

Careers In Finishing



CHEMICAL COATERS[®]
ASSOCIATION INTERNATIONAL

What is Finishing?

Over 100 years ago Henry Ford stated, "Any customer can have a car painted any color he wants, as long as it is black." Some have questioned the sincerity of this statement since Ford offered Model T cars in other colors, including fire-engine red and hunter green. However, even in 1909 Henry Ford may not have realized the importance of the finish on an automobile!

Today, the industrial finishing industry has advanced in ways that Henry Ford could only imagine. Every color of the rainbow can be seen, including finishes that seem to shift in color. The finish may be glossy, smooth, matte, textured, wrinkled, metallic or even pearlescent. And not only is there a never ending array of colors, the quality of the finish continues to improve.

So what exactly is the purpose of a finish? The two primary purposes are to provide a protective coating on the finished part so it lasts longer, and to make that finished part look great! The protective aspect can include hardness, flexibility, scratch resistance, color retention, and corrosion resistance. However, the decorative aspect of the finish may be the most important...making that finished part look appealing!

When you are shopping for a new product, what is the first thing you see...the coated finish. Whether you are looking at a boat and trailer, lawn mower, piano, snow blower, light fixture, patio furniture, grill, kitchen cabinets, washer/dryer, motorcycle/bicycle, or that new car (even in black), how that item looks will affect your purchase. The quality of the finish will remain long after you make that purchase: your pick-up truck is resistant to rust, and that irritating door ding didn't crack the painted finish.

However, it would be foolish to think there wasn't room for improvements. Improving application efficiencies through technology, removing dangerous solvents to help our environment through chemistry and who knows, maybe there are more colors beyond the rainbow.

What Industries Use Finishing?

These are just some of the industries where you'll find finishing processes.

- » Aerospace
- » Household Appliances
- » Medical Equipment
- » Construction Equipment
- » Agricultural Equipment
- » Office Furniture
- » Automotive
- » Automotive Components
- » Recreational Products
- » Lawn & Garden Equipment
- » Hardware Products
- » Sporting Goods
- » Fitness Equipment
- » Military Equipment
- » Transportation
- » Emergency Vehicles
- » General Metals
- » Electrical Products
- » Architectural Products
- » Wood Products

What Does the Finishing Process Look Like?

When an item is ready to be finished, it will either be as a component, an assembly or a completed part. The first step is to make sure the item is clean of any dirt, oil or residue from the manufacturing process. The cleaning process can be mechanical (shot blasting) and/or chemical (pretreatment). Once the item has been cleaned, it must go through a drying process to eliminate any residual water.



The next step is to apply the coating, and there are several options available, including liquid paint, powder coating and electrocoating. Each of the available technologies can consist of various chemistries, depending on the required performance. These properties can include weatherability, corrosion protection, color and gloss retention, hardness, flexibility, chip resistance, and there are even anti-graffiti coatings. The item might be coated by dipping into a tank, spraying with a gun or with the use of a robot.

Once the coating has been applied, it needs to dry if it is a liquid or be cured if it is a powder. Although there are liquid coatings that can air-dry, the most common method of curing a coating is in an industrial oven. This helps to accelerate the curing process to produce the desired finish.

Other aspects of the overall finishing process include a conveyor for moving the parts, hooks and racks for holding the parts, processes for cleaning the hooks and racks, and testing methods to verify the quality of the finish.

What Type of Jobs are Out There?

The finishing industry has career paths for everyone. Like chemistry? Pretreatment and paint companies need chemists to develop new products. Prefer being hands-on? Job shops and manufacturers need painters and technicians to keep their lines running efficiently. Interested in the business side of things? Money needs to be managed and products need to be marketed. Here are some of the careers waiting for you:

FINISHING END USER

- » Finishing Engineer
- » Finishing Line Manager
- » Job Shop Owner
- » Maintenance Manager
- » Operations
- » Paint/Powder Coater
- » Production Manager
- » Purchasing
- » Quality Assurance
- » Safety Supervisor

FINISHING SUPPLIER

- » Chemist
- » Sales
- » Coatings Production
- » Engineering
 - ◆ Electrical
 - ◆ Environmental
 - ◆ Manufacturing
 - ◆ Mechanical
- » Research & Development
- » Business Development/Marketing
- » Technical Service Representative

This list is a small sampling of the types of jobs you'll find in the finishing world. The next six pages will provide you with a look into the careers of several individuals in our field.



Rex M. Krohn Jr.

John Deere

Manager of Enterprise Facilities Services

How long have you been in the industry?

26 years; 5 with a paint manufacturer and 21 with John Deere.

How did you become involved in the finishing industry?

I started as a chemical testing and analytics technician. Then I worked in paint formulation, application engineering, and system design, which led me to a role with John Deere.

What are your primary job responsibilities?

I am primarily the paint competency leader for John Deere, in which I lead the materials, manufacturing engineering, and design engineering teams that support paint operations worldwide. I am also responsible for facilities competencies and infrastructure for electrical, mechanical, environmental, civil, and structural engineering.

What skills are required for your job?

Be willing to learn from others: you will meet many people that have specialties in areas and can teach you the knowledge and skills needed to be successful. Be a good teammate: almost all of the work we do today centers around working with others. Be willing to fail and try again: accept challenges, learn from them, and move on with the knowledge that you gain through those experiences.

What is the best thing about your job?

The best thing about my role is the variety of projects and people that I get to interact with every day. John Deere has given me the opportunity to work globally, and I have built lasting friendships with colleagues around the world.

What advice do you have for someone considering a career in finishing?

Be willing to try any opportunity put in front of you. You never know what type of work you might like and excel at.

Lindsey Boyle

BASF/Chemetall

Technical Sales Representative



How long have you been in the industry?

3 years

How did you become involved in the finishing industry?

Through curiosity mostly. I was previously a high school teacher and I wanted a new challenge.

What are your primary job responsibilities?

I make sure current customers are receiving great service by helping them with their pretreatment and metalworking needs. I also develop new business and provide chemical process consulting and support.

What skills are required for your job?

Communication and relational skills; technical product knowledge and writing; problem solving; positive attitude, time management, and self-motivation; empathy and listening.

What is the best thing about your job?

Helping serve customers, providing solutions, connecting with great people, working in the field and not being in an office every day. There is always something new to learn!

What advice do you have for someone considering a career in finishing?

- Get involved with professional organizations as soon as possible!
- Take notes and ask questions. There is so much to learn in this industry. Always be a student!
- Don't be shy. Get out and network! Call a company and ask them for a tour.

Michelle Striggow

Graco

Business Development Manager



How long have you been in the industry?

33 years

How did you become involved in the finishing industry?

I interviewed with Graco my senior year of college. They were only hiring mechanical engineers as salespeople, but I convinced them they needed a material science and metallurgical engineer.

What are your primary job responsibilities?

Most of my career has been in sales and marketing. In sales my responsibility was to train, support and work with distribution. As the product marketing manager, I worked to develop new products for the worldwide market while also promoting existing products. Currently as a business development manager, I work on strategic mergers and acquisitions to fill gaps in the Industrial Division to continue growing Graco's footprint.

What skills are required for your job?

Technical aptitude, bachelor's degree, ability to work with people at all levels, self-motivation.

What is the best thing about your job?

Every day is different! In all of my positions I have had a lot of diversity in my day-to-day responsibilities, it is never boring.

What advice do you have for someone considering a career in finishing?

There is something about the finishing industry that once you get in, you want to stay. If anyone had told me 25 years ago that I would still be hanging out in paint kitchens getting paint on my hands and shoes, I would have told them they were crazy! But the people throughout the finishing industry are awesome and it makes you want to stay and be as good as those around you.



Douglas Harper

Vice President of Operations

JIT Powder Coating Company

How long have you been in the industry?

31 years.

How did you become involved in the finishing industry?

I started through a temporary service. A company had an opening as a painter's helper. I was hired at JIT as a parts hanger in 1993, working on the small line with just a few employees. I quickly moved to powder coating as a trainee.

What are your primary job responsibilities?

Oversee and organize the daily production schedule to maximize productivity. Hire and train new employees. Monitor the production equipment to ensure it is in good working condition. Maintain the highest level of productivity.

What skills are required for your job?

Good communication and an understanding of both financials and the dynamics of the business. Set the tone for the company along with goals going forward.

What is the best thing about your job?

Accepting the challenges of daily productivity and employee development.

What advice do you have for someone considering a career in finishing?

Take advantage of learning opportunities and new challenges. You will only get better!



Edward Koehler

JR Custom Metal Products, Inc
Powder Coat Facility Manager

How long have you been in the industry?

7 years.

How did you become involved in the finishing industry?

JR Custom Metal Products is our family-owned and operated business. My grandpa, Jesus Raul Martinez, started this business in 1974 in his garage. JR Custom has grown to over 140 employees.

What are your primary job responsibilities?

I manage, direct, and implement strategies and objectives within the powder coating operation to facilitate product introduction and ensure production goals and cost objectives are met.

What skills are required for your job?

A person needs to understand the entire powder coat process from start to finish. Understanding the process and equipment will prepare a person to troubleshoot when problems arise.

What is the best thing about your job?

Seeing the outcome of what my family created. It is so rewarding to help plan, design/build, and powder coat a product, then be able to tell your kids, we made that.

What advice do you have for someone considering a career in finishing?

Ask questions and listen. There are so many knowledgeable people in this industry. Attend as many conferences or shows as you can. Prior to building our powder coat facility, we were at these events asking questions. The answers gave us insight on what to plan for within our facility.

How long have you been in the industry?

3 years

How did you become involved in the finishing industry?

My background is administration, accounting and program management. My son worked for Bean's Best and introduced me to the owner, who needed someone with my skills. I liked the trajectory the company was on, so I came on board.

What are your primary job responsibilities?

Bookkeeping, human resources, purchasing, and customer service.

What skills are required for your job?

The skills that I find most useful in my position are the ability to read people, patience for problem solving, knowledge of best practices and risk management, attention to detail and follow through, a listening ear, healthy boundaries, a positive attitude and a sense of humor.

What is the best thing about your job?

I have the freedom to learn new aspects of the business and expand my knowledge base in almost any direction. I enjoy the areas I manage and genuinely like everyone here.

What advice do you have for someone considering a career in finishing?

Finishing is fascinating and universal. Whether someone is an artist, a chemist, an accountant, or a sales professional, there's a place in finishing, and there always will be.

Amy M. Heath

Bean's Best Manufacturing LLC
Administrator



Karen Walters

Gema USA Inc.

Senior Marketing & Events Specialist



How long have you been in the industry?

32 years, 15 of those in marketing.

How did you become involved in the finishing industry?

I started in an entry level role out of high school. I've worked in a variety of positions while obtaining my BS in marketing & distribution management. I was then able to move into a marketing position for Gema.

What are your primary job responsibilities?

Marketing, including advertising, promotions, sales materials, communication, and working with distributors and customers. I also manage the execution of special events, meetings and trade shows.

What skills are required for your job?

Bachelors degree in marketing or business, along with experience in marketing and event management. Strong knowledge of social media platforms, Microsoft Office, and Adobe software. Good communication and problem solving skills, along with the ability to multi-task and be organized.

What is the best thing about your job?

The friendships that I have formed with co-workers, customers and others within the industry. Working for a company that allows me to continuously improve my skills and take on new responsibilities. Never a dull moment, fast paced, but very satisfying when projects or events are completed successfully.

What advice do you have for someone considering a career in finishing?

Listen and learn as much as you can from co-workers and industry colleagues. Join industry associations and participate on committees to further develop professional connections and friendships. Be willing to continuously expand your knowledge and take on new challenges.



Jeff Blain

Circle-Proscio, Inc.

Regional Manager

How long have you been in the industry?

5 years.

How did you become involved in the finishing industry?

I began working for Circle-Proscio managing the China production facility in automotive and HVAC. Upon returning to the US in 2017, I got involved with the commercial side of our chemical pretreatment business.

What are your primary job responsibilities?

US - New Business Development & Marketing Manager

China - GM of our China operations

What skills are required for your job?

Asking questions and listening to understand. Resourcefulness, tenacity and creativity to develop solutions. Facilitation, collaboration, and customer advocacy. Proactively learning to stay on the cutting edge of new technology. Understanding key operational factors that matter most to customers.

What is the best thing about your job?

Working with great people at a company all about customer innovation. I get to participate on teams to develop solutions for customers across a wide variety of industries and product lines.

What advice do you have for someone considering a career in finishing?

Get involved with customer facing activities to understand what matters most to the people that are using your product. Take advantage of trade association education and networking events. There are a lot of great people with diverse experience willing to share it.



Victoria Gelling

The Sherwin-Williams Co.

Technical Director of Electrocoat, CORDEX and Advanced Platforms

How long have you been in the industry?

19 years.

How did you become involved in the finishing industry?

When I started graduate school at North Dakota State University, I began working with a professor who had a research grant from the United States Air Force. The focus of the grant/research was the replacement of hexavalent chromium as a corrosion inhibitor for

aerospace aluminum alloys. That became the focus of my Ph.D. dissertation.

What are your primary job responsibilities?

Engaging with our customers. Staying up-to-date on state-of-the-art liquid technologies; electrocoat technologies and corrosion and weathering standards. Management of projects and people.

What skills are required for your job?

Electrochemistry and corrosion knowledge, curiosity, attention to details for project management, and "soft skills" for people management.

What is the best thing about your job?

Meeting potential customers and finding out what their unmet coating needs are currently, and for the future. I particularly enjoy coming up with new solutions to existing problems.

What advice do you have for someone considering a career in finishing?

It is a great career with wonderful potential for growth. Take every chance to expand your skill sets. Don't be too afraid of failure, it can prevent you from taking new directions in your career.

Duane W. Fudge

BASF/Chemetall

Key Industry Sales Manager - Special Products

How long have you been in the industry?

36 years.

How did you become involved in the finishing industry?

After graduating from college with a BS in Chemical Engineering, I received a job offer from a specialty paint and coatings manufacturer.

What are your primary job responsibilities?

Provide sales acquisition and retention support for key customers across North America focusing on metalworking fluids, e-coat, paint detack and non-destructive testing.

What skills are required for your job?

Problem solving, relationship building and management, negotiations.

What is the best thing about your job?

I get to interact with manufacturers in multiple industries and locations around the world, seeing how things are made and offering consultive advice in making process improvements for cost control, quality and sustainability.

What advice do you have for someone considering a career in finishing?

There is almost no limit as to where in industry or where in the world you may choose to go. Finishing is a highly important aspect of nearly everything and anything manufactured today. In addition to a wide variety of industries, there are also a breadth of careers including R&D, equipment design and construction, paint and coatings applications, surface treatment chemistry, accounting, sales and much more. Finishing encompasses an exciting range of sales, technical, operations and many more career opportunities.



Tony Sclafani

AR Iron, LLC
General Manager



How long have you been in the industry?

I started in the finishing industry in 1989.

How did you become involved in the finishing industry?

I started in the family-owned ornamental iron business when I was 15. We fabricate ornamental iron gates, fencing, railings, spiral staircases, entryways, security screen doors and light structural ironwork. All of these products require coatings for exterior and interior protection to exposure.

What are your primary job responsibilities?

Over the years I have worn many hats. I started in the finishing department washing and cleaning the steel when I was 15. I have been responsible for pretreatment, blasting, hanging, coatings, ornamental iron installations, installation supervisor, residential and commercial sales. Currently I manage 43 employees and daily operations of the business.

What skills are required for your job?

In my job I have to have the knowledge of all aspects of our services. Having the ability to understand how our products are made, and what is needed to provide a durable sustaining product to our customers is very valuable. I would not have been able to comprehend what is involved if I didn't perform all aspects of the job over the last 32 years.

What is the best thing about your job?

People. Getting to interact with others and see the growth of our business and the success that it has brought them as well as our company is very rewarding. Having been in Las Vegas for over 32 years we have had much involvement with growing Las Vegas. I always share a proud moment when I drive by somewhere or go anywhere in town and see one of our projects from over the years. It brings an overwhelming feeling of gratification to be able to say, "We did that."

What advice do you have for students?

Educate yourself. Be open to suggestions and don't limit yourself to what you want to achieve. It is important to surround yourself with other champions with like-minded goals and values. Set goals for yourself and never give up. Keep moving forward.

What's Next?

So you've decided that the Finishing Industry seems like a pretty great place to be. Now what?

Step 1: Consider what careers best fit your interests and skill sets. Think about what type of job you will find most rewarding.

Step 2: Investigate the requirements for the career you want. Does it require training at a technical school? A two-year degree? A four-year degree? Peruse job postings to get an idea of the required education and training for different careers.

Step 3: Find technical schools, colleges and/or universities that offer programs in your area of interest.

Step 4: Apply for a CCAI Scholarship. CCAI offers scholarships at both the national and local chapter levels for students pursuing careers in finishing.

Step 5: Get involved with CCAI. From mentoring to internships to networking with your local chapter, involvement in CCAI will give you a leg up when it comes to finding a job. See the back cover for a full list of CCAI resources.



You see finished products every day. Products like those below are made possible because of people working in the finishing industry, like the ones you've read about here. What products do you want to help make more beautiful, more functional or more durable?



Student Resources

Whether you are still in school, just starting your career journey, or looking for something new, here are some resources to help you out.

CCAI Scholarships

The CCAI Matt Heurtz Scholarship Program is open to high school seniors planning to attend college or technical school, and to current college and technical school students.

Criteria and application details can be found at www.ccaiweb.com/scholarship.

CCAI Student Membership

Student membership is open to any individual 16 years of age or older who is currently enrolled in high school, college, technical school or community college. Gain unlimited access to training videos, participate in discussions on the CCAI website forums, and earn discounts to attend CCAI events.

Learn more and join today at www.ccaiweb.com/membership.

CCAI Training Aids

CCAI offers training videos on topics ranging from finishing basics to curing, and have powder coating training in English and Spanish. We also publish several training manuals covering all your finishing questions.

Check out the videos and manuals at www.ccaiweb.com by choosing the EDUCATION tab.

FABTECH

FABTECH is North America's Largest metal forming, fabricating, welding and finishing event. Each Fall, it offers a great opportunity to learn about the different aspects of the Finishing Industry. A show floor with hundreds of exhibitors showcases all the latest technology, and the technical conference offers education on all areas of the industry.

Visit www.fabtechexpo.com for complete information.

CCAI Chapters

CCAI has more than a dozen active chapters across the country. Chapters offer technical training, business presentations, and visits to manufacturing plants to see finishing in action. Chapters are also an excellent opportunity for networking with industry experts.

A list of chapters can be found at www.ccaiweb.com/chapters.



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