

Car Wash SPOTLIGHT

BREEZE THRU

Express Car Wash



Hi-Performance
WASH
SYSTEMS, INC.

BREEZE THRU *Car Wash Debut*

John and Andrea Agnew are the proud owners of the new Breeze Thru Express Car Wash located in Ft. Collins, Colorado. John and Andrea are not newcomers to the car wash industry. They have owned and operated many self service and automatic car washes over the years. Because the Agnews have seen pricing in the self serve market plateau, along with falling revenues they decided to make the leap and build an Express Tunnel Car Wash.

John and Andrea began their quest to build an exceptional Express Wash by touring the United States, in order to look at a variety of operations and formats. John found a wide range of opinions on the best way to operate an Express Wash successfully, and determined that there were several key factors to success. These factors included a low starting price, typically \$3 for a basic wash, free vacuums, and easy traffic flow through the site. Andrea found the image a car wash projected in building design, employee appearance and uniforms, and facility cleanliness were key factors in successful washes. Working with Hi-Performance Wash Systems, John and Andrea were able to design and equip their wash for maximum profitability.



During the development, they departed from the typically long and arduous process of building a wash by using several non-traditional methods. They employed a local professional project planner, to run their project through the various municipal hurdles. Because their site is located in an environmentally sensitive area along the Poudre River, there were several obstacles which normally might have prevented a wash from being built at all. Because of the planner's experience with the city and local knowledge, she was able to expedite the entire approval process.

When it came time to select a General Contractor, instead of the traditional fixed-bid selection process, John chose a reputable G.C. and negotiated a fixed-fee, design/build concept. This allowed them to work with the G.C. during the design phase to refine the project and meet their expectations without costly and time consuming change orders.

Architecturally, they were able to include many features into the building that make car washing at their facility an enjoyable experience. A row of south-facing windows along the ceiling allow natural light to permeate the tunnel as do windows at street level which also extend the length of the facility. John wanted to have an open feeling in the tunnel, and achieved that by using top brushes and wraps that retract, giving a clear view through the tunnel. By eliminating mitter curtains customers do not feel they are driving into a 'black hole' and therefore have a more positive experience.



Breeze-Thru has many unique features which enable it to wash over 1,000 cars per day with ease. As customers enter the site, they can either proceed directly to the paystations, or to the free vacuuming area. Prior to entering the queue behind the pay stations, pick-up trucks can proceed to a special area for cleaning out their beds. By removing trash and debris before entering the queue, they eliminate a time-consuming delay at the wash entrance and maximize vehicle throughput.

Next are three ICS Auto Sentry paystations which in tandem can supply a car to the queuing lane every 15 seconds and provide redundancy for busy days in case one unit fails. When a customer pulls up to the bilingual Auto Sentry, they are prompted to select from a \$3, \$7, or \$11 wash. By limiting the choices to three wash packages and one ala-carte selection, customers make their wash selections quickly. The Auto Sentries are also protected by custom stainless steel encasements. These clamshell-style doors close to cover the entire auto sentry at night protecting it from vandalism, and open during the day to display the wash menus.



Customers proceed up the queuing lane, which rises in elevation for several feet, and then has a pronounced descent to the conveyor. This gives customers a better view of the conveyor, and greatly aids in steering quickly onto the conveyor. The conveyor is driven by a 5 horsepower electric motor. In fact, only one piece of equipment in the entire tunnel is hydraulic. By limiting hydraulically driven equipment, broken hydraulic hoses become a thing of the past, and electrical efficiency is boosted substantially. Another interesting feature at the conveyor entrance is the Digicapture camera arch. This arch contains 6 cameras which completely photograph all vehicle surfaces. In the event of damage claims, the manager can review the footage with the customer, detailing any pre-existing damage before the vehicle was washed. Cameras in the tunnel also monitor each vehicle, helping to further eliminate fraudulent damage claims.

As cars enter the tunnel, photo eyes and treadles measure the vehicle profile and wheel locations, allowing several pieces of equipment to customize the wash for particular vehicle types. Next the cars pass through Magnesium Chloride Remover and Presoak arches, and Chemical Tire Applicators (CTA). After the CTA's, a MacNeil Wheel Boss with helical offset brushes scrubs the wheels and tires, followed by two sets of high-pressure blasters. This produces very clean wheels without dangerous Hydrofluoric Acid.

RECLAIM SYSTEM

All of the high pressure applications in the tunnel use reclaimed water. During the Agnews' visits of washes around the country, they were dismayed when washes using reclaim water had foul odors in the tunnel. The Agnews wanted their wash to always smell clean and inviting. They selected a reclaim system produced by Huron Valley Systems. The combination biological-mechanical, 10,000 gallon per hour system cleans the water to 5 microns while removing soaps and waxes. This saves over 75 gallons per car in fresh water, all with no odor or ozone.

Next are two MacNeil top brushes which follow the vehicle's contour, cleaning the front, top and rear surfaces. The computer automatically retracts the top brushes for pick-up trucks after cleaning the cab, preventing the brush from going into the bed of the truck. Staggered Long-Armed Flex Wraps reach across the front, sides and rear of each vehicle, and are assisted by High Side and Low Side washers. A combination of best-in-class chemicals from Ecolab, Diamondshine, and CSI Lustra assist in cleaning at minimal cost.



MacNeil Wash Systems provides the next piece of equipment, the Tracer. Made in the United States, the Tracer is a high-pressure contouring robot which directs 1,000 psi water over the front, top and rear surfaces of the vehicle. Multiple photo eyes determine the vehicle shape and size, then control the Tracer to keep the nozzles perpendicular to the car surface at a distance of 12". The Tracer not only aids in cleaning, it also helps remove soap and triple foam before the vehicle goes through the rinse arches.



After passing through the Tracer, vehicles receive a fresh water rinse, Rain-X, drying agent or clearcoat, and spot free rinse. Tires receive dressing through a Hanna Tire Shiner, producing new-looking tires. Finally 12 MacNeil dryers, each driven by a 15 hp motor strip away the water leaving a dry vehicle. Flip nozzles on several of the producers redirect the airflow as vehicle mirrors pass, blasting out residual water from cracks and crevices. These dryers are also fitted with MacNeil Powerlocks, which cover the dryer inlets between vehicles, substantially reducing electrical usage.



POWERLOCKS

PowerLocks are a new innovation from MacNeil Wash Systems. In most tunnels, the car wash operator must choose between cycling the dryers on and off between cars to save electricity or letting the dryers run continuously, saving on start-up wear and tear. The new Powerlocks utilize pneumatically driven covers that block the air inlets between vehicles. This substantially reduces the load on the dryers, cutting electrical usage dramatically. The Powerlocks also know which vehicles are pickup trucks, and close after the cab has passed, preventing pooled water and debris in the bed from being blown back onto the vehicle. This also reduces the amount of trash blown out of pickup beds, keeping litter in the tunnel to a minimum.



As customers exit, they can proceed to the free vacuums. There are 17 vacuuming spaces, with a hose on both the driver and passenger sides. Each hose is connected to a central vacuum manifold, where a vacuum is maintained by 2 VFD-driven 25-hp motors. As more customers use the vacuums, the VFD's ramp up motor speed to maintain the vacuum and minimize power usage. This equipment was manufactured by VacuTech and made here in Colorado.



With the innovative site design, equipment selection, and support from HPWS, the Agnews anticipate easily washing 10,000 cars during their first month in operation.



BREEZE THRU

Express Car Wash

Hi-Performance WASH SYSTEMS, INC.

Founded in 1958, Hi-Performance Wash Systems has helped hundreds of car wash owners design, build and equip self-service, automatic and tunnel car washes throughout the Rocky Mountain Region. The HPWS car wash development staff assists owners in locating optimal sites, developing financial proforma, working with architects and general contractors, and building profit-generating car washes.

HPWS also remodels existing car washes to bring them up to date technologically. Whether this means simply updating individual equipment components or doing a full format conversion to the Express model, HPWS can do it all.

HPWS has 10 factory trained technicians available to support car wash owners in building and maintaining their facilities, along with \$500,000 in parts and supplies. Give us a call to see how we can help you increase your profitability.

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