



## Painters Prove Pivotal in Waterborne Electrostatic Gun Design

### CUSTOMER

Automotive Manufacturer

### GRACO EQUIPMENT

Pro Xp WBx Air Spray Manual Waterborne  
External Charge Electrostatic Gun

### CHALLENGE

A pickup truck factory used three different water-based coatings in its primer booth. As different cutouts came through, different primers were needed; so three different guns – each with a different primer – were loaded at all times.

Although painters were happy with the voltage and transfer efficiency capabilities of their previous Graco electrostatic spray gun, they struggled with the design. When painting in tight areas, the probe that charged paint as it sprayed out from the gun's nozzle would get in the way or fall off.

The finishing engineer responsible for the primer booth knew this couldn't continue. Damaged probes diminished the transfer efficiency of their externally charged guns. Frequent fussing with gun angles affected operator ergonomics.

### SOLUTION

To come up with a solution, a Graco engineer visited the truck factory and the operators working in the primer booth. They showed her how the probes would fall off when unintentionally moved beyond a 90-degree angle.

The Graco engineer incorporated their feedback into the design for a new externally charged manual electrostatic air spray gun.

- A short probe option would not reach out longer than the gun, lessening the likelihood of interference when painting in tight areas.

- A long probe option would extend further out in front of the gun's air cap, more effectively charging water-based material as it's sprayed out of the nozzle of the gun.
- Either probe option would not come off unless rotated 180 degrees, keeping the probe on the gun until the operator decided to remove it.

The new design was trialed alongside a non-Graco model. The painters and finishing engineer agreed that the Graco design offered more consistent voltage and better ergonomics.

### RESULTS

The Graco Pro Xp WBx External Charge Waterborne Air Spray Gun is now the only gun used in the truck factory's primer booth. The operators prefer the long probe option because:

- It does not easily fall off, lessening downtime due to fallen or lost equipment.
- It provides the best transfer efficiency and wrap.

If a painter wants to use the short probe length to get into a tight space, no tools are needed to swap out probes.



For more information, contact us at 1-800-533-9655. Visit [www.graco.com/ProXp](http://www.graco.com/ProXp).

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