

Topic for the MCA Event in Charles Town, WV

Title: Profitable New Trends in Car Wash Automation

General:

Automation is all about mining the profit potential of your car wash in new and exciting ways. Although there are hundreds of ways automation can positively affect car wash operations, we will explore the tools and strategies needed to generate profit from VFD motor control and remote car wash management.

During the one hour presentation, Mr. Belanger will share several application techniques that drastically reduce power consumption using VFD's for Dryers, Vacuums and Pumps. He will also introduce one of the hottest new trends in car wash automation – Remote Car Wash Management – which gives the operator the ability to proactively monitor and control the carwash remotely.

Background VFD

Anyone in our industry knows that the cost of utilities, in particular power, is increasing all of the time. Addressing waste in our motor driven systems not only delivers profit increases today, but also mitigates future profit erosion as utility companies increase rates. Centrifugal loads, like dryer fans, vacuum fans and pumps, by their nature use exponentially more power to reach maximum speed than any other speed less than max. Using variable frequency drives (VFD) to control of these kinds of loads offers car washers huge energy savings. VFDs are easily integrated into new build and existing car washes to eliminate waste in power consumption. The car wash industry, generally, has not taken advantage VFD energy saving techniques used routinely in other industries.

Case Study on VFD Savings: <http://carwashcmi.com/wp-content/uploads/2009/03/moo-moo-article1.pdf>

Wash Trends Article on VFDs: <http://www.washtrends.com/WashTrendsFall2009/index.html>

Background Remote Car Wash Management

System monitoring and alarming has been around a long time in other industries, but recent developments in real-time, remotely available monitoring data have now made it a phenomenal management tool for car washes.

The Operator defines their priority wash processes, like chemical levels and temperatures, air and water pressure, hydraulic oil temp, reclaim running or on fresh water bypass, etc., and the remote wash monitoring system deploys sensors to acquire the target data from the wash process and facility systems. Real-time conditions and events automatically report, or alarm, across the remote wash monitoring system network for display on various interfaces like computers and smart phones delivering contextual, localized, role-based information allowing owners and managers to initiate immediate corrective action remotely! Operators can benchmark optimal car wash operating parameters, know when they are outside of parameters, and then tweak the equipment on the fly remotely, ensuring they deliver a high quality, clean, safe and damage-free service all of the time. Car wash owners have hundreds of thousands of dollars invested into acquiring complex, integrated equipment systems with virtually no money invested into technology to help them run efficiently and effectively. A well designed monitoring and management system offers operators huge improvements in asset performance in the areas of quality, customer experience, reliability and availability.

Americas Car Care Business Article on Remote Car Wash Management:

<http://www.americascarcare.com/database/dms/acc1009w64.pdf>