



COMPANY PROFILE 2012

Houghton International Inc.

Houghton International is the world leader in industrial fluids, providing both high-tech metalworking and hydraulic fluid products, and fluid management services almost since oil was discovered in Titusville, Pa., in 1859. Today, as Houghton continues to expand its global presence, product ingenuity and service expertise, we are still guided by the goals of our founders.

Fulfilling our mission to be the most successful and respected industrial specialty chemical company in the world, Houghton partners actively with its customers, providing innovative and sustainable technical process-fluid solutions, and thereby improves their production efficiency through increased productivity, reduced cost, minimized risk and minimized environmental impact.

Our industrial fluids customers fall into dozens of different industries with a heavy concentration in metalworking, automotive, aerospace, aluminum and steel. We bring a scope and depth of technical services unequaled in the industry. With customer service offices and manufacturing on six continents, Houghton helps customers all over the world find new ways to save on process chemical and disposal costs while improving production speed and part quality.

Houghton in Brief

- Founded in 1865; launched its first commercial product (a rust preventive) in 1867
- Manufactures specialty chemicals, oils and lubricants
- Provides turnkey support with fluid management services
- Privately held and headquartered in Valley Forge, Pennsylvania, USA
- Offices, manufacturing and research facilities in more than 50 locations around the world
- Partners with leaders in metalworking, automotive, steel and many other industries
- The 2010 Kline & Company Metal Working Fluids Report shows Houghton to be the world's largest metal working fluids company.

Houghton International Inc.

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FAST FACTS ABOUT HOUGHTON INTERNATIONAL

Houghton International — Worldwide Headquarters — Valley Forge, PA

Primary Locations

North America

United States

Carrolton, GA (Manufacturing)
Detroit, MI (Manufacturing)
Troy, MI
Fort Worth, TX
Houston, TX

Canada

Ontario, Brampton
British Columbia, Surrey

Mexico

Jalisco, Guadalajara

South America

Brazil, Sao Paulo (Office & Manufacturing)
Brazil, Macaé
Argentina, Buenos Aires

Chile, Santiago,
Colombia, Tocancipa
Lima, Peru

Europe

Czech Republic, Brno
Denmark, Soro
Finland, Espoo
France, Villefranche-sur-Saone
France, Rouen (Manufacturing)
Germany, Dortmund (Office & Manufacturing)
Greece, Athens
Italy, Turin (Office & Manufacturing)
Netherlands, Oosterhout

Norway, Oslo
Norway, Stavanger
Poland, Krakow
Romania, Bucharest
Russia, Moscow
Spain, Barcelona (Office & Manufacturing)
Sweden, Helsingborg
Turkey, Istanbul
Ukraine, Kiev
U.K., Manchester (Office & Manufacturing)

Africa

Nigeria, Lagos
Republic of South Africa, Albertson

Asia Pacific

Australia, Melbourne (Office & Manufacturing)
China, Beijing
China, Chongqing
China, Shanghai (Office & Manufacturing)
China, Hong Kong
India, Pune

Japan, Tokyo
Malaysia, Kuala Lumpur
New Zealand, Auckland
Singapore
South Korea, Seoul
Taiwan, Taipei
Thailand, Bangkok (Office & Manufacturing)

FAST FACTS ABOUT HOUGHTON INTERNATIONAL



Key Industries Served

Aerospace
Automotive
Bearing
Building Materials, Appliances
Defense
Food & Beverage
Forging & Stamping
Hardware
Heat Treatment
Machine & Job Shop
Machinery & Equipment

Marine
Medical Devices
Mining
Non-Ferrous
Offshore
Packaging, Cans
Spring & Wire
Steel
Wind Energy

Product Lines

Specialty Hydraulic Fluids

Houghton has been manufacturing and supplying fire-resistant (FR) hydraulic fluids since the 1950s. We are the leading producer of FR fluids with more than 20 million gallons shipped annually, and they are backed by extensive, ongoing technology and lab support services. We are the only supplier of all types of water-based and anhydrous FR hydraulic fluids, including water glycols, high water content fluids (HWCF), polyol esters, phosphate esters and vegetable oil-based fluids.

Heat Treatment

Houghton is the worldwide leader in heat treatment technology and application expertise across a wide range of industries. We supply cold quenching oils, martempering oils and aqueous quenchants. Houghton has developed multiple breakthrough products through the years, including our biostable Aqua-Quench[®] polymer quenchants for induction and immersion hardening applications.

Metal Cleaning

Houghton's complete line of metal cleaning products removes dirt, lubricants, particulates and fluids that accumulate on metal parts during the metalworking processes. We make system cleaners that keep coolant systems running longer. Houghton also makes cleaners for general shop use. The line includes alkaline, synthetic, emulsion, detergent, and acidic products, as well as custom-formulated solutions for your specific manufacturing process.

Metal Finishing

Use Houghton's metal finishing products to pretreat and finish aluminum with the latest fluid technology. We specialize in pretreatment for paint and anodizing and electrocoloring aluminum, both for markets and architectural use. Houghton is the market and technology leader, with many years of experience in aluminum finishing.

(more)



Product Lines (continued)

Metal Forging

For decades, Houghton has developed new formulations of forging lubricants that meet changing industry needs and address common operating concerns such as residue build-up and die life. Houghton metal forging lubricants can improve die life, and provide a cleaner, safer working environment.

Metal Forming

Houghton's metal forming fluids cool, lubricate and protect your expensive manufacturing equipment during stamping, drawing, rolling, heading and other common metal forming processes. Whether you are producing auto body panels, office furniture, nuts, bolts, or crankshafts, Houghton's metal forming fluids offer excellent lubrication and corrosion protection, to increase tool and die life, and improve your surface finish.

Metal Protecting

Rust and corrosion are the naturally occurring enemies of machined parts. Moisture, oxygen, dirt, film from other metalworking fluids, and other materials can cause serious damage, causing your parts to be rejected. Houghton's complete line of solvent-, oil- and water-based corrosion preventives protect metal parts during production and in storage, both indoor and outdoor. They also protect your tools and equipment.

Metal Removal

For more than 140 years, OEMs and machine shops have relied on Houghton metal removal fluids for their machining operations. Our products are compatible with soft and hard water and are used in many different types of machining centers such as bar machines, boring mills, lathes, chuckers, benders, saws, and centerless and cylindrical grinders.

Non-Ferrous Processing

Houghton is where the world turns for specialized fluids and technical support for the entire non-ferrous sheet and rod producing process – from casting to finishing. We work with you every step of the way to choose the best fluids, solve problems, save you money, improve your process, and enhance end-product quality. We understand that each mill has unique needs, and we have the know-how to design lubricant packages tailor-made to fit those needs.

Specialty Additives

Houghton offers a complete line of specialty additives including friction modifiers, finished gear oils, and finished gear oils with friction modifiers. Houghton's Sturaco™ line of friction modifiers are primarily used to cost-effectively reduce noise, vibration and harshness (NVH) in a wide variety of mechanical applications.

Steel Mill Products

Houghton partners with the steel industry to provide the latest in highly engineered process fluids and services. Our products serve all stages of steelmaking – hot rolling, cold rolling, fluid power, roll grinding, temper rolling, casting and tubular production. No steel fluid product line in the industry is broader. Houghton provides a unified approach to streamlining your production process.



FAST FACTS ABOUT HOUGHTON INTERNATIONAL

FLUIDCARE™ — Chemical Management

Houghton's FLUIDCARE™ chemical management service optimizes chemical use in your plant by ensuring that you use the right fluids, in the right amounts, in the right way. A team of Houghton experts that includes certified chemists, experienced engineers, and production managers look at your situation from every angle to streamline processes, increase plant efficiency, reduce waste, boost output, and dramatically reduce overall costs. Plus it's one less thing for you and your crew to think about.

Houghton's FLUIDCARE program helps your plant:

- Minimize waste
- Reduce downtime
- Improve tool life
- Prevent contamination
- Simplify waste treatment
- Control health, safety and environmental risk

How does it work?

Only FLUIDCARE is driven by the concept of total cost savings – the most efficient path to chemical management success. Our metallurgic and fluid experts start by baselining your cost per production unit and then systematically take steps to reduce that cost.

We develop a chemical management program that meets your specific needs. We do this by implementing process engineering changes, extending the chemical life cycle, and establishing new or improved fluid recycling programs.

Houghton frees you from fluid headaches and staffing and budget constraints so you can focus on producing a better product. By outsourcing the chemical management function, you gain the expert and technical resources to manage non-core activities without the expense. A Houghton on-site manager will spearhead efforts, working as a member of your staff to guide you through:

- Product selection
- Application advisement
- Inventory control
- Technical support
- Employee training
- Water/wastewater treatment
- Fluid disposal and recycling