

Technology

How Color Point Is Stopping Cart Theft With Plastic Shelves



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Metal theft costs U.S. businesses 1 billion dollars every year, according to the U.S. Department of Energy. When metal prices rose to 29 cents per pound, Color Point experienced upward of 5% losses in carts and racks.

Some days Color Point's Ken VanWingerden must wish carts didn't have wheels. It might be tough for operations, but it would make it harder for thieves to steal them. VanWingerden isn't alone: Metal theft costs U.S. businesses about \$1 billion every year, according to U.S. Department of Energy estimates. When scrap metal prices rose to 29 cents per pound, greenhouse operations like VanWingerden's felt the impact. He says he saw upward of 5% loss in carts and shelves.

All 50 states have enacted metal-theft legislation, and sites like ScrapTheftAlert.com and StopMetalsTheft.org have become powerful tools for law enforcement, prosecutors, and the recycling industry. Still, it wasn't enough, and VanWingerden says he believes greenhouses have to protect themselves.

Metal Carts Are The Industrial Equivalent Of OxyContin

"Scrap metal is a magnet for people to take and turn in," VanWingerden says. "A former driver shocked me when he said, 'That cart looks like one OxyContin pill.'"

Most law enforcement agencies believe scrap metal theft is tied to the rise of addiction to painkillers like OxyContin.

"We decided it was time for action, and the best way we prevent our carts from being taken is to detract from their appeal," VanWingerden says.

Two years ago, VanWingerden went to McConkey Company for a custom-designed shelf.

"We were getting carts back from stores completely stripped down. There was nothing left on them, if they came back at all," he says. "The shelf is the easiest thing to remove from the cart."

Color Point had already modified its carts for theft deterrence, including pop riveting the posts down, riveting posts to the base, and adding a canopy on top of the cart. That deterred cart theft but increased shelf theft. Every cart is RFID (radio-frequency identification) tracked, and starting this spring, Color Point will be implementing RFID/GPS (global positioning system) for trailers.

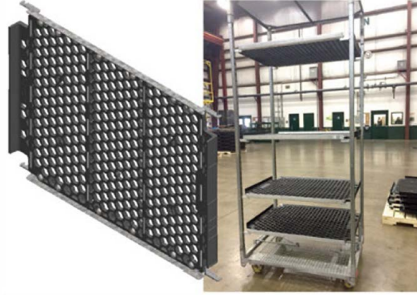
"About every two minutes, it tracks the trailer information and sends it back to us," VanWingerden says.

How To De-Monetize A Cart

McConkey listened to VanWingerden's concerns; then its in-house engineering team set out to design a plastic shelf for Color Point. This was no simple feat. Color Point had some very specific requirements for its shelves, as it had tried previous plastic shelves before with no success. The requirements included were:

- Fit on its existing 30x40 hook-and-post carts
- Not solid, must allow airflow and water drainage
- Strong enough not to flex or bend
- Completely smooth, including corners and undersides, to prevent employee and plant injury
- Completely flat bottom, to ensure hanging baskets don't get caught and employees don't scrape hands
- Easy for employees to install and remove

"We replaced most of the metal with a type of tough, structural plastic made from milk jugs recycled in the Midwest," says Derek Moeller, President of McConkey Company, who designed Color Point's shelf. "We also assembled it with rivets so it's not easy to disassemble."



Color Point is in the process of replacing metal shelving with plastic racks on 250,000 of its existing carts. Going forward, all new carts will have plastic shelving, which has significantly reduced theft at the operation.

Return On Investment Is More Than Just Cost Savings

Countless iterations and several molds later, McConkey had a shelf ready for beta testing in 2015. The product weighed less than half that of a steel shelf and the pricing was comparable.

“The payback is significantly better, with less theft plus numerous operational advantages for employees,” Moeller says.

The product was so successful for Color Point that it tweaked the design, making small changes like adding underside support beams, and ordered another 20,000 carts for 2016.

“We’re getting huge praise from the employee side,” VanWingerden says. “We have a lot of seasoned people in our facility who are thrilled with it.”

Why? It’s lighter weight than steel, and gentler on their hands. Product slides much better on the shelf compared to sheet metal, and it is easy to install and reposition on carts.

VanWingerden was involved with the every aspect of the shelf’s design. He says he believes it’s critical for the engineer, designer, and user to be intricately involved.

“We made lots of small changes that make no difference to the plants but make it easier for employees,” he says.

For example, the company specified a bigger gap between each post and the side of the shelf, something VanWingerden says makes changing the shelves 30% easier. The shelf has a unique honeycomb design that makes it easier for employees to grab, without fear of cuts if they aren’t wearing gloves. More importantly, it facilitates the airflow and water drainage that VanWingerden felt was critical.

“The majority of our product gets sold off of carts — annuals especially stay on carts,” he says.

With open-air carts, you get more air circulation and sunshine, which is important for retail display, as well as for shipping in dark trucks.

Color Point began seeing the shelf’s impact outside the greenhouse almost immediately. Theft is down significantly on carts with the plastic shelves, and while scrap metal prices have dropped, VanWingerden says he doesn’t think that’s made a huge difference, as other greenhouses are still losing carts.

“Now that our shelves are mostly plastic, they’re worth next to nothing,” he says. “It’s not worth the labor to cut them down and take them to the scrap yard.”

Currently, the company operates a fleet of about 35,000 to 40,000 carts, meaning it has nearly 250,000 shelves to convert. To date, 40,000 of them are converted — VanWingerden says he’s not going to throw away steel to replace with plastic — and every year the company orders more of the new shelves than it planned. Bottom line: All new shelves will be plastic shelves.

“When I drive between our greenhouses in Kentucky and Illinois, I see billboards all along the road: ‘Will take any scrap metal,’ ‘Turn in your scrap metal here,’” VanWingerden says “It’s a huge business, and it’s not declining.”