

"Since we upgraded with ITW Gema, we cover more surface with less powder!"



THE COMPANY

Temple Products of Indiana, Inc. powder coats aluminum extrusions. While their parts are mostly used on recreational vehicles and cargo trailers, Temple also powder coats components for specialty vehicles like ambulances.

THE CHALLENGE

It had become clear that Temple needed to increase line speed significantly without reducing line density to handle their challenging production schedule. The existing equipment was not capable of meeting their demands and they were interested in upgrading to the latest technology the powder coating industry has to offer. After a lab trial at ITW Gema, Temple felt that the OptiSystem™ offered the solution they were looking for.

THE SOLUTION

An automated system including OptiGun™ automatic powder guns, OptiFlow™ pumps and OptiTronic Plus™ control units was installed. ITW Gema's AutoTracker™ Programmable Logic Controller (PLC) was added to enable automatic gun triggering and precision control.

THE SAVINGS

According to John Loomis, "We knew we were going to see powder savings, but we never expected to save this much – our powder usage has decreased by 40%." The OptiSystem allows Temple to put the right amount of powder on the part, creating less waste and enabling them to increase throughput by 60%. Upgrading with ITW Gema gave us the efficiency we were looking for and a **payback in just 3 months.**

ITW Gema

Superior By All Measures



"I got much more out of this upgrade than I ever expected – we're getting 60% more throughput using 40% less powder."

John Loomis, Temple Products of Indiana, Inc.

READY TO UPGRADE?
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THE LEADERS**

Leaders Like Temple

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

Temple Products of Indiana, Inc. Exceeds Expectations With OptiSystem™

"To go from 5 ft. to 8 ft. per minute, we needed an upgrade."

A new OptiSystem from ITW Gema increases productivity and lowers costs for Temple Products of Indiana, Inc., enabling them to overcome challenging production requirements.

A case study from Temple Products of Indiana, Inc.

Temple Products was faced with the challenge of drastically increasing line speed and capacity, but without sacrificing the quality their customers demand. The upgrade to ITW Gema powder coating equipment allowed Temple to meet those demands and save money.

Company Background

Temple Products was founded by Sid Schwartz in Detroit, Michigan in 1971. Originally, Temple was in the business of making shower doors. In 1975, the company settled in Elkhart, Indiana, became Temple Products of Indiana, Inc. and changed its focus. Temple now buys aluminum extrusions and adds value by cutting, punching and bending the parts to size and powder coating. Temple's components are mostly used in the recreational vehicle (RV) industry, but also go into the manufacture of cargo trailers and specialty vehicles such as ambulances.



Existing Equipment and Challenges

The existing ITW Gema powder coating system was fairly new. However, Temple needed to dramatically increase line speed without decreasing the line density. Getting more parts through the system faster meant they needed an upgrade to the next level of technology.

They wanted to get away from "toll painting," the practice of powder coating parts for customers outside their industry in order to supplement revenue. To do this, the challenge was increasing capacity to produce higher volumes of their main product and eliminate the supplementary powder coating that was forcing them to operate like a job shop.

In addition to the challenge of faster line speeds, they were also producing an intricate part that was difficult to coat. In order to get into the corners, they had to apply a lot more powder than necessary. A lab trial at ITW Gema demonstrated that the OptiSystem could sufficiently cover the Faraday Cage areas (corners) without over-coating the entire part.

Goals for the upgrade included:

- Improved film build control
- Decreased powder consumption
- Reduced paint line shift hours
- Increased throughput

New Equipment Installed

The new OptiSystem was installed in Temple's existing 8,000 cfm Diamond™ booth from ITW Gema. The upgrade included eight OptiGun™ automatic powder guns, OptiTronic Plus™ control units and OptiFlow™ powder pumps. An AutoTracker™ Programmable Logic Controller (PLC) was added to allow Temple to have automatic gun triggering, superior application control and advanced diagnostics.



The OptiTronic Plus control unit's digital technology allows Temple to achieve more uniform film build and gives them the ability to store up to 255 coating programs. Using the precision control of the OptiTronic units and working with Rohm & Haas to develop the optimum powder formulation, Temple was able to achieve the lowest possible film builds without sacrificing coverage of difficult Faraday Cage areas.

Savings

Temple can now coat more square footage using significantly less powder. According to John Loomis "We're so efficient we don't even have to reclaim powder anymore!" They also have seen a decrease in spare parts usage. The lower powder volume enables hoses, tips and electrodes to last much longer, saving money and decreasing downtime. They no longer have to rely on outside jobs to maintain their production goals, but are now able to focus on their primary area of expertise. All of their savings combined resulted in a **payback of only 3 months** on their investment.

Temple's upgrade achieved the following results:

- Reduced average film build from 2.0 to 1.2 mils
- Lowered powder consumption by 40%
- Eliminated 20 hours per week from the finishing line while increasing throughput by 60%
- Reject rate went from 4% to virtually zero

Future Outlook

Business has been very good for Temple Products of Indiana, Inc., and they are planning an expansion of both their welding and powder coating lines. They currently coat about 30,000 pounds of aluminum each day and have the ability to double that amount before they reach full capacity with their current system.

Temple has been very impressed with the service and support they have received and additional upgrades will certainly include equipment from ITW Gema.

