

We are Quaker Houghton

Remanufacturing Solutions



Our Vision

To be **the** trusted partner to the world's leading manufacturers, who rely on our process fluid solutions to advance the world safely and sustainably.



We are Quaker Houghton

A global leader in Industrial Process Fluid Solutions



1.9B
Net Sales



150+
Years Serving
our customers



15k
Customers



4000+
Colleagues



116
Countries



30+
ISO Certified
Locations



40+
Offices/
Service Centers



30+
Manufacturing
Plants



30+
R&D Centers and Labs



Servicing Industries that Matter

Industry process expertise to solve your toughest challenges



Metals & Construction

Steel
Aluminum
Rod & Wire



Transportation

Automotive
Aerospace
Defense
Marine



Energy, Consumer Goods & Industrial

Oil & Gas
Tube & Pipe
Metal Containers
Consumer Appliances
Mining
Renewable Energy
General Industry

Sustainability is **Core** to our Business






Social. Environmental. Economic Progress

Strengthening Our Business Practice By:

-  Innovating Together for a Better Tomorrow
-  Protecting Our Planet
-  Empowering Our Colleagues and Communities
-  Sourcing Our Materials Responsibly



Enabling Our Customers To Achieve Their Ambitions Through:





-  Waste Reduction
-  Water Reduction
-  Energy Reduction
-  Human Health Improvements
-  Carbon Footprint Reduction





How We **Strengthen** Our Sustainable Business Practices



	2030 Goals*	Highlights
 Innovating Together for a Better Tomorrow	100% of finished goods not classified as CMR	97.8% finished goods not classified as CMR hazards
 Protecting Our Planet	CARBON NEUTRAL in our operations (Scope 1 and 2)	52% of global electricity is sourced by renewable or zero carbon energy
 Empowering Our Colleagues and Communities	0 serious injuries	40% reduction in TRIR from 2020-2022, well below industry standard
 Sourcing Our Materials Responsibly	75% of suppliers that exceed our performance threshold	30% of our palm oil is fully segregated through the RSPO

*An extensive list of goals can be found at quakerhoughton.com/sustainability.
RSPO: Roundtable on Sustainable Palm Oil
TRIR: Total recordable incident rate
CMR: Carcinogenic, mutagenic and reprotoxic hazards

Remanufacturing Solutions

At Quaker Houghton, we understand that **remanufacturing** plays a crucial role in a circular economy, empowering businesses to extend the lifecycle of their products and reduce waste. Our remanufacturing solutions include:

- Surface finishing products for stripping paint, carbon, and rust from parts
- Heavy-duty and general-purpose cleaners for removing a wide range of soils from a variety of substrates
- Aluminum paint removal products
- Rust protection
- Selective electroplating products and services

Solution Driven Approach

Our world-class products and services to reduce operating costs, improve productivity, increase product quality, and strengthen our customers' competitive advantage. With our expertise and industry knowledge, together we can achieve.

- Improved Velocity-Reduction in component cleaning cycle times and improvements in first run yields
- Reductions in Operational Cost –Identify the hidden cost of cleaning; targeting process improvements to impact the bottom line spend
- Waste Minimization-Reductions on volume of waste created utilizing QH engineered service & laboratory analysis
- Reductions in Warranty- Media free cleaning technologies & reductions in sediment counts
- Improved Ergonomic Impact -Reductions in need for component manual detail operations

Remanufacturing Solutions

Our remanufacturing products are designed for cleaning:

- Oil
- Grease
- Paint
- Dirt
- Carbon
- Removing paint and oxides

Products are formulated to perform on new multi-alloy components as well as older cast and steel only units.

Quaker Houghton focuses on reconditioning various alloys, including aluminum castings, steel, titanium, stainless and other materials commonly used in engine and power components.

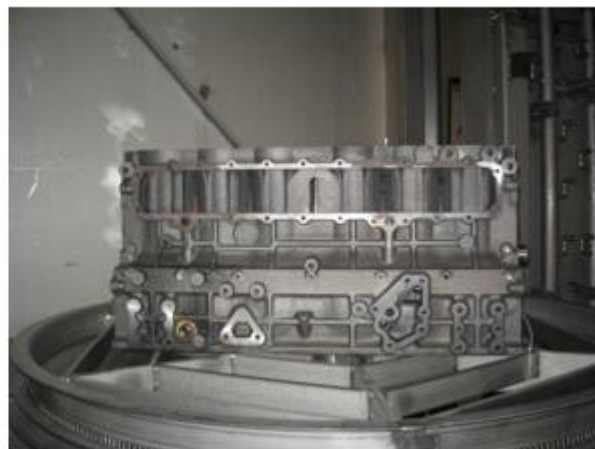
Our products perform exceptionally on aluminum and magnesium castings including heads, blocks, manifolds, etc. in removing carbonized/burned-on petroleum byproducts that result from engine operation.

During this chemical cleaning and stripping process, the components are deoxidized and will be restored to a like-new appearance and condition, thus allowing for OEM performance.

Remanufacturing Solutions

- **Heavy-Duty Cleaners:** Designed to provide long bath life and tolerate high soil loads, our cleaners are effective on most soils, including resinous compounds. These cleaners deliver heavy duty performance, are excellent at soil emulsification, and can be used in all immersion cleaning systems. Multi-metal safe options are available.
- **General Purpose Cleaners:** Specially formulated with low solids content, these cleaners are free rinsing and have flash rust protection. Phosphate and silicate-free products are available.
- **Paint Removal:** These products formulated with special surfactants, dispersants and inorganic agents and are designed to strip paint in immersion applications. Aluminum-compatible products are available in addition to products specially formulated for ferrous alloys. HAPs-free options are available.
- **Oxide Removal:** This range of products is designed for any oxide removal need, from laser scale to heavily rusted ferrous alloys. Alkaline, acidic, and neutral products are available.
- **Rust Protection:** Quaker Houghton has a full range of corrosion prevention products, including rust preventives that provide good wetting and a clear, dry to touch film.

Alkaline Cleaning and Paint Stripping Result:



Tankless electroplating where and when you need it most – that is The SIFCO Process.

The SIFCO Process® is a portable method of electroplating localized areas without the use of an immersion tank which provides comparable surface enhancement benefits:

Use	Deposit
Dimensional restoration	Nickel, Cobalt, Anodize
Corrosion protection	Cadmium, Zinc, Nickel, Zinc-Nickel, Tin-Zinc, Anodize
Wear resistance	Nickel, Nickel-Cobalt, Nickel-Tungsten, Nickel-Phos
Electrical contacts	Silver, Gold, Rhodium
Tarnish resistance	Tin, Gold, Platinum
Bearing surfaces	Silver, Tin, Babbitt
Improve brazability	Nickel

Tankless electroplating

The portability of the process also offers minimized down time and related savings. With a 60-year-old history in various industrial sectors globally, it meets the stringent specification requirements & quality standards, and plated SIFCO deposits withstand harsh environments and work conditions. The adhesion properties of SIFCO Process deposits often exceed those of welding and flame spray coatings.

SIFCO ASC can provide you with the equipment, chemical solutions, and technical knowhow to perform this process within your workshops, additionally we offer plating services directly from our four contract service locations within North America, to restore, recondition, and remanufacture:

Hydraulic Systems

Rods, Cylinders, Pumps, Valve seats, Spools, Housings

Transmissions, Gearboxes, Drive Systems

- Piston plates, Bearing retention bores, Bearing Seats, Gear Shafts
- Differential housings, Brake pistons, Axle bearing seats, Wheel hubs
- Cam shafts, Bearing journals, Cylinder blocks, Cylinder heads

Hydraulic Cylinder Repair



Before



During



After

Thank You!