partnership  
a World of Differences