



There's No Stopping This Coating Line

TRAFFIC SIGNAL MAKER MCCAIN UNVEILS NEW
POWDER COATING SYSTEMS

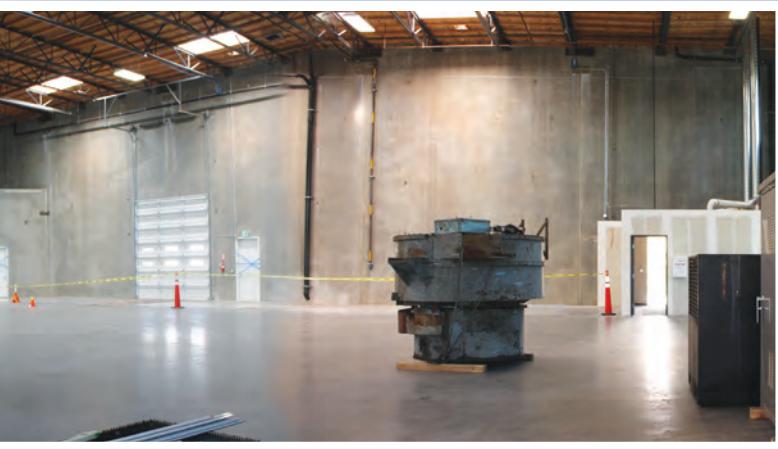
By Tim Pennington
Editor

Drivers across the U.S. do whatever the products made by McCain Inc. tell them to do. Well, most drivers.

The Vista, Calif.-based company is a leader in providing traffic control equipment, intelligent transportation systems and parking guidance for cities and towns all over the world.

McCain's outsource manufacturing division, McCain Manufacturing, recently dramatically expanded its facilities to 100,000 sq ft to increase and improve its powder coating and finishing operations. John Kingston, applications engineer and powder coating supervisor, says a new automated conveyor was installed along with a large-scale batch powder coating system.





BEFORE: The above photo shows the McCain plant getting prepped for the new line.



Sales of McCain's powder coated traffic signals are expected to double in just four years to \$160 million.



AFTER: With lines and ovens in, work begins to flow through the facility in the photo below.

IMPROVED TECHNOLOGY AND OPERATIONS

According to Kingston, the automated, overhead I-beam conveyor system brings together the latest technological advancements in the finishing industry, including a seven-stage pretreatment wash, electrostatic application and curing process.

“McCain has always been a pioneer in developing technology,” Kingston says. “Our powder coating systems continue the trend by using advanced equipment and machinery to deliver exceptional

“The condition of the world’s transportation infrastructure and the industry that drives it has advanced considerably over the past quarter century. We’ve been able to grow and develop with the industry.”

speed and capacity uncommon to the region. By combining technology with skilled artisans and technicians, we feel we offer a consistent, high-quality powder coating to our customers.”

The high-throughput system also features dual-coating capabilities that Kingston says save time and money by applying multiple coats in half the time. Components that are too large for the automated system are treated in the batch system where McCain’s experienced craftsmen apply each coat by hand using power pulse technology.



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A new automated conveyor was installed along with a large-scale batch powder coating system to help with facility throughput.

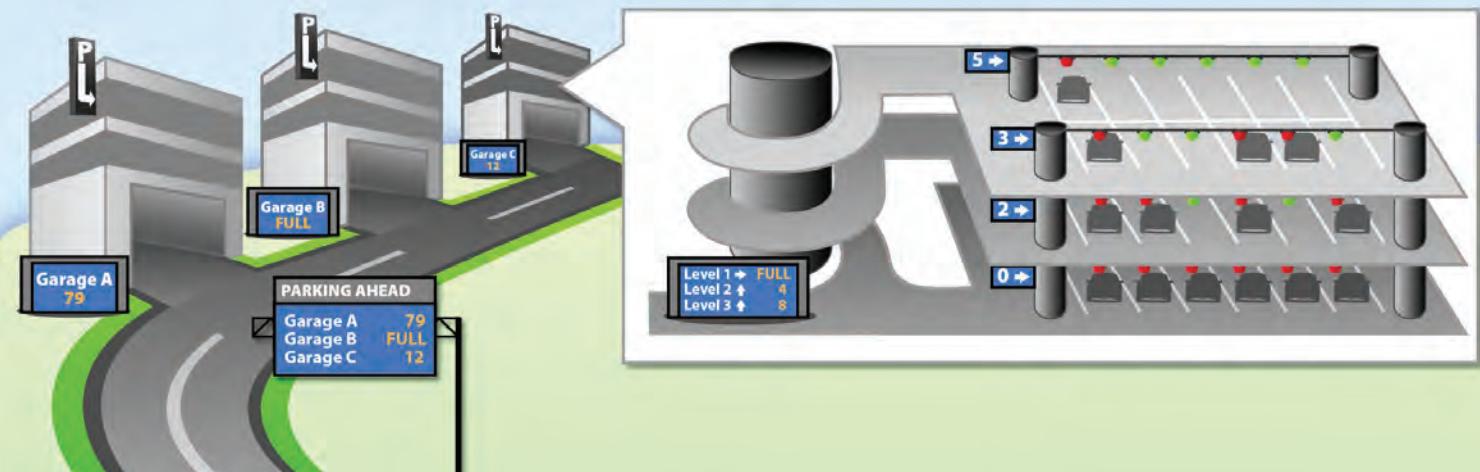
The need for new space and coating equipment is easy to understand: Business is booming for McCain as major cities are improving traffic signalization. McCain's staffing is up to more than 600 people, a 30-percent increase in just two years. Sales that were at more than \$80 million in 2010 are expected to double to more than \$160 million in 2014.

According to Kingston, McCain's commercial-grade powder coating is available in a large collection of colors and textures for parts of all shapes, sizes and industries, including aerospace and defense products, automotive materials, medical equipment, metal enclosures, solar systems, telecommunications, and more.



McCain is a leader in traffic control equipment and intelligent transportation systems.

How Parking Guidance Systems Work



McCain says nearly one-third of all congestion in metropolitan areas is attributed to the search for parking, making it an essential element of any fully integrated intelligent transportation system, including the company's patented Parking Guidance System.

HOW IT WORKS

Drivers are guided to available parking by variable message or "wayfinding" signs that visually communicate accurate space availability by structure, level and row at

key decision points both in and around the structure(s).

- The wayfinding signs guide drivers to open parking garages, structures or lots.
- At the parking entrance, drivers are informed of the number of available spaces.
- Inside the structure, signs display open spaces by level and row.
- LED lights above each space provide visual availability queues: red for occupied, green for vacant.

McCain says its system is 99.99-percent accurate in individual bay moni-

toring and causes a 2- to 5-percent increase in patronage to stores and shops because of the reduced bottlenecks, often cutting search times by 50 percent or more and creating customer loyalty. One example of its success is a recent project at O.R. Tambo International Airport in South Africa where arriving passengers can find a parking space in 2.5 minutes compared with 15 minutes previously.

McCain says the system also eliminates as many as 250,000 lbs of carbon dioxide per year, based on a 1,000-car parking garage. ■

The company was founded by Jeffrey McCain in 1987 and since then has expanded into more than 11 countries, producing more than 5.6 million traffic signals, 75,000 cabinets and 58,000 controllers.

"The condition of the world's transportation infrastructure and the industry that drives it has advanced considerably over the past quarter century," McCain says. "We've been able to grow and develop with the industry, working

to create and establish advanced solutions that offer a better on-road experience."

The expanded powder coating operations are the latest value-added services being offered at McCain's full-scale manufacturing facilities. In addition to powder coating, McCain's North American manufacturing division offers sheet metal fabrication, CNC machining, die casting, plastic injection molding, thermal forming, and turnkey assembly, complete with

engineering and design services. The company has more than 300,000 sq ft of manufacturing space in California, Washington and Mexico. ■

For more information on McCain Manufacturing, please visit www.mccain-inc.com.

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Debugging A Powder Coating Line

To read about finding solutions to line issues, please visit pfonline.com/articles/debugging-a-powder-coating-line.