

“After upgrading with ITW Gema®, we have consistency from batch to batch – every time!”

THE COMPANY

Hydro Aluminum is a leading aluminum extruder and the largest drawn tubing producer in North America. With 11 aluminum extrusion facilities, customers can count on getting the right metal at the right time. Their St. Augustine, Florida facility specializes in the contract manufacturing and finishing of a wide variety of extrusions. Examples include wind chime tubing, aluminum boat decking, awning components, soccer goal components, and compressed air piping systems, along with other specialty products.

THE CHALLENGE

Having extensive experience with a liquid electrostatic finishing system, Hydro Aluminum wanted to bring the benefits of powder coating into their operation. Their initial powder coating system included manual guns from ITW Gema. However, the company soon realized that a higher level of automation was required to achieve the consistency and quality their customers demanded.

THE SOLUTION

Hydro Aluminum chose ITW Gema for their powder system upgrade, based on their positive experience with Gema's manual guns and the excellent service from ITW Gema's distributor, Dietz Supply Company. Hydro Aluminum installed a 9000 cfm ITW Gema cartridge booth, fitted with OptiGun® automatic powder guns, OptiStar™ control units, and OptiFlow™ high performance powder pumps. A 30' x 65' environmental clean room was supplied by Dietz Supply.

THE SAVINGS

Upgrading to ITW Gema's OptiFlex™ automatic powder coating system resulted in numerous benefits for Hydro Aluminum. “Having a system that maintains consistency every time, has reduced the number of rejects and improved the quality of our finished products,” stated Scott Johnson, Regional Engineering Manager. Hydro Aluminum can now target new customers with higher coating requirements.

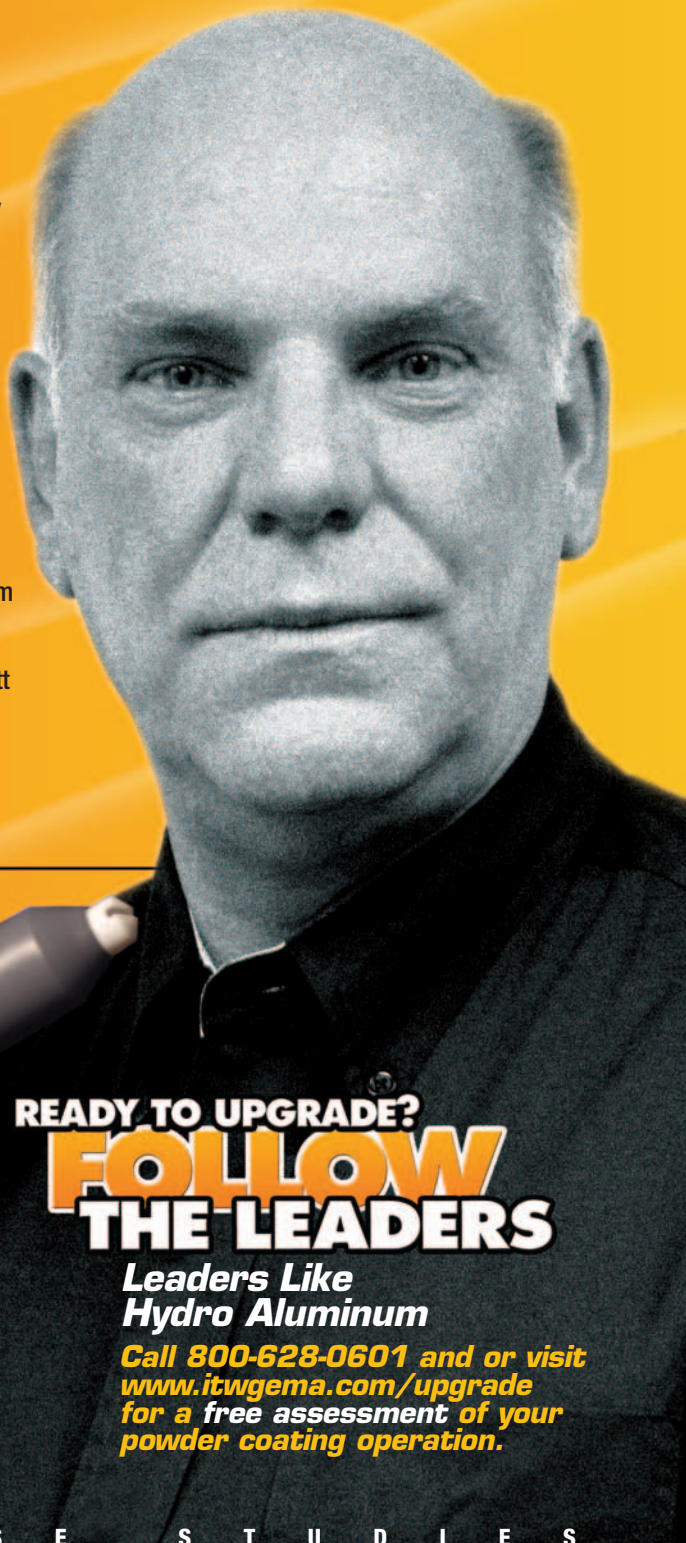
ITW Gema®

Superior By All Measures



“Previous success with ITW Gema's manual guns, along with the excellent service provided by our distributor Dietz Supply Company, made our decision to upgrade with ITW Gema an easy choice!”

Scott Johnson, Hydro Aluminum



READY TO UPGRADE?
FOLLOW
THE LEADERS

*Leaders Like
Hydro Aluminum*

*Call 800-628-0601 and or visit
www.itwgema.com/upgrade
for a free assessment of your
powder coating operation.*

Hydro Aluminum Achieves Consistent High Quality Coating with the OptiFlex™ Automatic System

**"We feel we have one of the most advanced powder application systems in the southeast."
- Scott Johnson**

Installing a new powder coating system from ITW Gema has given Hydro Aluminum the ability to provide finishing of the highest quality.

A case study from Hydro Aluminum

By installing ITW Gema's automatic powder coating system, Hydro Aluminum can provide a coating finish that meets even the highest of aesthetic requirements.

Company Background

Hydro Aluminum in St. Augustine, Florida, formerly known as VAW, was acquired by Norsk Hydro in 2002. Norsk Hydro, which has been in operation over 100 years, consists of 11 aluminum extrusion facilities in North America that provide contract

manufacturing, finishing, and fabrication services in a variety of industries which include industrial and electrical aluminum, consumer durables, building and construction aluminum, and transportation. Hydro Aluminum in North America provides metal procurement through final assembly and shipping, making them an attractive choice as a provider of aluminum products.



Existing Equipment and Challenges

Hydro Aluminum's desire for consistent high quality finishing was their primary reason for upgrading their powder coating system. Liquid finishing was being utilized previously, then powder coating through the use of ITW Gema manual guns. Hydro Aluminum needed automated technology to achieve the coating quality and consistency they desired.

In addition to quality and consistency, Hydro Aluminum was also looking for the following results in their upgrade:

- Increased capacity
- Reduced color change time and cross contamination (more than 50 colors are used, including exotic metallics, veins, and textures)
- Utilization of an environmentally friendly process

Equipment Installed

An ITW Gema Cartridge Booth and Powder Coating System consisting of eight OptiGun® Automatic Powder Guns, OptiStar™ Control Units, and OptiFlow™ High Performance Powder Pumps were installed in Hydro Aluminum's new Environmentally Clean Room. To improve consistency, Hydro Aluminum also included a ITW Gema AutoTracker™ Programmable Logic Control (PLC) which activates the guns and stores coating parameters. "By using the stored programs, we achieve process control from one job to the next, creating the consistency we were looking for," remarked Scott Johnson.

Through creative scheduling by Hydro Aluminum and the experience and flexibility of the installation crew, Hydro Aluminum was able to meet their customer delivery schedules throughout the installation. Scott Johnson noted, "No production time was lost during the installation, and the first part off the line was great!"

Savings

Previous experience with liquid technology and manual powder coating processes led Hydro Aluminum to seek new automated technology that would provide a repeatable and consistent coating finish. ITW Gema's distributor, Dietz Supply Company, provided Hydro Aluminum with the solution to meet their goals.

Following their system installation, Hydro Aluminum was successful in the following areas:

- Achieved a consistent high quality finish through process control and automation
- Increased productivity by as much as 10% on the powder coating line
- Reduced color change time to under 8 minutes
- Realized the environmental benefits of a powder coating line



Future Outlook

Due to the successful results achieved through Hydro Aluminum's powder system upgrade, they expect to increase their business through added capacity and acquiring new business opportunities with high end coating requirements.

"Service is very important to Hydro Aluminum – the service provided by ITW Gema and Dietz Supply Company is one of the primary reasons we chose ITW Gema equipment," stated Scott Johnson. With ITW Gema equipment and the ServiceNet™ distribution team, consistency of application, along with local service and support, continues after the installation is complete.

