

***"Now that we've upgraded to ITW Gema, we have the color change flexibility to grow our business."***



#### THE COMPANY

Pioneer Manufacturing, LLC manufactures metal products for the Rogers Group in Clare, Michigan. Among the companies under the Pioneer corporate umbrella is StageRight, a distributor of major event staging and seating risers, and Rogers Athletic, which produces a full line of football practice equipment and athletic training tools.

#### THE CHALLENGE

Previously, color changeovers took four to six hours with two operators. Color cross-contamination was a major issue, so the only realistic solution was limiting production to one color. Pioneer wanted to automate their manual system, increase productivity, and expand their line to provide a variety of color and finish options.

#### THE SOLUTION

Pioneer attended an industry trade show looking for quick color change technology. After investigating what the competition had to offer, Pioneer decided ITW Gema, and the Magic Cylinder™ booth, was the best solution. An OptiSystem™, including OptiGun™ automatic powder guns and OptiTronic Plus™ control units, was installed, along with two EasySystem™ touch-up units.

#### THE SAVINGS

As a result of their upgrade, Pioneer reduced finishing labor by more than 75%, while achieving extremely quick color changeovers. "With one operator we can do a **complete color change in 3 minutes** if we spray-to-waste and **5 to 10 minutes** if we reclaim," stated Kyle Camp, Plant Manager, "This system has really exceeded all of our expectations!"

*"Before the upgrade we could offer our customers any color they wanted – as long as it was black. Now we have the fast color change capability to provide a wide variety of colors."*

*Kyle Camp, Pioneer Manufacturing, LLC*

**ITW Gema**

Superior By All Measures



**READY TO UPGRADE?**  
**FOLLOW**  
**THE LEADERS**

*Leaders Like Pioneer*

*Call 800-628-0601 and ask for Debra or visit [www.itwgema.com/upgrade](http://www.itwgema.com/upgrade) for a free assessment of your powder coating operation.*

# Pioneer Achieves Super-Fast Color Changes With the OptiSystem™ and Magic Cylinder™

**“ITW Gema exceeded all of our expectations.”**

Being one of the first companies in North America to install a Magic Cylinder™ powder coating booth from ITW Gema demonstrates Pioneer's innovative spirit and commitment to technology.

A case study from Pioneer Manufacturing, LLC

**Pioneer Manufacturing, LLC manufactures metal products for its sister companies, including StageRight (distributor of high-tech portable staging) and Rogers Athletic (manufacturer of football practice equipment). Pioneer was looking for fast color change tools and found the solution by upgrading to a new powder coating system from ITW Gema.**

EasySystem™ touch-up units are positioned at the entrance and exit of the booth in case manual touch-ups are needed.



The guns are controlled by OptiTronic Plus™ control units, which give Pioneer the most precise powder application possible. Light curtain part recognition was included to enable detection of various part profiles and only trigger the guns necessary to coat the part, saving powder and money. ITW Gema's AutoTracker™ Programmable Logic Control (PLC) maintains command over the entire system, ensuring accurate, repeatable results.

To achieve the fastest color changes possible, Pioneer also opted to install a Chameleon™ Color Management System. When it is time to change colors, the Chameleon goes to work cleaning pumps, powder hoses, suction tubes, and powder guns. This leaves the booth operator free to perform other color change tasks, saving time and making color changes extremely fast and efficient. Another color change tool Pioneer has implemented is the use of ITW Gema's Type 66 conductive powder hose. According to Kyle Camp, Plant Manager, “We feel fortunate to have the new color change hose, eliminating the need for dedicated color hoses!”

## Savings

Working in close partnership with local distributor Filter and Coating Technology, Inc. (FACT), ITW Gema was able to meet and even exceed Pioneer's goals. “My boss is a perfectionist,” explained Kyle Camp, “It was a good thing for me when ITW Gema exceeded all of our expectations!”

Pioneer's savings included:

- Eliminated one shift and achieved a 75% reduction in paint line labor costs
- With one operator, color changes can be completed in 3 minutes if they spray-to-waste, 5 to 10 minutes if they reclaim
- Throughput has been increased by 15%
- Line speed has doubled, while at the same time producing a higher quality finish and lowering reworks by 80%

## Future Outlook

Pioneer plans to continue to seek future powder coating solutions that offer flexibility and consistently high quality at a low cost. ITW Gema has those solutions and Pioneer intends to call on this partnership again when it is time to turn planning into reality.

The reason? Company President, Dave Rogers, summed it up when he said, “With the multiple sizes and colors we do, flexibility is a key issue. We would definitely buy ITW Gema again because they have been able to help us achieve our goals.”



## Company Background

Pioneer Manufacturing, LLC manufactures metal products for the Rogers Group in a state-of-the-art facility in Clare, Michigan. This facility is shared with sister companies StageRight Corporation and Rogers Athletic.

StageRight sells portable staging and seating risers, acoustical shells, ADA (Americans with Disabilities Act) ramps, and crowd control barricades. A full line of football practice equipment and athletic training tools is produced by Rogers Athletic, including blocking sleds, strength training equipment, goal posts, and stand-up dummies.



## Existing Equipment and Challenges

Prior to upgrading to their new system from ITW Gema, Pioneer was using a completely manual Nordson system. They were running two paint line shifts with two operators working each shift. It took four to six hours to change colors with two operators, so offering multiple color choices to their customers was not feasible – black was the only color available.

Pioneer was ready for an upgrade and their expectations included:

- Reduction of finishing line labor costs
- Color changeovers in under 20 minutes
- Increased throughput
- Faster line speed

## Equipment Installed

Pioneer chose the Magic Cylinder™ powder coating booth from ITW Gema for their upgrade. Because this booth is such a unique and revolutionary piece of equipment, Pioneer designed their environmental room with curved glass walls specifically to showcase it.

Parts pass through the Magic Cylinder booth, where twelve OptiGun AX™ automatic powder guns coat the parts. The guns are mounted on ZA02 reciprocators to enable automatic in/out and up/down gun movement.