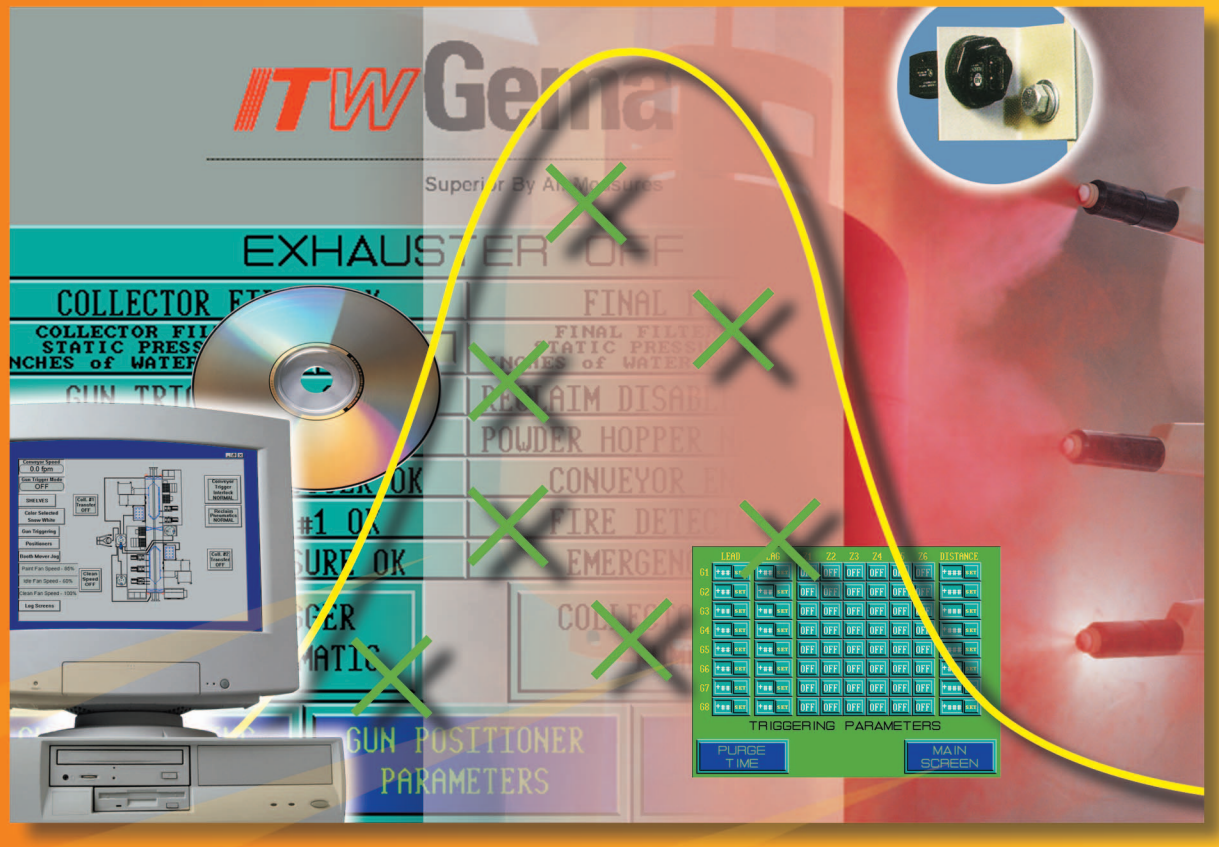
AUTOTRACKER™ 2.0

PROCESS CONTROL SYSTEM

The World Leader in Powder Coating Systems



Ultimate control of powder coating is within your reach...

AUTOTRACKER™ 2.0 maximizes the accuracy, efficiency, and economy of your powder coating applications.

ITW Gema

Superior By All Measures

1 Higher Quality Finish Every Time

More accurate film build. Less waste.

- The **field-proven** AUTOTRACKER™ 2.0 Programmable Logic Control (PLC) automates standard booth components, to provide **consistent, high quality powder coating** time after time.
- Photo cell or light curtain provides incoming part recognition, automatically triggering guns on and off as needed (and optionally moving them in and out) for **accurate, repeatable results** and dramatically reduced scrap.
- **More consistent film builds improve finish quality**, meeting tighter tolerances minimizing overspray and edge build-up.
- Automatic line purging **eliminates powder "bursts"** when guns first trigger on.
- Available "part recipe" system **automatically adjusts** optional analog powder delivery controls, optimizing gun current, voltage, air mix, flow rate and other settings for each application style.
- **System monitors powder and booth system functions** and identifies motor overloads, filter status, compressed air quality and powder reclamation and reprocessing factors.
- Automated controls yield **increased efficiency**, even with frequent changes in part configurations.

2 Remarkable Flexibility

Adaptable to a wide variety of parameters.

- AUTOTRACKER 2.0 handles **any coating application** need from the simplest to the most sophisticated.
- **Control programs trigger guns** for line gaps, different vertical lengths, horizontal and vertical zoning, and horizontal target distance.
- Gun movement control may utilize reciprocators, oscillators or multiple axis machines.
- Optional in/out positioners independently move guns, to maintain **precise horizontal gun-to-part distances** for consistent overall finishes.
- System accommodates both **simple zone recognition, variable zone** or more **complex style recognition**, using photo cells or light curtains to scan parts conveyed into the booth.
- **Zone recognition** accommodates many dimensions, activating guns in specific booth “zones,” based on a digital “image” part profile stored in the PLC.

User-friendly, color graphic displays on the AUTOTRACKER 2.0’s operator’s panel are accessible at a touch, making it simple to monitor any aspect of system status at a glance.

- **Variable zone recognition** accommodates families of products that have similar coating requirements such as flat panels versus deep parts.
- **Style recognition** meets more advanced needs, using sensors or remote inputs to identify the individual part style and allow for such needs as triggering guns at precise part locations.
- Control can also extend to other production systems, for **networking** and absolute coordination of all processes.
- Optional modem communication is available for **remote program adjustments and diagnostics**.

3 So Smart It’s Simple

Less training. More productivity.

- User friendly, **color touch-screen operator interface** panel allows for one-touch control access and at-a-glance monitoring of all systems and operations.
- Controls for gun triggering, gun moving operations, recovery systems, conveyor, and flame detection interlocks, and other booth functions.
- **Basic-level** PLC unit stores information to control gun triggering and purge.
- **Advanced-level** PLC unit recalls such data as individual gun delivery, voltage and settings for each part style.
- Once programmed, the system is **easy-to-handle for operators with minimal training and experience**, greatly cutting applied powder costs.
- Dependable repeatability increases productivity, turning out **more parts in less time** with less wasted powder and effort.

4 Saves You Money

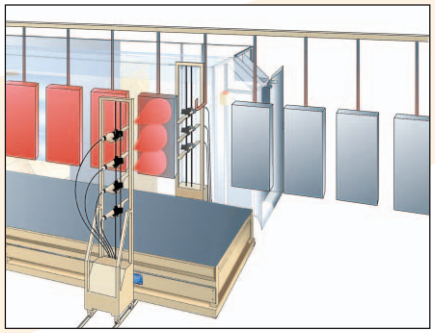
Better powder usage. Less equipment wear.

- AUTOTRACKER 2.0 **absolutely minimizes overspray**, reducing powder consumption per operation.
- Programmed control also **significantly increases first-pass transfer efficiency**, lowering average per-part cost and wear on equipment.
- Efficient coating **requires less recycled material**, improving the quality of powder applied without raising costs.
- Reliable system repeatability **minimizes coating rejects**.
- Even very sophisticated production runs can be completed with **fewer operators and less overall expense**.
- Better application control offers you more consistent film builds and **saves you money**.

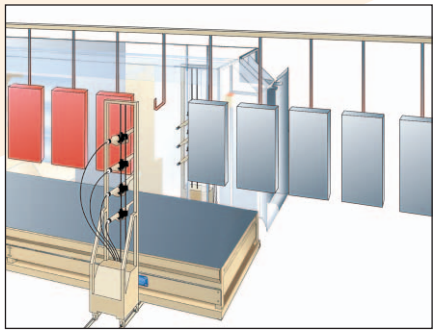
ITW GEMA’S 5 YEAR WARRANTY

All units are covered by ITW Gema’s unique 5-year warranty.

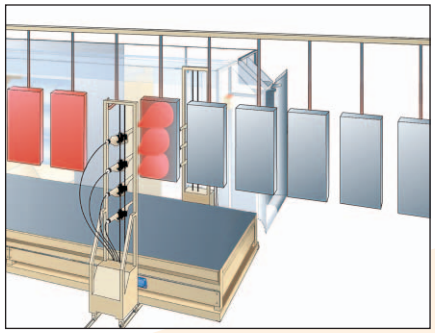
Gun Triggering Options



In the simplest form of gun triggering, guns spray only when a product moves in front of them.



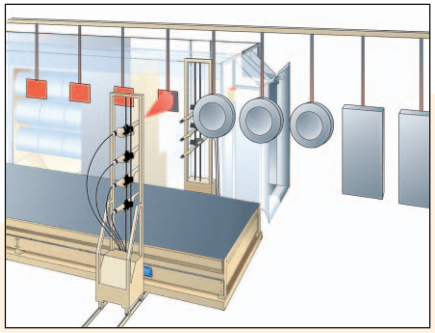
The Line Gap triggering method is only concerned with product presence, not size, quantity or shape.



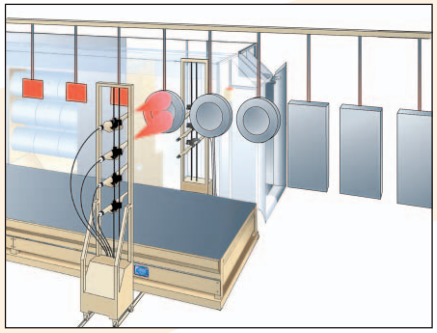
This triggering method reduces overspray, generating greater overall cost savings.

Line Gap

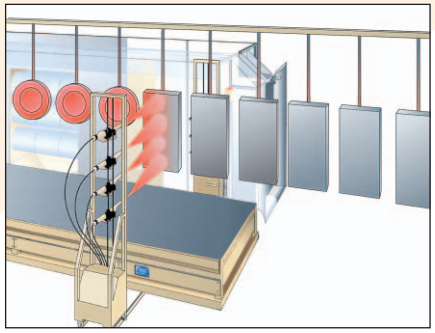
When a gap between parts is detected, the PLC turns off the gun(s) adjacent to that gap. When the next part is sensed, the gun(s) will resume operation at the appropriate time.



A series of photo cells or a light curtain station identifies the profile before the part moves into the powder booth.



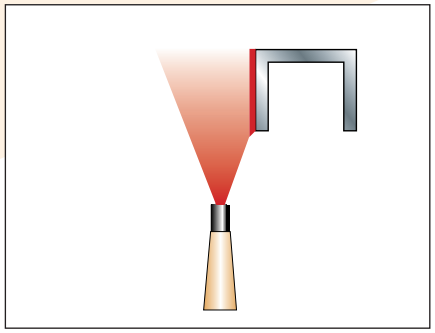
Profile information goes to the AUTOTRACKER 2.0 which tracks parts in relation to conveyor travel.



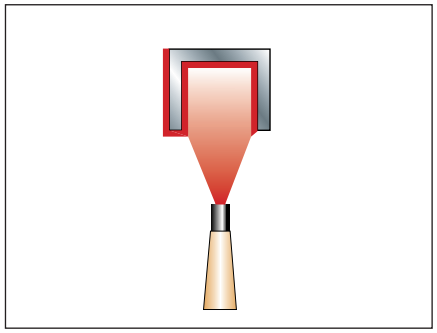
According to the operator's preprogrammed instructions, the PLC triggers guns in selected zones on and off as parts pass through the booth.

Vertical Zone and Horizontal Placement

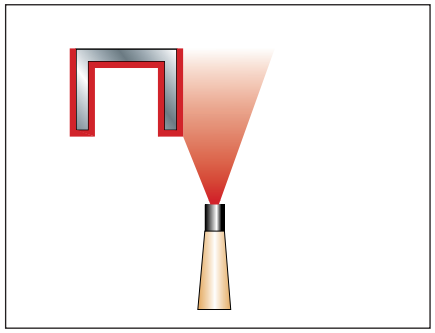
If parts have varying heights and widths, this option senses the different sizes passing through and turns on and off guns in specific zones. When desired, in-out positioners will maintain target distances by horizontal placement. Independent control of positioners on each side of the product permits greater flexibility and customization of motion.



Guns can be programmed with a lead distance to start spraying before a part reaches them, assuring a consistent beginning film build-up.



As the part moves by, the gun continues to operate according to the unique recipe stored for it in AUTOTRACKER 2.0, spraying only where it has been programmed to coat.



Programs can also start guns spraying after the leading edge of the part comes by—or keep them spraying for a set interval after the trailing edge moves away.

Lead/Lag

Adjustable through the operator interface, lead/lag distances meet special needs. If parts require extra spray time, guns can be turned on before the part reaches them and turned off after it passes. To reduce build-up on edges of parts or for parts with recessed areas, guns can be triggered on only in desired locations.

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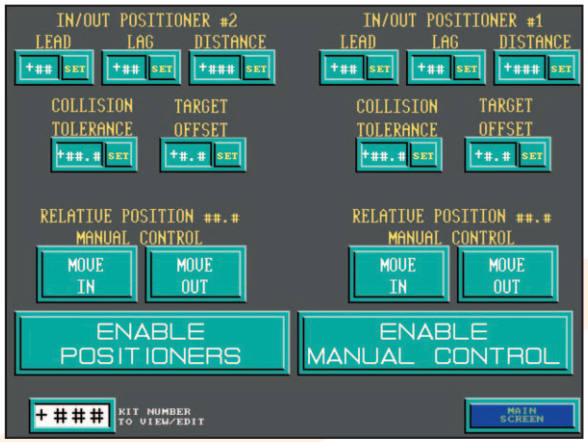

In/out positioning moves powder guns to a proper distance from part surfaces, to enhance finish quality, improve repeatability and/or uniformity, and control accurate film build. In/Out positions provide greater flexibility to deal with part types, sizes and configurations in batch runs.

In/Out Positioning

Commonly used to move guns in response to product width, and is often combined with fixed, reciprocating or oscillating guns to add flexibility.

- Independent programming of positioners on each side of the line facilitates greater flexibility of spraying.
- Positioning moves guns relative to the product face—to maintain a consistent target distance.
- Contouring while spraying improves finish uniformity.

Service and Support

In addition to our unique five-year warranty, our products are supported by a dedicated service team. ServiceNet™ is our 24-hour nationwide network of engineers and factory-trained distributors ready to provide you with a high level of local support. In addition, we offer:

- Factory direct field service staff for emergency situations
- Repair center in Indianapolis, Indiana
- System installation and start-up assistance
- Product and/or powder testing
- R&D lab for very specialized application testing
- Operator training in Indianapolis, Indiana (single or multi-day programs available)
- Field training programs conducted by the Regional Technical Engineer

servicenet 24 HOUR SUPPORT ™

All ITW Gema products are covered by ServiceNet.

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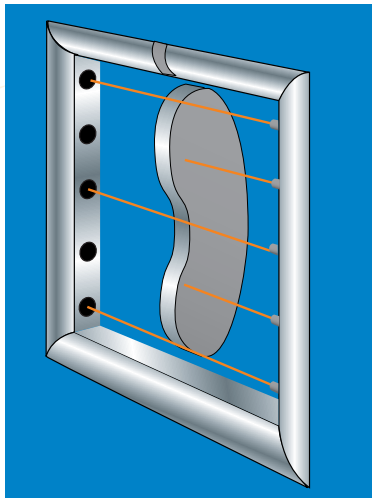
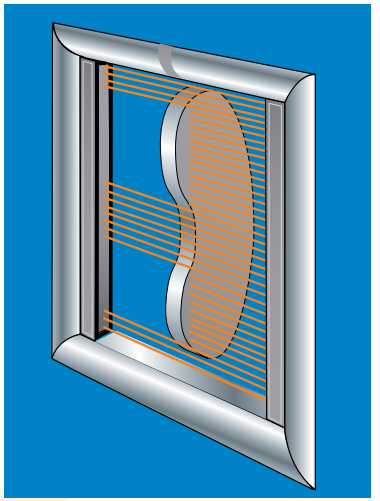


Photo cells are the most common method used for identifying or tracking part profile or style.

Photo Cell

A photo cell emits a beam of infrared light. When a part moves into position and breaks the beam, the cell sends a signal to the AUTOTRACKER 2.0. Each photo cell may control one or more guns.

- The beam from a photo cell determines part presence, providing information for spray gun control.



A light curtain uses a series of beams generated by several small photo cells, to scan parts to a finer resolution.

Light Curtain

A light curtain combines the beams from a number of photo cells to scan a much larger area than a single cell could. As a part moves through the curtain, the pattern created by the broken beams sends out a detailed shape and size signal, allowing the AUTOTRACKER 2.0 to identify the part style.

- Light curtains generate better resolution for part profiling addressing multiple products with complex configurations.
- Generally used in conjunction with analog positioning.

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