

ABSTRACT

Twenty First Century Powder Coating Job Shops: Juggling Customers, Competitors, Compliance, and Change.

As we cross the threshold of the 21ST Century, the worlds of business and manufacturing are going through phenomenal changes. Global markets, virtual technology, and wireless transfer of information will no doubt shape the future of every existing industry, as well as create many new ones. As the manufacturers of metal, plastic, and wood products constantly improve their production methods to reduce the cost of their products, the need for powder coating as a finish will become more important, and of course, more competitive. How will the most basic provider of powder coating, the “Job Shop”, survive in this new technological frontier?

This paper will explore the evolution of the basic powder coating job shop, from “mom and pop garage shop” to the Fortune 500 state of the art production facility. It will cover the basic definition of a job shop, and how most job shops operate. It will address competition between individual finishers and OEM in-house coating lines. It will also discuss what powder coaters need to do to remain competitive, ways to harness the power of the internet, and ways to remain flexible and adaptive to changing global markets and government regulations. Overall, this paper will discuss what will be necessary for powder coating job shops to survive in the new millennium.

Definitions:

JOB (Webster)

- 1: a small miscellaneous piece of work undertaken on order at a stated rate
- 2: to do odd or occasional pieces of work for hire,
to do or cause to be done by separate portions or lots: SUBCONTRACT
- 3: to carry on public business for private gain

SHOP (Webster)

- 1: a handicraft establishment
- 2: a business establishment

JOBSHOP (Webster-paraphrased)

- 1: a handicraft or business establishment specializing in miscellaneous, odd, or occasional pieces of work, for hire or subcontract, undertaken on order at a stated rate, for private gain.

POWDER COATING JOB SHOP (Greg)

- 1: The last link in the supply chain of finished products, and the only one capable of getting it done right yesterday.

Face it. No matter how much time was lost by design and engineering delays, material supplier delays, and production delays, when the parts arrive at the door for powder coating, the customer needs them yesterday! This is the reality of the job shop powder coater in the twenty first century. There is nothing in the paraphrased Webster definition of job shop that suggests that finishers are wizards possessing magical powers, yet, the title “finisher” suggests that the many delays that a customer incurs through the manufacturing process can somehow be overcome, and the delivery promise can still be met. The product will not be done until “we finish it!”

EVOLUTION OF THE POWDER COATING JOB SHOP

Just as the giant Boeing 747 had its roots at Kitty Hawk, and the aircraft carrier USS Enterprise ultimately sprang from a dugout canoe, most of the largest powder coating companies started small and grew larger with time. As with all evolutionary processes, Darwinian theory seems to sort out the survivors and the failures. The survivors tend to fall into four categories; Mom and Pop, or garage shops, small coaters, large coaters, and OEM coaters.

Mom and Pop and Garage Shops

Most powder coating companies, including mine started out as small Mom and Pop shops, or garage shops. (My father started our company with a couple of customers, a pizza oven, a used spray gun, and some basic tips from an equipment supplier.) Used equipment of all sizes and capacities is available on the second hand market, (as leftovers from the failures or trade-ins from survivors), and is much less expensive than new equipment. Although a used oven may not have the state of the art controls, bells, and whistles, it keeps the overhead down. But far more important than the equipment is the proprietors' ability to manage a business and move up the learning curve. Mistakes can be costly, and the key to survival is building a knowledge base and a reputation for quality. As the business grows, the successful entrepreneur will only be successful by learning how to keep costs low, profits high, and make capitol investments wisely. The used equipment dealers have warehouses full of shiny new equipment that put Mom and Pop out of business, because they bought all that new equipment and couldn't make the payments on it.

Small Coaters

If Mom and Pop are successful, they may grow their business into a small powder coating company. The majority of powder coating companies in America are considered small coaters. They are job shops that may have anywhere from five to fifty employees, and have sales up to ten million dollars. Most small coaters have a customer base of twenty to two hundred customers, and 80% of those customers are within a 100-mile radius. Their capacities may vary, but most will have both line and batch capabilities. They may use vapor degreasing or automatic wash lines, and may use manual or automatic spray guns. Their equipment will probably be a mix of new and used, but if they are successful, they know how to use it, and how to get more out of it than the manufacturer intended.

As with most small businesses, the key to survival is good management, hard work, and satisfied customers. Probably the single most difficult decision for the small coater is when and how much to grow. It is also important to note that an increase in size usually means a required improvement in structure. As small businesses grow, the need for better communication, better training, and a more defined business structure become more imperative. When that big job comes along, the company that bids low, buys more capacity, and scrambles to stay on top of the job, may very well be the next deal for the Salvage Company. However, the company that does their homework, prepares for the growth, and makes that job profitable is one step closer to evolving to the next level, the large coater.

Large Coaters

Large job shop powder coating companies are truly amazing businesses. The sheer volume of product that can be finished in one hour can stagger the imagination. Hundreds of employees hang thousands of parts each hour for a variety of customers. Fixtures and equipment allow high levels of efficiency. SPC and quality control keep rejects in the parts per million, and material usage at a minimum. A large coater may use 10,000 lbs of one powder on one job in a month and have less than 100 lbs. unaccounted for.

Though these large coaters may have started in a garage, their management has made the right decisions as to when to grow, how to price jobs, how to utilize resources effectively, and how to manage their evolution with control and structure. That is not to say that they have not made mistakes, but they have learned from those mistakes and have taken corrective action to avoid them in the future. This is the key to the evolution of the powder coating job shop.

OEM Coaters

Although an OEM coater has the benefit of having a captive customer, many OEM coaters have excess capacity and compete in the realm of the powder coating job shop. Though they have the advantage of a guaranteed workload, they face the same pitfalls as the small coater does. As the OEM coater competes in the open market, the challenges of capacity, scheduling, flexibility, and growth, effect them as well. In fact, some successful OEM coaters, through the benefit of their parent company, branch out to become independent finishers, and ultimately large powder coaters.

HOW MOST JOB SHOPS OPERATE

Most powder coating job shops operate in a similar fashion, regardless of size. Whether large or small, the name of the game is profit. The question is, "What kind of jobs do I want to run that will best fit my capacity and generate the most profit?" Obviously, the market will determine what jobs are available, and the hard question is "What jobs should I let go?" There are four basic types of jobs that a job shop has to choose from. The first three are roots of the fourth. They are the one time job, the occasional job, the repeat job, and what I call the carrot job. Each type of job has its advantages and disadvantages.

One time Jobs

One-time jobs are just that, a one time job. Whether it is Joe's bumper or the Liberty Bell, chances are you will only powder coat it once. There are actually more one-time jobs than any other type of job in the market. Because of the nature of powder coating, the finished product, when done correctly, will only need to be finished once, and that finish will exceed the life of the product. Chances are, Joe will probably sell his truck before the bumper needs to be re-coated. The advantage of this type of job is that it is usually a good fill in if the customer has no time constraint. If it is a rush job, a premium can be charged. The down side is the material cost. If the customer wants a specific color or material, the cost of the material alone can make the job uneconomical.

Occasional Jobs

Occasional jobs are usually same lot production runs. They are usually seasonal products that are in demand only in limited quantities, but are required the same time each year, such as snow shovels, rakes, and electric heater housings. The volume may increase if the product is successful, and the job may never come back if it is not. Or, they may be parts that are run for stock inventory but are not quick sellers. An economic order quantity is run to maintain a competitive price, and the job does not return until the inventory is depleted. The advantage of occasional jobs lies in the fact that with each production run, the efficiency gets better, but the price remains the same or increases. The down side is the same as with the one time job. If you buy powder for the job based on the initial quantity, the price is higher and either the profit or the potential of getting the job is lower.

Repeat Jobs

Repeat jobs, especially those under contract, are the powder coating job shops job of choice! Whether daily, weekly, monthly, or quarterly, the repeat job offers the greatest potential for profit. When quoting a potential repeat job, the coater

has several options to offer the customer. A flat piece price, a quantity discount price, a price ramp down to share the benefits of the learning curve, elimination of a set up charge, a one time tooling and fixturing charge, and volume discount on material costs, are all options available to job shop when quoting a repeat job. The main advantages are the security of the repeat business and the opportunity to improve the efficiency of the job, and therefore the improvement of profit margin. The down side is the cost of misquoting the job. If you have signed a contract and find out after the second production run that you missed something, the job can quickly go from a potential winner to a definite loser.

Carrot Jobs

Carrot jobs come in all shapes and sizes. Some are bonified and some are just plain fiction. A carrot job is usually the end product of an extremely optimistic entrepreneur who is convinced that this job is the better mousetrap. "If it can be finished at a lower cost, it will be initially competitive. This will allow it to gain market share and take off to become the best thing since the pet rock. After the initial 100-piece run, the volumes will grow to the millions within months!" Nine times out of ten, this is the scenario, and you never see the job again. However, a successful entrepreneur has the memory of an elephant, and if and when that product is successful, if you helped out, you have the contract. If not, your competitor will thank you!

Another type of carrot job is the hybrid. It is the one timer that may become an occasional, or the occasional that may become a repeat. The advantages and disadvantages are proportional to the level of investment, research, and intuition that are applied. Many carrot jobs, over time, turn out to be well worth the effort. The beauty of the successful ones lies in the fact that the finisher is often largely responsible for their success!

COMPETITION BETWEEN INDIVIDUAL FIRMS

If you own or work for a powder coating job shop, chances are there is a competitor within 60 miles of you. You may not even know they exist, and they may not know about you either. In some cases, competition may be relatively friendly, and shops may even share jobs and powder. In other cases, competition may be brutal, and competing shops may consistently under bid jobs to keep customers. Either way, there are several general types of jobs, and each firm will have their own way of selling to the customer.

Local Jobs

Most jobs a powder coating job shop does are local jobs. Even if the shop has its own truck, the freight costs often make out of town jobs difficult to compete on. Depending on the size of the city and the business environment there, foundries, fabricators, and stamping houses are usually the main source of work. If a large industry, such as the automotive industry has a plant in the city, several powder coaters may service that one company. Usually a small powder coating shop will

need at least several local jobs to keep busy. Larger shops may need several dozen. Depending on the state of competition between firms, some customers may take advantage of the market environment and continually requests re-quotes and price reductions. This often leads to the elimination of one firm, as the profit margins become too small for them to survive. For most companies, local jobs are the bread and butter of the business.

Niche Jobs

Because firms are built and grown by different people and on different jobs, the company's capacities will differ. Rarely are all competitors in a market armed with the same tools and equipment. Also, because different companies will purchase capital to run different jobs, they inherently create niches for themselves. A niche job is a job that one company develops that is relatively specialized. Whether it is long parts, assembly, two coat or two color applications, these companies develop an expertise to run certain jobs that differentiates them from their competitors. In many cases, the niche jobs are higher margin jobs than most other jobs, mainly because no one else can do them.

Big Opportunities

Once in a while, a really big job comes along that all of the competitors want to run. It may be a multi-year contract or high volume job that will fill the shops capacity and cover most of the overhead. The firm that lands the job will have both an advantage over its competitors and a hurdle for future opportunities. On one hand, the job will consume much of the company's capacity and assure that the company will remain busy. On the other hand, the job may cause other customers product quality and/or deliveries to fall. Also, if the big job required a smaller profit margin to assure commitment from the customer, other more profitable jobs may be sacrificed.

One other danger that is often present with big opportunities is the tendency of the company to want the job too badly. If proper care is not taken to make sure that the job is quoted within the means of the companies resources, or if mistakes are made and details missed, the job can quickly turn into an anchor that ultimately drags the company down. If the job requires the finishing of thousands of parts per week, and the price is low by a dime per piece, and there is a contract involving liquidated damages, the end result is obvious.

COMPETITION WITH OEM's

Sometimes a powder coating job shop will find itself competing with an original equipment manufacturer. This competition may be for an in-house job that the manufacturer wants to outsource, or it may be for a local job that the OEM quotes to fill unused capacity. Both of these scenarios can be very frustrating for the job shop.

Competing with an In-House Line

When a large company with an in-house paint line wants to convert some or all of their painting to powder coating, the local powder coating companies are usually put on the spot. The OEM has an estimate of its internal finishing costs, and would like the powder coater to do the work at a savings to them. Usually the biggest challenge for the powder coater is to educate the customer about the differences between paint and powder, and obtain an accurate cost of the current painting process. When a union company tells me that their cost to paint is \$.02 per pound, and my non-union shop labor cost is twice their estimate, I know I have an up hill battle. The key to quoting OEM work is to maintain focus on your profit goals, and make sure you have done a thorough job evaluating your costs and methods. If the job doesn't look like it will make money, it probably won't, and they are better off painting it! However, if you can educate them on the differences in both cost and quality of finished product, you can most likely build a strong and mutually beneficial relationship.

Competing with Extra Capacity

One of the most difficult competitive relationships a job shop powder coater can face is competition with an OEM's extra capacity. When a fabricator has an in-house powder coating line, and they have excess capacity, they often go out into the market to compete on local jobs. Their main advantage is that they can be highly competitive because most of their overhead is absorbed by their in-house work. This allows them to be selective in the jobs they want, and effective at taking them away. Usually it is best to compete on delivery and service rather than on price alone, as their in-house product will usually take delivery priority over an outside customers product.

HOW TO REMAIN COMPETITIVE

The challenge to every type of business in the global economy is two fold. It is not good enough to just be competitive, companies must also be profitable. For many powder coating job shops, the shareholders are the proprietors, the ones in the spray booth, unloading the trucks, or even hanging the parts on the line. Just being competitive is not good enough for them, they want to profit! However, if the competition is strong, they may settle for less profit than you. And therein lies the challenge. How do you keep focused on the jobs in front of you while still keeping an eye in the rear view mirror at your competition.

Know Your Business

The number one factor for success in the world of finishing is to know your business. Every one in your organization that is involved in management, sales, production, and quality control, should be well versed in the basics of powder coating. What is the difference between a thermoset and a thermoplastic resin? Between line and batch work? Electrostatic spray versus fluid bed dip? Corona versus tribo? Iron phosphate versus zinc phosphate? What is the difference between epoxy, hybrid, polyester, and TGIC polyester? If your Q.C. or sales rep can't answer these questions, chances are, your customers will find someone who can. However, if all of your key people are well trained and have a full understanding of what your business does, your customers will respect them and will seek your advise as well as your business.

Stay Flexible

Flexibility is inherent in the definition of "job shop". However, the vision that goes along with that flexibility is often overlooked. If a customer calls you about a job that requires a PVC coating, and you currently don't use vinyl, you may send them on their way to find someone who does. If a job requires assembly or final packaging, and you are not set up for it, turning that job away has an opportunity cost that may prevent you from doing a substantial amount of work for them in the future. The point is, keeping an open mind to the possibilities is what creates opportunities for the future. One job that you set up for today may lead to another very profitable job tomorrow. The company that limits their vision limits their opportunities. The other side of the coin is to learn, research, understand, and control the areas of expansion so as not to dedicate too much resource into a project that has no chance of covering the cost of that project.

Develop Niche Markets

Niche markets are markets with few or no competitors. They usually involve jobs that are unique or require specialized materials and equipment. The benefit of such jobs is the high profit margin that can be obtained. Most finishers can powder coat doorknobs for Ford at \$.03 each, but how many can coat a cement mixer? The margin on a \$.05 die spring may seem good if you coat 500,000 of them, but can you coat and assemble ATM machines? Do you sandblast? Can you apply 40 mils of functional epoxy to a bus bar? Can you coat with Teflon, nylon, or Kynar? These are some of the potential niche markets that require time and money to cultivate, but the end result is a profitable supplement to monthly bottom line.

Focus on the Basics; Quality, Delivery, Total Customer Satisfaction

No matter what types of finishing you do, the path to a profitable business is still the same. The customer pays the bills, and if the customer is satisfied, the bills get paid. The best way to keep your customers satisfied to fulfill their basic needs. A customer who receives the quality of finished product that is expected will be satisfied. A customer who receives the product on time will be satisfied.

A customer who receives quality product on time will be totally satisfied, even if the price is a little higher than the competition. There is an old saying, “there is never time to do it right, but there is always time to do it over.” Re-work costs both you and the customer. If a problem arises and a delivery promise can not be met, keeping the customer informed of the problem will go a long way to maintaining the relationship, as some mistakes are inevitable. The rule of thumb should be “get it done right, and get it done on time.” Your customers will not only thank you, they will pay you.

WHAT IS NEEDED TO SURVIVE IN THE NEW MELLENIUM

The final part of this paper will attempt to make some recommendations that you will find useful in your business. I do not pretend to think that I have all of the answers, however, I do think that most of them are no different than the ones that helped Ford and Rockefeller become successful. Although the global marketplace and the Internet were not available to the successful business pioneers of the past, I feel confident that they would have exploited their usefulness as easily as they did the means of their era.

Customers

“The customer is king”, “the customer pays the bills”, and “the customer is always right”, are catch phrases that have stood the test of time. However, in fact, the customer is often ignorant, the customer is often unreasonable, and if the customer does not pay their bills on time we don’t ship the customers product, are the realities of business in the twenty-first century. The key to a successful relationship with your customers is communication.

First, the customer must be educated. It is critical that the customer has no doubt what service is being provided when you quote a job. From the inbound freight to the packaging and delivery of the finished product, every aspect of the finishing process is the responsibility of the finisher to define. In most cases, the customer has no clue as to how the finished product should be packaged to prevent damage in shipment, so that should be clearly explained in the quote.

Second, the customer must understand the limitations of the finisher. If you quote production quantities of 1,000pcs and the customer ships 10pcs this morning and needs them this afternoon, (A) they may not be able to get them, and (B) they will not be at the quoted price. As mentioned earlier in the paper, the finisher is not a wizard who is able to magically and instantly finish the parts. Ovens must be turned on, fluid beds filled, masking may be required, and all of this takes time and costs money. Certainly a few favors can be done for a good customer, but a good customer does not go to the well too often.

Finally, if your company is to be successful, customers must pay on your terms. It is imperative to do the research on new customers, especially if those customers are large. For the small coater with a large customer, that big job can have your account receivables up to \$100,000 in one month. If your vendor payment terms are 30 days, and your payroll is weekly, when your big customers check comes in 90 days it may come to an empty office. For smaller accounts,

although it is very hard to do, holding shipment on an order is better than shipping it for free. That is the disadvantage for being the last link in the production chain. Everyone else had to be paid for the product to reach your door, and there may not be enough left to cover your price. Make sure your customer knows that you expect to be paid, and that COD is an acceptable form of payment.

Competitors

Competition is not a bad thing. No matter how small your pond, or how large your business, the competition will force you to improve. In general, the free enterprise system forces companies to keep on top of their game. This benefits both the customers and the suppliers. The key is to understand your competition without becoming obsessed with them. What they do should not dictate what you do, for if it does, you are going in the wrong direction. In most markets, competitors vie for some jobs, but individual companies maintain most jobs without competitive threat. This is due to the customer relations that the finishers build with their customer base.

If a new player enters the market and undercuts the existing finishers' prices to gain market share, some customers will inevitably shift to them to gain competitive advantage over their competition. Depending on the abilities of the new company, they may be successful in attracting customers away from the existing finishers. If so, all finishers may have to re-evaluate their profit goals and pricing structures to compensate. (This is where a good niche market comes in handy.) In most cases, this is a positive change. However, if the number of competitors exceeds the volume of work in the market, the competition can increase until one or more of the finishers is forced out of the market, i.e. goes out of business.

Compliance

Compliance refers to government regulations. In today's market, compliance can make or break a company. One of the reasons for the success of the powder coating industry as whole is the advent of government regulations on the liquid paint industry. Before the current state and federal regulations were created on VOC emissions, disposal, and handling of paint and solvents, powder coating was, in most applications, not competitive with paint. The need for ovens to cure the powders gave the air-dry painters a cost advantage that kept powder at the edge of the market. Many paint shops even used their spent solvents as weed killer around their plants until regulations required reporting on use and manifests of disposal.. Today, most government regulations are still mostly focused on the liquid finishing industry. However, as the environmental concerns with such things as NOX emissions, TGIC exposure affects, and disposal of used powder and wash line chemicals increase, so will the costs involved with keeping in compliance. To be sure, the pendulum swings both ways, and the day may come when paint is knocking on our door.

Change

In the good old days, all a company had to do was take a part, coat it with plastic, and send it to the customer. Business came from the company down the street, sales were done door to door, and all metal parts were fair game. Today, in the global market, fabrications, castings, and stampings, are moving off shore to Asia and south to Mexico and Central America. And the quality of finished product is improving through technological improvements in both materials and application methods. The challenge facing the domestic powder coating job shop is to not only find domestically produced products to finish, but also to offer foreign companies the value added services needed to finish their products that have domestic demand. Today's powder coater must be able to not only compete in the finishing market, but must be able to assist the companies producing the parts to be coated in their fight to remain competitive.

The Internet has created a vast opportunity for those companies with the vision to exploit its power. It is now possible to create a relationship with a customer that may be hundreds of miles away, by offering finishing services to them in route to their customers. A powder coater in Nevada can finish and package product for a customer in Mexico whose product is shipping to Seattle. A powder coater in New York can capture the business of a foundry in Ontario whose finished product is in route to Florida. By using the Internet as a sales tool, no sales person has to knock on their door, they only have to go on line to find and develop this relationship.

Finally, no longer are metal parts the only parts that are suitable for powder coating. With the development of low cure powders and visible light cured resins, wood products and plastic injection molded parts are now being powder coated. These and other markets will be developed through the ingenuity and perseverance of the powder coating job shop as the desire and the vision of the entrepreneurs who run them continue to explore the possibilities.

Summary

As we cross the threshold of the twenty first century, the business world in general is an open book. Many of the chapters that are written will tell of successes and failures in all forms of business. No doubt, the powder coating job shop will play an important role in that future, and will be lucky to get a footnote at the bottom of the page. The Mom and Pop shops and the small coaters will rise and fall, and as the world grows smaller, the challenge to be successful will surely grow larger. But when the dust settles in the proverbial spray booth, the company whose product is the best seller will most likely have had it finished by a job shop powder coater. And on that note, I am FINISHED!