# LASERWASH



Touch-Free In-Bay Automatic Vehicle Wash System



PART OF OPW A DOVER COMPANY

## PERFORMANCE, DEPENDABILITY AND QUALITY

With more than 10,000 LaserWashes shipped worldwide, PDQ Manufacturing, Inc., takes great pride in being the leader in the in-bay automatic vehicle wash industry. We are dedicated to providing wash operators with the most innovative equipment that exemplifies our tradition of **Performance**, **Dependability** and **Quality.** The new LaserWash® 360 raises the standard again with new revenue-enhancement features and total cost-of-ownership improvements that offers wash operators the opportunity to realize the industry's highest return on investment.





Simplified engineering and high-quality materials provide the optimal balance between initial investment and long-term profitability. Substantially faster wash speeds increase vehicle throughput, resulting in shorter wash lines that will delight your customers and keep them coming back again and again. Smart 360<sup>TM</sup> Technology enables the LaserWash® 360 to be highly responsive to dynamic conditions in the wash bay, minimizing downtime and optimizing the wash process, resulting in higher customer satisfaction and repeat business.

E-Chain
Left or right mounted energy chain for easy and low-cost installation





#### Rollers Inside

Bridge and trolley movements are smooth and effortless using internally mounted dual-axis rollers. The hanging design enhances self-centering and improved roller life by protecting the rollers from the harsh wash environment.

Slip-Free Belt Drive
Bridge and trolley movements are controlled using slip-free drive
belts for improved performance and wash accuracy. Less moving parts
provide a much simpler drive system.



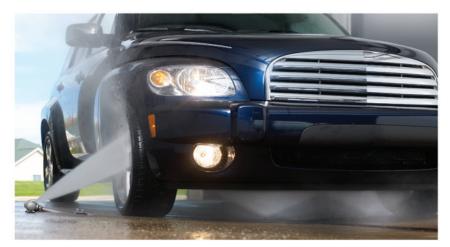


The LaserWash® 360's simple but sophisticated feature set provides exceptional chemical application and coverage with rounded corner profiling, Smart Dwell® chemical deployment and articulating arch functions that allow the system to cover the backs of side mirrors. The new arch-oscillation feature aggressively attacks bugs on the front of vehicles from multiple angles for superior bug removal and cleaning in areas with even the most difficult deposits. With more than 1,000 PSI (70 BAR) water pressure, the LaserWash® 360 supplies the necessary impingement to remove stubborn dirt and debris in even the most hard-to-reach areas of the vehicle. The LaserWash® 360 allows you to store and readily access your preferred or seasonal wash packages, customize wash services and adjust wash speeds in an infinite set of combinations. This functionality provides site operators with the ultimate programmable wash system for fast, consistent cleaning and exceptional performance.



#### **Revenue Enhancing Services**

The LaserWash® 360 offers significantly faster wash speeds that minimizes your customer's valuable time at the site. Unlimited wash-package configurations and multiple service offerings allows you to provide customers a full array of choices that satisfy even their most discriminating needs. New up-sellable features include front bug prep for superior bug removal, dedicated super sealants and FlashDry® rinse options that offer a choice of multiple drying configurations. These innovative services delight your customers with the ultimate washing experience, and they will leave your site with the cleanest, shiniest and driest vehicle possible, one that they will be proud to drive.





#### **Turn Your Wash into a Glowing Success**

Put the Shine back into your profits with the OverGlow Hi-Gloss Application System. Not only will your customers love their shiny vehicle, you will love the extra revenue this product is capable of generating. Your customers will enjoy the look of a colorful, thick sheet of solution draping their vehicle. The OverGlow system includes strategically located bright LED lights that will further enhance the customer experience, ensuring excitement as well as performance.



Increased service offerings include undercarriage, OverGlow, triple foam, bug prep, super sealant and more.



#### **Lower Cost of Ownership**

As car wash operating costs continue to rise, operators are taking a much closer look at reducing electrical, water, chemical and maintenance costs to better compete and improve their profitability. The LaserWash® 360 was designed with this in mind: minimizing water requirements, reducing electrical consumption through the incorporation of variable-frequency drives and lowering chemical usage that allows the savings to drop down to the bottom line. Smart 360<sup>TM</sup> Technology dramatically reduces the need for site attendents to intervene with the wash process allowing them to focus on more important tasks.

A "keep-it-simple" design goal minimizes the need for sensors, grease fittings, swivels and valves, while the use of common electrical components throughout the system allows easier troubleshooting, minimizes regular maintenance costs and delivers consistent high-quality cleaning. Additionally, the LaserWash® 360 is built using only the best in non-corrosive materials, providing operators a rugged machine that will deliver a long, reliable life of revenue generation.

#### **Vehicle Positioning**

One of PDQ's most recognizable innovations is the unparalleled Virtual Treadle<sup>®</sup>. This electronic vehicle-sensing technology eliminates drive-on floor-mounted mechanisms, creating a wide open and inviting bay for your customers. The Virtual Treadle process begins as the vehicle enters the wash bay. Ultrasonic sensors accurately measure the vehicle's width, and bridge sensors signal the driver to stop or back up, by activating easy to understand audible LED signs. The wash system is then activated with an electronic safety envelope surrounding the entire vehicle, allowing the LaserWash<sup>®</sup> 360 to maintain an optimum cleaning

distance whether the vehicle is parked to one side or angled in the wash bay.

#### Virtual Treadle Loading

The totally integrated loading system provides consumers with simple entry into the wash without the hassles of treadles, guide rails or hanging tee-bars.



# LASERGLOW

#### ILLUMINATION EFFECT SYSTEM

Get Your Wash Noticed... Not only will the LaserGlow System help improve your customer flow, it can also be configured to work for you 24/7/365 by illuminating your wash bay day and night whether there is a vehicle in your bay or not. The system can be programmed to display multiple color combinations of flashing patterns, or constant colored illumination that matches your brand image. A glow from your wash bay can be a highly effective marketing tool to draw more attention to your wash site encouraging consumers to take notice and keep your existing customers coming back again and again.

Available on new equipment or as a retrofit kit for installed LaserWash 360's



The ultra-sophisticated LaserWash® 360 Arch Control System drives quicker throughput and amazes customers with its precise movements throughout the entire wash process. The arch is able to rotate 360 degrees while simultaneously navigating around the vehicle. The Automatic Obstacle Guidance System uses advanced technology to locate obstacles such as trailer hitches, side mirrors and other obstacles that may restrict the wash arch from properly traveling around the perimeter of the vehicle. The arch will move away from the obstacle, record the position of the obstacle to avoid it on subsequent passes and continue washing the vehicle. If the wash arch cannot avoid an obstacle it will attempt to fully retract, rinse off any solution using the overhead rain arch and prompt the customer to exit the bay. After the vehicle has exited and the bay is clear the machine will automatically reset in preparation for the next vehicle.

ARCH CONTROL



STEP 1 Move away from the obstacle.

STEP 2
Automatically back off to safely pass around the obstacle.

STEP 3
Continue wash process and record position to avoid obstacle on the next pass.



This ensures the safest and most effective wash for all vehicle configurations. The three-axis arch movement provides rounded corner profiling that produces consistent and effective coverage by keeping the nozzles directed at the vehicle no matter which position the arch is in, a capability that sets a new, unmatched standard in the industry. No more chemicals or water sprayed on the floor! The Smart 360™ arch control makes every second productive – corner profiling eliminates wasted movement and the wash time at each corner is reduced by 60%.



PDQ's LaserWash® 360 integrated dryer option can be coupled with the unique FlashDry® High-Volume Spot-Free Rinse service. FlashDry® requires no additional time for a basic dry by completing the rinse and dry cycles in a single, simultaneous operation. Developed on the principal that it is easier to remove water that is already in motion, FlashDry® technology simultaneously rinses and removes more than 80% of the water in a single 10-second pass. Additional dryer options include

a MaxAir® Stand-Alone Dryer, or the ability to use the integrated dryer as a drive-through dryer unit as the customer exits the wash bay. These options allow greater package differentiation, giving operators the ability to up-sell customers for increased revenue and profitability.







#### **SwingAir Synchronized Motion Drying System**

Your customers will enjoy drier vehicles with PDQ's new SwingAir Synchronized Motion Drying System. The enhanced SwingAir oscillating feature improves dryer performance while still using less energy than most conventional dryers. This new system incorporates motion in the center two producers to help sweep water off of the vehicle's top surface, allowing the two outside producers to focus on pushing water down and off the sides of the vehicle. The SwingAir feature is available on both stand-alone and integrated MaxAir® drying systems.



The LaserWash® 360 wash control system uses a web browser interface, which allows you to access all key operating functions of the wash equipment through your web browser without any special software. Additionally, you can configure wash packages, program machine functions and monitor sales activity remotely over the Internet, getting real-time information and eliminating unnecessary visits to your wash sites. The LaserWash® 360 can also be programmed to automatically send alerts to your PC, Tablet or Smartphone to let you know if your wash is down or to provide status updates on critical issues that may be occurring at your wash locations. This capability keeps you in touch with all of your sites from anywhere at anytime.

#### LaserWash® 360 Features:

#### Standard Machine Features:

Standard Machine Includes: LaserWash® 360, Corrosion-Resistant Bridge & Trolley, Smart 360<sup>™</sup> Technology (with: Smart Networking, Smart Dwell®, Smart Arch Control, Smart Drying System and Smart Cleaning System), Automatic Obstacle Guidance, SST Wall Mounts, Aluminum Rails, Virtual Treadle, Electrical Control Panels, Basic LED In-Bay Sign, General Pump



Scan this QR code with your Smartphone and view the LaserWash® 360 video

#### **Options:**

- CAT 3535 Pump
- Water Heater
- Second/Third Pressure Fed Inlet
- Water Saver Package
- In-Bay Pump Station Covers
- 2 or 4 Nozzle Integrated Dryer
- MaxAir® Stand Alone Dryer
- SwingAir Synchronized Motion Drying System
- LED Service Confirmation Sign
- LED Entrance Sign
- LaserGlow Illumination Effect System
- High Pressure Undercarriage
- Extended Solution Package
- 3X Color Foam

- Booster Pump for Low Pressure Sites
- Dedicated Super Sealant Manifold
- Dedicated Front Bug Prep Manifold
- Rust Inhibitor
- Wheel Cleaner
- High Volume Rinse Arch
- Electric High Pressure Gatling Guns
- Free Standing Frame
- Spot Free Rinse Application
- Water Reclaim Systems
- Storage Tanks
- Wash Activation Entry Terminals
- Cortex Site Management Software
- WALS Loyalty Program

### LaserWash® 360 Specifications

#### **Building Requirements**

Height Wall Mount		10'-6" Minimum (3.20 m)		
	Frame Mount	10'-8" (3.28 m)		
Width	Wall Mount	t 13'-6" Minimum to 18'-0" Maximum (4.11 to 5.49 r		
	Frame Mount	13'-6" Minimum (w/o integrated dryer) (4.11 m)		
		14-1" Minimum (w/integrated dryer) (4.28 m)		
Length	Wall Mount	28'-4" (full length rails)** (8.64 m)		
	Frame Mount	29'-7" (full length rails)** (9.02 m)		

Note: Equipment dimension specifications do not take into consideration any obstructions, unusual wash bay configurations, etc. \*\*Rails can be cut to length for shorter bays.

#### **Utility Requirements**

Air	1.5 SCFM @ 90 psi (6.21 Bar)		
Water	38 GPM (143.8 LPM) @ 30 psi (2.07 Bar) - Direct Feed		
	19 GPM (71.9 LPM) @ 10 psi (0.69 Bar) - Low Flow Tank Feed		
Electrical	3-Phase, 50/60 Hz		

#### **Electrical Requirements**

Voltage	<b>Pump Station</b>	<b>Water Heater</b>	Bridge	<b>Dryer Power Feed #1</b>	<b>Dryer Power Feed #2</b>
208/230	90/85 Amps	28/25 Amps	20 Amps	44/41 Amps	44/41 Amps
380	60 Amps	25 Amps	20 Amps	15 Amps	15 Amps
460	40 Amps	208/230V - 28/25 Amps	208/230V - 20 Amps	21 Amps	21 Amps
575	30 Amps	208/230V - 33/30 Amps	208/230V - 20 Amps	17 Amps	17 Amps

#### **Drying Options**

30 HP Integrated 4 - Producer MaxAir® Dryer (FlashDry Ready)	(208/230/380/460/575V 60 Hz)	(220/380V 50Hz)
15 HP Integrated 2 - Producer MaxAir® Dryer (FlashDry Ready)	(208/230/380/460/575V 60 Hz)	(220/380V 50 Hz)
30 HP Stand Alone 4 – Producer MaxAir® Dryer	(208/230/380/460/575V 60 Hz)	(220/380V 50Hz)
45 HP Stand Alone 6 - Producer MaxAir® Dryer	(208/230/380/460/575V 60 Hz)	(220/380V 50 Hz)

PDQ reserves the right to revise designs, add or delete features and change specifications at any time without notice or obligation.





