

'Agnes' Transforms Material Handling With Tape



With more than 500 retail stores in 36 states, Eye Care Centers of America Inc. is the third largest retail optical chain in the U.S. To meet Eye Care Centers' need for product, parent company HVHC Inc. has to produce huge quantities of eye glasses in an array of configurations. To help meet this demand, and do so in an efficient, cost effective manner, HVHC opened a modern new production plant in Schertz, TX.

"When we built our new plant we installed several conveyors to move product throughout the facility," recalls Ric Lee, HVHC's manager of quality operations at Schertz. "One of the problems we had, though, was that we still had several smaller volume material handling applications within the plant that were being addressed by people pushing carts between multiple locations. We couldn't figure out an economically and justifiable conveyor system that would work for those applications."

That's when NCC Automated Systems Inc. of Telford, PA., weighed in with some alternative suggestions for these troublesome applications. NCC designed, laid out, and installed the conveyor systems for the new plant and when HVHC told them they were looking for ways to make the remaining applications more efficient, NCC showed them several options.

"They helped us identify and research a number of automated solutions," notes Lee. "The one that really grabbed our attention, though, was the automated guided vehicle (AGV) from Creform. This seemed like it might provide a far better ROI than a conveyor would for these duties."

Unlike costly and difficult to install traditional AGV systems of the past, modern AGVs are cost-effective and rapidly deployed. Installation of these systems is non-interruptive because there is no need to dig a trench in the floor. That's because the

'Agnes' Transforms Material Handling With Tape

Published on Industrial Maintenance & Plant Operation (<http://www.impomag.com>)

vehicles require only an adhesive-backed magnetic tape on the floor to designate their guideway. The tape is read by a magnetic induction sensor mounted on the cart. Needless to say, the AGV's route can be easily modified by changing the tape path if needs to be changed.

A Creform AGV system was installed at the HVHC facility, making a continuous loop around the production floor. As originally designed, the system had 10 stations. "We took occupancy of the new building at the end of March 2009 and were completely moved in by April 24," says Lee. "Agnes was brought in, installed, and was actually one of the first things on site. Agnes was running around the building before almost anything else was even here."

Agnes?

"We named the Creform system Agnes in part because we never had an employee named Agnes so we could not get her confused with someone or something else. It was just a joke at first and we actually were going to have a contest to name the system, but everybody seemed to like the name Agnes so much that we stuck with it.

"It was up and ready in less than an hour after they got it here," Lee continues. "Nearly all they had to do was lay the tape down on the floor. Actually, we have changed her path after we got it in here realizing that the way we had penciled it in was not optimum for what we needed. Fortunately, NCC had left me some extra tape so we simply pulled up some of the old tape, laid down new tape, and rerouted her."

Of course the old way of moving this product — people pushing carts — could also be altered very quickly, but there are some big differences. "With the old way we sometimes had spoilage issues. You have stacks of trays on top of a cart and you run into something and the trays fall over and then you have lenses all over the floor. You drop 10 or 20 trays and that costs quite a bit of money.

"Also," he notes, "The new system keeps people in their workstations. Each minute counts as far as production, and when people are away from their production station pushing carts that's a production loss."

Conveyors keep people at their production stations as well, but for these smaller volume applications the AGV system wins hands down. "It would have been very, very expensive to put conveyors in those areas. We looked into it and found that conveyors for just one of these applications would cost over \$140,000 so there's no comparison, cost-wise.

"The ROI on Agnes was less than six months," Lee reports. "In our business ROI is vital, so any time you have something that is going to pay for itself in six months through labor and spoilage savings, that's a no-brainer."

Visit www.creform.com [1] for additional information regarding Creform Corporation and its products.

'Agnes' Transforms Material Handling With Tape

Published on Industrial Maintenance & Plant Operation (<http://www.impomag.com>)

Source URL (retrieved on 01/25/2015 - 5:51pm):

<http://www.impomag.com/articles/2010/04/agnes-transforms-material-handling-tape>

Links:

[1] <http://www.creform.com>