Hubbard-Hall
SINCE 1849

Better Results.
Less Chemistry.™

Expertise from Around the Hall

Surface Cleaners | Metal Finishing | Wastewater Treatment

Chemistry and expertise for solving manufacturing's toughest problems

Have a Hubbard-Hall expert speak at your next event.

Infinitely curious and always happy to roll up their sleeves to solve problems that no one else can, our expert Technical Team also enjoys sharing their insight and knowledge.

Hubbard-Hall experts have built their street cred at several industry trade shows, presenting real life examples of how we have improved a process or increased productivity for our customers. Our talented bullpen of technical experts is ready to bring their skills to your next event. From aqueous or solvent cleaning to metal finishing (such as rust prevention and coloring) and wastewater treatment. We've got over 175 years experience to share.

Our people. Your problem solvers.

Expertise you can trust. 32% of Hubbard-Hall associates are in tech support, customer service, or sales. This means that you get answers fast while the rest of our team gets your order delivered on time and in spec.

HubbardHall.com

Cleaning the hard to clean

Manufacturers who adhere to strict cleaning processes have 40% fewer defects due to poor cleaning. Our experts can show you a choice for every challenge – aqueous or solvent. Learn how reducing rework and rejects and improving your cleaning process can reduce chemical consumption and complexity while having lasting effects on your wastewater treatment.

ABC's of Phosphate Free

Phosphate conversion coatings on metals are used to impart corrosion resistance and lubricity and serve as a base layer. Accordingly, phosphates in process wastewater can produce serious problems in the environment. There are options available to remove phosphates safely and stay within EPA Guidelines.

Learn:

- How Zirconium coatings are the next generation of pre-paint chemistries.
- The benefits of being phosphate free.
- What is required to improve your process.
- The long-term effects of Zirconium coatings.

Aqueous Cleaning 101

For decades, aqueous cleaners have been widely used. Understand and appreciate the basics of water-based parts cleaning from the best in the business. A high-end overview of aqueous cleaning processes and technology that extend the life of cleaners, including a membrane technology that results in a 95% reclaim efficiency.

Learn:

- What applications benefit from aqueous cleaning.
- How you can improve your current process in just a few steps.
- About the environmental, health and safety impact.
- How to reduce your total chemical cost.

Exploring Cleaner Futures: How Membrane Filtration Boosts Your Bottom Line and Sustainability Efforts

Join us for a presentation that dives into the dynamics of equipment and chemicals, and the key to enhanced performance and long-lasting solutions. Experience the benefits of membrane filtration and its capability of reclaiming up to 98% of your cleaning solution. Discover the benefits of minimizing waste disposal expenses and fine-tuning cleaner lifespan through oil concentration adjustments. See for yourself the direct relationship between cleaner concentration and effective oil content management. Implement strategies to cut chemical costs, waste disposal, and energy expenses while prolonging the life of your cleaner and contributing to a more sustainable future.

Learn:

- The role of membrane filtration in safeguarding your assets
- Challenges in achieving optimal cleanliness across processes
- Cost-saving opportunities from longer bath life and reduced waste

Have You Considered How Chemical Paint Stripping Can Cut Costs, Improve Quality, and Boost Capacity?

It is generally accepted that paint and powder coating processes suffer from the overspray that builds up on hooks, racks, and hangers. Consequences include a drop in electrical conductivity, which reduces coating adhesion, and results in a poor visual appearance. The solution is to remove the build-up as often as possible, but that's something many coaters find hard and expensive. Chipping, burning, and blasting the excess buildup of paint and powder are slow, labor-intensive processes that end up damaging and adding to the repair cost for hooks and racks.

Learn:

- Which process is best for you.
- What happens to coating that's been removed.
- What the key benefits from moving away from chipping, burning, and blasting are.
- How has this worked for other companies like you.

Moving From Solvent to Aqueous Cleaning: What Do I Need to Know?

With the increasing regulatory pressure surrounding halogenated degreasing solvents, the pressing question emerges: Can and should industries transition to aqueous-based cleaning methods? This session dives into the essential process steps required to assess the feasibility of such a conversion. It examines the potential benefits and drawbacks while shedding light on the realities encountered.

Have you thought about how you will address different alloys – with water-based chemistry, can you clean aluminum and steel in the same line, or will you need to set up different cleaning lines? A move to aqueous cleaners also requires you to address other issues such as surface tension, corrosion, and bleed out further down the process line. By the end of this session, participants will be equipped with a clearer perspective on the feasibility of transitioning.

Learn:

- Assess if aluminum and steel can be cleaned together or require separate lines.
- How to manage issues in your cleaning process.
- Evaluate the benefits and drawbacks of switching to aqueous-based cleaning.

Overcoming the Challenges of Cleaning Aluminum

Cleaning aluminum is far different and more challenging than cleaning stainless steel due to its short supply and difficulty to clean safely. Metal finishers worry about over-etching, difficult stains and damaging expensive aluminum. We cover the basic principles that make aluminum unique, cleaners that remove stubborn contaminants and case studies on how to reduce the cost, complexity, and chemical consumption of cleaning aluminum.

Learn:

- How is the aluminum being used? Will a caustic soda-based cleaner impact this?
- To identify the contaminant you are trying to remove.
- Why over-etching aluminum is a concern.
- The benefits of post-cleaning waste treatment.

Protect Your Parts, Equipment, and Personnel with Proper Cleaning

17% of rejects occur because of poor pre-treating and inadequate metal cleaning. Without the proper cleaning process in place, residual contaminants “burn” into the surface during heat treatment, causing damage to your parts and furnace. Efficient cleaning is not only about achieving the required technical cleanliness at a minimum cost, it ensures safety, sustainability, and regulatory compliance.

Learn:

- The importance of cleaning
- Pre Heat Treat cleaning
- Short- and long-term effects
- Post cleaning: extend your bath life

Solvent Alternatives: Don’t Let Your Process Lines Go Down

From supply chain issues and facility shutdowns to increasing regulatory constraints and environmental concerns, learn about the current situation and what that means for your business. Hubbard-Hall experts will discuss the current situation with every type of solvent and future regulations and what that means for your business—plus, our experts will share their position on what this means for manufacturing in the future.

Learn:

- What your options are.
- How to maintain chemistry: reclaim solvent and aqueous cleaners.
- How to maintain equipment: check monthly and clean often.
- About replacing your chemistry: non-halogenated solvents, fluorinated solvent blends, modified alcohols, or aqueous cleaning.

The Real Cost of Parts Cleaning

Soils and contaminates are notoriously difficult to remove from drawn and formed metal parts. If not removed properly, they can cause downstream contamination, rework, downtime, and customer rejects. But companies have different attitudes toward cleaning costs, risks, and impact.

Learn:

- How attitudes about cleaning relate to quality yield.
- How quality yield relates to what a shop spends on cleaning and its profit margins.
- How the hidden cost of not cleaning properly can far outweigh the initial cleaning cost.
- Tips on building a cleaning process to improve quality, yield, and the bottom line.

Using Surface Analytics for Monitoring Process and Part Quality

A common question asked by metal finishers is....How do I know when my cleaner bath is aged, and no longer effectively cleaning parts? Over the years, shops have used methods such as an oil split test, titration, conductivity, and other wet chemical methods. In this discussion, we will demonstrate how measuring the surface characteristics of parts in real time can give a more accurate and meaningful prediction of when the cleaner bath is no longer effective.

We will discuss how this technology can ensure part quality for the life cycle of parts, from incoming stock to final finish. Our discussion will include a real-world case study of a high-volume critical cleaning application.

Learn:

- Traditional methods for assessing cleaner bath effectiveness.
- Real-time surface analytics for more accurate predictions of cleaner bath effectiveness and part quality.
- A case study on a high-volume critical cleaning application will be discussed.

What If You Could Reuse Your Masking Materials and See Savings As High As 85% Per Year?

Many companies spend considerable amount of money on caps, plugs and masking materials to just discard them. Why not recycle and reuse them to increase the lifespan, save time and money while increasing sustainability? Hubbard-Hall customers agree that implementing the right process to reuse their masking plugs allows them to save money, improve profitability and satisfy the need for environmental and most importantly economic sustainability.

Learn:

- The benefits of reusing your masking materials.
- How non-hazardous solvents allow for a safer work environment.
- Why biodegradable is for easier waste treatment.
- Strip masking materials, increase the life span... and produce less waste.

Which Packs the Bigger Pre-Treatment Punch - Iron Phosphate or Zirconium?

Iron phosphate has long been the workhorse (or go-to) pretreatment process for the powder coating industry. With many process options to choose from, spray wand – 7 stages. They provide excellent paint adhesion and superior bonding & salt spray hours.

Zirconium conversion coatings provide advanced bonding and anti-corrosion treatment for all metals. They are formulated to replace conventional iron or zinc phosphate products in pretreatment applications with environmental, energy, and wastewater treatment advantages.

During this lively debate, our experts will help you decide which process will pack the bigger pre-treatment punch for you—or a combination of both.

Learn:

- Advantages/disadvantages of each application type
- Optimizing your process for reducing chemical consumption and cost
- Regulatory issues to be aware of

Our focus is on the manufacturing process – we specialize in the tricky and temperamental from pre-treatment all the way through to waste-water treatment. Our experts can help with color, corrosion and heat treat and share how to save time and money.

Choosing The Right Rust Preventative to Make Your Process More Profitable

Rust and corrosion are costly issues in the metal finishing industry. Whether your products are being shipped overseas, sitting in inventory on a shelf or waiting for the next metal finishing process, they deserve protection. There are options available to protect your products. Improve your process, protect your parts, and see a significant savings on rework.

Learn:

- The difference between solvent, soluble oil, water based and more.
- The importance of each.
- Which process is best for you.
- How companies like you changed their process for better protection

Electroless Nickel: Five Ways to Extend Your Bath Life

Rust and corrosion are costly issues in the metal finishing industry. Whether your products are being shipped overseas, sitting in inventory on a shelf or waiting for the next metal finishing process, they deserve protection. There are options available to protect your products. Improve your process, protect your parts, and see a significant savings on rework.

Learn:

- Passivation for Protection from Plating. (Say that 3 times fast.)
- Control the Parameters
- Pre-treating is crucial—the cleaner the rinse, the lower the contamination.
- Capture the particles. Bag filters are best, put your filtration to the test.
- Idle Time: Check the Hypo!

Summer Months Mean Higher Humidity: Lower the Chances of Rust and Corrosion

Using the right chemistry to prevent rust and corrosion will extend shelf life and reduce costs incurred by rework. During hotter weather, conditions are optimal for high-humidity corrosion. Studies show that the metal finishing industry is spending $276 billion per year addressing corrosion. Protecting your parts begins with improving your process. Finished parts represent a significant dollar investment whether they are sitting in inventory on a shelf or waiting for the next metal finishing process. Using the right chemistry to prevent rust and corrosion will extend shelf life and reduce costs incurred by rework.

Learn:

- How companies like yours can benefit from better corrosion protection
- What can be implemented into your current process for longer-lasting protection
- How you can use biodegradable, water-miscible products
- How to save costs by eliminating reprocessing and minimizing chemical use

Treating the hard to treat

With 525 consults per year, our experts are trusted tank side. To stay within discharge limits, you must know what's in your wastewater and how it got there. Our experts can help you optimize your treatment plan, even if it means making changes upstream.

5 Ways to Future Proof Your Wastewater System

Whether you are scaling up production or just want to ensure that your wastewater system is running smoothly for the future, planning is crucial. Let's look at changes and precautions that a plant can do to ensure that its wastewater system is up to par with the production demands.

Learn:

- If production increases, can your wastewater system keep up with the increased flow?
- How do you remove the metal contaminants from the wastewater effectively?
- Has phosphorus showed up on your discharge permit; are there concerns about how to remove it effectively?
- Let's discuss the top ways to remove phosphorus from your wastewater system.

5 Ways to Remove Five Metals in Your Wastewater

Have you struggled with removing metals from your wastewater stream? Hubbard-Hall will look at the top five ways to remove chrome, nickel, copper, zinc, and cadmium from metal finishing wastewater. We will also go over hydroxide versus sulfide as well as metal precipitants and how to use them.

Learn:

- Hydroxide versus sulfide precipitation.
- Metal precipitants: how and when to use them.
- Flocculants: the differences in them, their makeup, and their use.
- Mechanical treatment, such as membrane filtration, electrocoagulation, and ion exchange.

Mastering Wastewater Systems: Essential Insights Into Maintenance, Lifespan, and Chemical Impact

In this high-level overview of wastewater system maintenance and upgrades, learn to navigate factors such as material degradation and technological advancements, examine the effects, and address issues of chemical usage on the equipment. Designed to equip you with the knowledge needed to ensure your wastewater system remains in optimal condition, highlighting the importance of understanding both the hardware requirements and the chemical interactions that can influence system longevity and performance. By implementing proactive maintenance strategies and informed chemical management practices, you can enhance the reliability and efficiency of your infrastructure, ultimately contributing to environmental sustainability and public health protection.

Learn:

- Essential equipment for wastewater systems
- Lifespan considerations for wastewater systems
- Impact of chemical usage on wastewater equipment

Phosphates: How They Impact Your Discharge

To meet EPA regulations, a facility needs to understand how to remove phosphorus from its water. This session will cover two processes – chemical and biological removal. The presentation looks at what the future holds and further discussion around additional work that is being done - such as the Hypoxia Task Force, industry research for better practices, and nutrition management plans for the recovery of impaired water.

Learn:

- About the element phosphorus and its uses.
- How it can ultimately lead to the eutrophication of our water supply and how to alleviate this issue.
- How to remove phosphorus from wastewater—chemical and biological.
- What the future of wastewater looks like.

Start to Finish... Upstream Solutions for Hard-to-Treat Metals in Wastewater Treatment

Metal finishing operations struggle with removing metal ions in their wastewater treatment process. This presentationcovers how to maintain regulated levels of metal with a concentration on less cost and chemistry.

Learn:

- How to implement solutions in the upstream operations to mitigate metal problems.
- The benefits of choosing a better cleaning chemistry.
- How to achieve higher efficiency and lower cost in wastewater treatment.

Wastewater Reclamation in the Metal Finishing Industry

How clean is clean? We often ask ourselves about the parts we manufacture, but how often do we look at our water? Is it clean enough for the make-down of baths? For rinsing parts? When we discuss reducing our water footprint, these are questions we should ask ourselves to ensure that we meet manufacturing needs. Water usage within the metal finishing industry is critical, from the make-down of the production baths to the need for flowing rinses to ensure parts are clean for the next step in the process.

Learn:

- Impart the need for water recycling in the metal finishing industry
- Discuss the top methods in use now for water reclamation
- Review lab and pilot study data on the different methods for water reclamation
- Discuss future steps to reduce water consumption in the metal finishing industry

Meet Our **Cleaning** Experts

Connor Callais, Technical Applications Specialist

Connor recently began his career in the metal finishing industry when joining Hubbard-Hall as an application specialist in 2019. He is a graduate of Wofford College with a bachelor's degree in chemistry and applied mathematics. He spent a year at the University of South Carolina studying physical chemistry and research, working with synthetic techniques for RAFT polymerization of nanocomposites. Connor enjoys working with various applications, including metal coloring, pre-treatment, corrosion protection, and aqueous cleaning.

Fernando Carminholi, Business Development Manager

Fernando is a Chemical Engineer graduate from E.S.P.M. in Sao Paulo, Brazil. He oversees Hubbard-Hall's distribution channels and business development team. Fernando has extensive experience in the chemical specialty products industry for surface finishing, focusing on industrial parts cleaning, metal pre-treatment, and functional electroplating.

Jeff Davis, SVP, Sales and Business Development

Jeff has over 40 years of experience in sales, marketing, training, and public speaking. He has been involved with the marketing and sales of chlorinated, fluorinated, and alternative solvents since 1982, beginning with Diamond Shamrock and then with Hubbard-Hall. His experience at Hubbard-Hall has included recommending various solvents, equipment, and testing protocols for various cleaning requirements, from industrial vapor degreasing to precision and electronics cleaning. Jeff is a Beta Gamma Sigma honors graduate with a master's degree in business administration.

Larry Ensley, Product Manager - AquaStrip and MetalGuard

Larry is a graduate of North Greenville University and oversees Hubbard Hall's technical service team and lab operations. He has extensive experience in the chemical industry and has been with the organization for almost 30 years, successfully guiding his technical team. Larry is the acting product manager for AquaStrip and MetalGuard product lines.

Meet Our **Cleaning** Experts

Joshua McClellan, Business Development Engineer

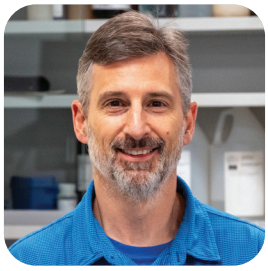
Joshua has over ten years of experience as a technical account manager in the chemical industry, specializing in metal cleaning and processes. He graduated from Winthrop University with a Degree in Chemistry and an MBA from Webster University. Joshua works closely with his customers to understand their specific operations and applications to help them get better results with less chemistry.

Mark Miller, Sales/Technical Service

Mark has 23 years of pretreatment experience, focusing on phosphate and zirconium conversion coatings. He has extensive expertise in helping customers improve their quality and process efficiencies.

Kevin O'Brien, Business Development Manager

Kevin O'Brien has established himself as an industry expert with over 35 years of experience in the zinc phosphate market. He developed his expertise by working in multiple facets including manufacturing, quality, technical support, and sales for local, regional and global chemical suppliers. In addition to his broad background, he specializes in the various processes of fastener manufacturing from wire drawing through the final finish.



Mike Valenti, Director of Technology

A graduate of the University of Georgia, Mike Valenti has over 30 years of experience in specialty chemical development and product management. He has been in the development and sales of specialty chemicals, detergents and cleaners, and metal finishing products. His experience includes recommending cleaners for both aqueous and solvent cleaning processes, non-ferrous surface preparation, equipment, and testing protocols for a wide range of critical metal finishing operations requirements.

Meet Our **Finishing** Experts

Jerry Dwyer, Market Manager, Heat Treat Salts

Jerry is a graduate of The University of Texas, San Antonio with a BS in Biology/ Chemistry. Jerry has served the metal working and finishing industry for over thirty years. He has extensive knowledge and experience in heat treating, phosphates, and black oxide. He has progressed from service technician to regional sales management, and finally Market Manager at Hubbard-Hall for the past half decade. His passion for science, problem solving and helping customers has always kept him active and engaged with his work.

Jameson Grout, Account Manager

With over nine years of experience in the metal finishing industry, Jameson has worked as a Technical Service Rep, Plating Engineer, Plating Manager, and Production Manager. Driven by a passion for this sector, he has joined the front lines at Hubbard Hall to strengthen their specialty chemical presence in New England. Jameson brings expertise in aluminum, aerospace alloys, black oxide, phosphating, nickel, copper, gold plating, passivating, electropolishing, and electroless nickel.

Jason Potts, Product Manager

Jason Potts brings over 25 years of experience in metal finishing to Hubbard-Hall. He previously held roles as Business Development Manager at MacDermid/Coventya and Operations Manager at HMQ. Potts is a Licensed Wastewater Operator with expertise in aluminum metal finishing, cleaning, anodizing, electroless nickel, phosphating, heat treating, and zinc plating.

Meet Our **Treating** Experts

Robin Deal, Product Leader, Aquapure

Specializing in industrial wastewater treatment with Hubbard-Hall for the past 8 years. Robin has worked as a wastewater operator, holding a physical/ chemical wastewater license in the state of North Carolina. She has also completed the wastewater treatment plant operations specialist certificate program at Sacramento State University. Robin speaks frequently at events, educating and helping to work toward finding efficient ways to transform to a leaner treatment process.

Stewart Holloway, Senior Account Manager

Stewart has nearly 40 years of experience in the metal finishing/wastewater treatment industry. He began as a wastewater treatment specialist in the Ohio Air National Guard and is a licensed industrial wastewater operator in Ohio. Stewart has overseen various electroplating, hot black oxide, vapor degreasing, and electro-polishing process lines throughout his career. He continues expanding his expertise, currently pursuing wastewater treatment plant operations certification from Sacramento State University.

David Joyce, Waste Water Specialist

David specializes in solving industrial Wastewater issues through chemistry & process improvements, receiving recognition from numerous companies supporting Aerospace, Military and Medical fields. Twenty-eight years of experience with environmental compliance, manufacturing/metal finishing and wastewater treatment. David can be found on site providing audits to help improve processes while maximizing system performance through chemistry.

Jeremy Morgan, Product Manager, Biologics

Jeremy is an expert in biological wastewater treatment. Hubbard-Hall recently brought him on board through their acquisition of BioConversion Technology. He has 12 years of experience in the industry and a Chemical Engineering degree from Georgia Tech. Jeremy assists industrial and municipal clients in the Southeast region. He troubleshoots wastewater treatment systems, provides consulting services, and teaches classes on the subject.

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Chemistry and Expertise for Manufacturing's Toughest Problems

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