

NEW METHOD PLATING

Est. 1931

Finisher's Profile

'Old' fashioned fundamentals keep them coming back to New Method Plating

Much has changed since 1931, when Ralph Capalbo, Sr. founded New Method Plating & Enameling Company in the basement of his parents' home in Worcester, Mass. For one, many of the advanced pretreatment and plating chemistries and additives widely in abundance today had not been developed; sophisticated computer-controlled finishing systems were fantasy (heck, televisions were not even mass produced at the time!); and environmental controls were light years away from the modern, progressive systems in operation today.

At the same time, many of the principles, strategies and philosophies that propelled New Method Plating Company in its infancy more than 80 years ago (hard work, investment, innovation and ingenuity, to name a few) are still applicable today despite all the dramatic changes witnessed in both manufacturing and in business in general. It's a legacy that's particularly relevant as the company steadily transitions to a third generation of family management.

"My father was an entrepreneur at the age of 17," said Ralph Capalbo, Jr., the current president of New Method Plating Company. Ralph's father, Ralph Capalbo, Sr. (see Figure 1) was also self-educated and had a strong mechanical ability. He was pretty creative, too. "I remember how he fabricated plating barrels out of paint buckets," Capalbo recalled. "Dad had a back-up for everything."

Countless examples of such imaginative thinking dot the time line of progress that New Method Plating Company has seen over the past few decades. The first in a long line of those achievements was set in motion in 1940, when Ralph Capalbo, Sr. moved the business to an industrial/residential area on Hammond Street — the site of its current location. Ironically, the site alone was a reflection of the state-of-the-art construction of the day (see Figure 2). As Ralph Capalbo, Jr. tells it, the building his father purchased in 1940 had literally been "driven" to Worcester from St. Louis. This prefabricated structure was actually showcased at the 1913 World's Fair as an example of the construction of the "future."

The advancements seemed to accelerate from that point onward. Shortly

**NEW METHOD PLATING
AT A GLANCE**



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www.newmethodplating.com
Number of employees: 19
Year founded: 1931**

after settling into the transplanted pre-fab facility — which the Capalbo family fully restored to its original appearance — the family patriarch developed a process to convert cadmium, a characteristically "drab" finish, into something more aesthetically appealing while still providing the dependable corrosion resistance for which cadmium is known. With this innovation, said Ralph Capalbo, Jr., New Method Plating Company developed a reputation as a go-to source for specialty plating services (see "Capabilities" sidebar).

The next phase of New Method Plating Company's development not only included a physical expansion entailing several thousand additional square feet of space, but it also



Figure 1. Ralph Capalbo, Sr. founded New Method Plating in 1931.



Figure 2. The early days: New Method Plating was established more than 80 years ago. The original, prefabricated building, purchased in 1940, was "driven" all the way to Worcester, Mass., from St. Louis, Mo.

FINISHER'S profile



Electronic components get a copper strike prior to chrome plating.

included the incorporation of advanced plating processes. Ralph Capalbo, Sr. purchased the company's first fully automated, return-type rack cadmium plating line just before the end of World War II, following that up with the acquisition of an automatic nickel-chrome plating line. In the years that followed, the unit was modified and expanded to facilitate plating of zinc die castings.

"We were one of the first platers to plate zinc die castings," said Ralph Capalbo, Jr. "Not too many platers can do that."

It was during this critical growth phase that New Method Plating Company received an education in the impact of changing market dynamics. With the end of World War II and the

subsequent loss of military contracts, diversity became the key element to the company's growth as Capalbo sought out new markets. The 1960s brought the replacement of the WWII automatic line with a newer, larger, and faster cadmium rack line and the addition of a large, high-speed fully automatic nickel-chrome plating line.

The 1960s also ushered in an era of a different sort for New Method Plating. In 1963, Ralph Capalbo, Jr. worked closely with his father on the installation of the company's first barrel plating automated programmed hoist. New Method Plating Company's fifth plating line — a computer-controlled automatic barrel nickel programmed hoist unit — was installed in 1997.

PRIMARY SUPPLIERS



Gilbert & Jones
Prosys Finishing Technologies
Luster-On
Worcester Chemical
Jessup Engineering
GOAD Tank Liners

The improvements made to New Method Plating Company's operations over the years have not been limited to the production line. As a matter of fact, a significant portion of the company's revenues are reinvested in the business to ensure ongoing compliance with both state and federal environmental regulations. This investment is immediately evident when you tour through New

Method Plating Company's high-tech wastewater treatment facility.

"We have always shown a strong commitment to protecting the environment," said Ralph Capalbo, Sr., pointing out key aspects of the intricate system. A stand-out feature is a computer-controlled station that monitors virtually every aspect of the company's effluent treatment operation — all in real time and supervised by a licensed operator. Built-in mechanisms provide detailed reports for state inspections. What's more, the structure also employs fortified walls and ceilings to provide the requisite containment in the event of a spill.

ATTENTION TO DETAIL

While New Method Plating Company's finishing prowess and expertise are the primary reasons for the company's ongoing success, these are not the only factors. This finisher's emphasis on providing exceptional customer service to its diverse clientele is also a key attribute. In illustration, following are a few brief case histories highlighting the company's capabilities:

Case #1. Electroplating of a forging for the military. New Method Plating Co., Inc. was approached by a customer in the military industry to perform cleaning and cadmium plating



Some of New Method Plating's employees have been with the company for decades, with the senior-most workers going on more than 30 years.

services on a forging. The job proved challenging due to tight timing requirements and the many military specifications and industrial standards that needed to be met. In addition to cleaning the forging,

CAPABILITIES & CERTIFICATIONS

- ISO 9001: 2008 AS9100 approved
- NADCAP accredited
- New Method Plating Company offers cadmium, zinc, copper, nickel, and chrome plating on steel, brass and zinc die casting substrates.
- Finishes are available in a wide variety of RoHS and non-RoHS chromates (Clear, Yellow, Olive Drab, Black).
- Pre- and post-plating operations include: cleaning, seal coating, sandblasting, degreasing and large-capacity hydrogen embrittlement baking.
- Other services include: passivation and solvent vacuum degreasing.
- Industries served: aerospace, military, Department of Defense, fasteners, communications, electronics, security/anti-theft devices and valves.



One of New Method Plating Company's specialties is custom finishes for fasteners.

FINISHER'S profile



With its own trucking fleet, New Method Plating Company can provide pick-up and drop-off services for customers near and far.

New Method Plating Co., Inc.'s automatic station return plating line allowed for plating and chromating to extremely tight tolerances of 0.0005"–0.0008 cadmium. The parts were made using 4140 alloy steel and heat treated off site to RC 38-40. The facility's high-capacity ovens allow for hydrogen embrittlement relief (pre- and post-plate baking). New Method Plating Co., Inc. also assumed responsibility for final quality inspection and sign-off. Furthermore, the company employs Fischer X-Ray technology to ensure precise thickness testing, as per NADCAP's stringent requirements. New Method Plating Company was able to deliver this high-volume order (5,000 pieces) in just three days, leveraging its NADCAP accreditation, its ISO 9001:2008 AS9100 certifications, and its plating expertise.

Case #2. Cad plating job for the aerospace industry. New Method Plating

Company, Inc. performed the cadmium plating of specialty screws for an aerospace industry customer. These 8-32 x 0.401 screws were plated and finished to very tight tolerances of 0.0003"–0.0006" thickness.

The project, which called for yellow cadmium treatment, included cleaning, plating, baking and chromating on an automated station return plating line. The parts were made from 8740 machined alloy steel and heat treated off-site to RC 36-40. The plating project entailed 115,000 screws, and was completed and delivered to the customer in three days.

Case #3. Nickel plating job for the commercial hose/piping industry. New Method Plating Co., Inc. was approached to perform its precision nickel plating services for a Rhode Island-based manufacturer of commercial hoses/piping. The part to be plated was a brass male and female hose barb measuring 5/8" x 1 1/2", to tight tolerances of 0.0001"–0.0003". This long-run job required large volume production — several million pieces, in fact.



Still going strong. This computer-controlled automatic barrel line was installed in 1997.



Father & sons. From left: Chris, Nick and Ralph Capalbo, Jr. New Method Plating enters its third generation of family management.

THE NEXT CHAPTER

In much the same way that Ralph Capalbo, Jr. supported his father's efforts in New Method Plating Company's sophomore years, Ralph's sons have also taken increasingly active roles in the next phase of the company's development. Chris, Ralph Capalbo, Jr.'s oldest son, joined the company in 1997, applying the knowledge he learned studying chemistry in college. In some ways, Chris — a fixture at the National Association for Surface Finishing's Annual Washington Forum and the New England Surface Finishing Regional — has developed into New Method Plating Company's authority on regulatory matters, working closely with state environmental agencies.¹ Not long after Chris came on board, his brother Nicholas — who shares the title of co-vice president of opera-

tions with Chris — joined the company's management team.

"Nick likes the 'operational side' of the business, whereas Chris thrives on the customer-service side," Ralph Capalbo, Jr. noted. (Nick's mettle was tested recently when he was called upon to handle an emergency while his big brother and dad were away at a conference.) "Nick really stepped up," his father recalled.

Of course, everything runs much more seamlessly when the entire New Method Plating Company team looks out for one another, like family. Many of the 19 men and women employed with the company have been there for more than 20 years, with the senior-most workers going on 30-plus years. That translates not only into invaluable loyalty to the company, but it also means each worker feels they have a stake in the business.

"We've worked hard to build a good

nucleus of people," Ralph Capalbo, Jr. declared. No doubt that "grandpa" would agree.

Visit www.newmethodplating.com for more information.

REFERENCES

1. New Method Plating is a member of the National Association for Surface Finishing (NASF), NAMF-New England Chapter and AIM, the Associated Industries of Massachusetts, a dynamic and innovative association of Massachusetts employers. AIM, which supports public policy that encourages economic growth and opportunity, is guided by the belief that only a vibrant, private-sector economy creates opportunity that binds the social, governmental, and economic foundations of our commonwealth.