SUCCESS STORY

Automaker Saves Up to \$60,000 for Each Color It Doesn't Need to Throw Out



CUSTOMER

Automotive

GRACO EQUIPMENT

Low Shear BPR

CHALLENGE

A large automotive manufacturer has three, scheduled production holidays every year. The scheduled breaks are great for employee morale, but not so great for the paint used to give their vehicles a lustrous, Class A finish.

Although factory production took a break, their paint circulation system kept moving. One color could go through more than 1,000 turns. Continuous circulation for as many as 14 days often sheared the paint so much that it was no longer usable.

Getting rid of one high glossy color meant \$30,000 to \$60,000 of lost material. Costs got even higher when they factored in downtime, labor and waste disposal costs.

Why did they have to get rid of so much paint before starting production back up? Based on similar challenges seen at other automotive plants, Graco engineers identified the main problem: the factory's back pressure regulator. The BPR was needed to control fluid pressure on the circulation line, but the equipment's design increased paint shear.

SOLUTION

Paint shear is caused by harsh changes in velocity and direction of the flow of the paint. That's why Graco designed a patent-pending back pressure regulator (BPR) that reduces paint shear, while providing consistent pressure regulation. Compared to typical BPRs, the Graco Low Shear BPR has gentler turns and better controls the velocity of paint flow. Its ceramic-coated wet parts resist harsh metallic paint properties, easing the wear and tear on the equipment, as well as the material that flows through it.

RESULTS

The automotive manufacturer compared the Graco Low Shear BPR to their legacy BPR.

- They circulated paint through each BPR for 1,000 turns.
- They then tested the paint to see if it could still provide a Class A, new car finish.

The paint that circulated through the low shear BPR remained usable. The paint that went through the legacy BPR had to be thrown out.

Happy with the potential to save tens of thousands of dollars, the automaker immediately ordered three Graco Low Shear BPRs. They plan to order dozens more for a new paint circulation project.

Now after every holiday, factory employees come back ready to work – and so does their paint.



For more information, contact us at 1-800-533-9655. Visit <u>www.graco.com</u>.

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