

"I feel like I got a whole new system simply by upgrading my old one!"



THE COMPANY

The Schulte Corporation combines both wood and wire to produce a variety of unique storage products for home, office and institutional use.

THE CHALLENGE

Schulte was concerned with material utilization and the capability of their existing powder coating equipment. Therefore, Schulte began considering new options for their expanding business. The plant engineer, Steve Koehl, turned to ITW Gema to improve their operation.

THE SOLUTION

ITW Gema upgraded the existing system with OptiTronic Control Units and new guns. Also included in the upgrade was a remote powder feed hopper and a vibratory sieve for reclaiming powder, improving quality and consistency.

THE SAVINGS

Schulte immediately realized a substantial reduction in powder, the elimination of downtime, and extended life for their wear-parts. After using the new equipment for three months, the average powder savings was 32%. Based on powder savings and cost, this translates into a **total payback in less than three months.**

"With ITW Gema's new OptiTronic™ controllers, I was able to dramatically reduce material waste, rejects, and labor costs. I've increased control over my system – and my profits. My return on investment has been exceptional."

Steve Koehl, Schulte Distinctive Storage

ITW Gema

Superior By All Measures



**READY TO UPGRADE?
FOLLOW
THE LEADERS**

Leaders Like Schulte

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

Schulte Improves Efficiency With OptiTronic™

Now that's how you coat wire products!

The OptiTronic™ control unit is the newest innovation from ITW Gema, and Schulte Distinctive Storage is proving that the OptiTronic truly lives up to its claims!

A case study from Schulte Distinctive Storage

The Schulte Corporation, a manufacturer of distinctive storage products for home or office, increases efficiency by coating their products using the new OptiTronic control unit from ITW Gema.

Company Background

The Schulte Corporation opened their doors in 1919 as a manufacturer of bathroom fixtures. Schulte continues to be a privately owned, family business, but has changed their focus to the manufacturing of storage solution products for the home and office.

Combining both wood and wire in their products, Schulte creates a variety of storage options for home, office and institutional use.

Existing Equipment and Challenges

Schulte began using powder in their Bloomington, Indiana facility 12 years ago in a Wagner booth, using eight automatic powder guns made by another manufacturer. However, as Schulte began considering new options for their expanding business, the plant engineer, Steve Koehl, turned to ITW Gema to improve their coating efficiency and quality.

The existing configuration reclaimed and resprayed powder directly from the bottom of the collector, which made cleaning the gun pumps very difficult.



Other problems with the existing equipment included:

- Inconsistent film build
- Excessive powder usage
- High maintenance costs due to spare parts usage
- Poor equipment reliability

The Lab Trial

Schulte's previous configuration called for hanging the wire shelves back-to-back. However, during the lab trial using the OptiTronic controls, the customer asked us to try hanging numerous parts in a stacked configuration. Even in this multi-layered position, ITW Gema successfully coated the parts and the OptiTronic controls achieved a film thickness within acceptable limits. No other competitor was able to demonstrate this capability!

Equipment Installed

ITW Gema replaced the existing system with eight OptiTronic control units and eight stationary PG-2AX guns. Also included in the system was a remote powder feed hopper and a vibratory sieve for reclaiming powder. The sieve and remote hopper allowed for improved quality and more consistent delivery.

Savings

The customer realized an immediate improvement with the new guns and OptiTronic controls, experiencing a reduction in powder delivery required to achieve the desired coating result. Since the coating thickness is more consistent, they have reduced their overall powder consumption. The reduction in powder consumption is being achieved from three specific areas:



1. Higher first-pass transfer efficiency
2. More efficient electrostatic control, allowing superior weld coverage
3. More uniform delivery control from the OptiTronic at reduced powder flow rates

Downtime has been eliminated and spare parts usage has been dramatically reduced. The reduced parts usage is due to the improved gun design and the lower powder outputs.

The main benefit of the OptiTronic controls is the powder savings. After using the new equipment for three months, the average powder savings was 32%. Based on powder savings and cost, **this translates into a payback in less than three months!**

Future Outlook

Thanks to the excellent results achieved using ITW Gema's OptiTronic Control Units, Schulte has consented to becoming a referral account for this new technology. They have agreed to allow other prospective customers to visit their facility to see the OptiTronic controls at work, and will also be partnering with ITW Gema to test other up-and-coming technologies. Schulte is also in the process of installing a new line that will feature OptiTronic controls with 16 stationary PG-2AX guns, an 8000 CFM dual collector cartridge booth and a PLC to automatically select the programs for the OptiTronic and to trigger the guns.

A significant benefit to this new line will be the ability to hang multiple parts across, as demonstrated in the lab trial, thereby increasing the line capacity by 100%!

