METALWORKING FLUID SOLUTIONS
FOR THE AEROSPACE INDUSTRY

HOUGHTON™
Fluid Partnerships Making a World of Difference
A HISTORY OF PERFORMANCE

Houghton International has been supporting the diverse fluid needs of aerospace companies and their subcontractors since the 1940s. Our innovative formulations are used in the sophisticated manufacturing processes of global aircraft producers as well as the detailed machining and grinding processes of component and assembly suppliers.

Houghton fluids increase the efficiency and productivity of aerospace manufacturers across the globe. Our biostable fluids stay operational longer than our competitors’ fluids. Our straight oils improve the machinability of exotic aerospace alloys, and our cleaners reduce finishing time for the skins of airplanes, fighter planes, rockets and more.

As you know, it takes years of rigorous testing for metalworking products to meet the stringent requirements of aerospace manufacturers. Houghton’s quality products continue to exceed the requirements of customer specifications and gain approvals from industry leaders including Boeing, Northrop Grumman, Cessna, NASA, Airbus, Bombardier, and Rolls-Royce.
At Houghton, we deliver innovative products that help you face complicated production challenges – from strict FAA regulatory controls and safety issues to intense performance requirements.

Plus, we have the technical expertise and industry experience to offer key process recommendations that increase productivity, lower manufacturing costs, and help meet your “green” initiatives.

Houghton helps aerospace manufacturers reduce overall costs by:

- **Increasing sump life**
  We introduced our Hocut 795-B coolant to a manufacturer with an 80,000-gallon central sump that kept souring within weeks of each new change-out. Our Hocut 795-B has yet to require a change-out in the decade since the switch.

- **Decreasing waste**
  Advanced proprietary Houghton wastewater treatment technologies combined with our biostable fluids are helping hundreds of customers reach true zero liquid discharge.

- **Extending tool life**
  Houghton's high lubricity cutting oils and coolants increase tool life and leave a fine finish on aerospace alloys.

- **Improving worker safety**
  We worked with one of the world's largest space vehicle manufacturers to solve a recurring bacteria problem.

- **Lowering fluid consumption**
  Houghton's long lasting biostable products extend fluid life without any reliance on costly additives.
A FLUID NETWORK ACROSS THE GLOBE

Whether you manufacture titanium body cores of B-52 Bomber planes, produce engine mounts and fittings, or build aisle stand controls...Houghton is there. We have plants and technicians in more than 30 countries around the globe, guaranteeing consistent product quality plus expert support anywhere and everywhere aerospace components are manufactured.

And, as a longstanding international organization, Houghton has a vast global distribution network to ensure that our products are readily available and delivered to your facility quickly.

TECHNICAL SERVICE

Our rich heritage in aerospace coupled with our thorough understanding of metalworking – its many alloys, its various processes, its challenges – provides us unparalleled application knowledge.

We use this advantage to match the most effective and compatible products from our comprehensive line with your manufacturing process for optimum performance and efficiencies.

Houghton technical support starts with a comprehensive review of your manufacturing process.

Our specialists examine the alloys that you machine, the equipment that you operate, and the products that you already use. We test our fluids on-site to fine-tune and perfect our recommendation, help you make the switch, and then perform periodic fluid analyses to continuously improve sump life, part finish, and tool life.

PRODUCTS THAT FIT EVERY NEED

Houghton fluids enhance nearly every process and material – from steel alloys, aluminum, and titanium to cutting-edge composites. Our extensive portfolio of products earning aerospace approvals includes:

- **Hocut®**
  Synthetic, Soluble, and Semi-Synthetic Cutting Fluids
- **Cosmolubric® and Houghto-Safe®**
  Fire-Resistant Hydraulic Fluids
- **Aqua-Quench® and Houghto-Quench®**
  Aqueous and Oil-Based Quenchants
- **Rust Veto®**
  Corrosion Inhibitors
- **Cosmoline®**
  Military-Specified Fluids
- **Cerfa-Kleen®**
  Cleaners and Finishing Solutions

Houghton International’s biostable Hocut 795-B Coolant is approved by Boeing in all six usage areas under specification BAC-5008.
In addition to providing product solutions, Houghton also offers FLUIDCARE™, our chemical management service offering. FLUIDCARE™ offers a sustainable approach to total fluid management. Our services range from regular customer visits by field service technicians to teams of operators based permanently on customers’ sites.

By partnering with FLUIDCARE™ you’ll receive a continuous productivity improvement plan designed to maintain reduced operating costs. You’ll then be able to focus on your core business activities. Year after year, our proven effective model will:

- Reduce your operating costs
- Help reduce your environmental footprint
- Provide shop floor operatives with a safe working environment
- Maintain optimal operating machining conditions through control chart monitoring
- Track KPIs through effective data management techniques

THE ONLY FLUIDS PARTNER YOU’LL NEED

Turn to Houghton for all your fluid needs.

We deliver proven, high-quality products, global resources, and ongoing technical support. Your productivity will soar.

Visit us online at www.houghtonintl.com for more details or call us at 610-666-4000.

HOUGHTON AEROSPACE APPROVALS

- AirBus Bombardier
- BAE Defense Systems
- Boeing Aircraft
- British Aerospace
- Cessna
- Douglas Aircraft (Division of Boeing)
- EADS
- General Dynamics
- Goodrich Aerospace
- Lockheed Martin
- Martin-Baker
- McDonnell Aircraft (Division of Boeing)
- NASA
- Northrup
- Pratt & Whitney
- Rolls-Royce
- Saab Aerospace
- SNECMA
- US Government
- Westland Helicopters, Ltd.