



INNOVATION ■ EXPERTISE ■ TECHNOLOGY

SUCCESS TRACKER

NEW HANDLING TECHNOLOGY IS ELIMINATING THE PRESSURE ON OPERATORS, WHILE INCREASING PRODUCTIVITY AND ACCURACY

The concept of the Handling Projector has been around for a year or so now. Indeed, Prime Vision and Genuin Engineering won an acclaimed industry award in 2017 for their collaboration in establishing the first pioneering steps in the development of a working solution.

Furthermore, over the past year development and implementation has been rapid, establishing three full-scale working pilots at major sorting hubs in Holland, Germany and Poland. Every location presented challenges, with each stepping-up the level of complicity and through-put demand. This culminated in a final solution that used 24 projectors working in synchronization on a single moving conveyor, acutely demonstrating the versatility, scalability and unique capabilities of the handling projector.

The solution was adapted and configured to efficiently meet the requirements of a variety of setups and configurations. By employing an open-architecture approach, Prime Vision and Genuin have ensured that these pilots – and all future installations – can be incorporated seamlessly into most mainstream sorting and scanning environments.

In the most basic terms, a handling projector is a simple solution. The theory is – as the parcel moves along the conveyor – the system locates the label, scans the barcode, ascertains the destination and then projects a route number onto the package.

The operator can then place the parcel into the correct mail chute or roll cage without having to stop to read the label.

Although a simple solution, the handling projector is very technically sophisticated. A high-intensity light



tracks and projects a target number onto a parcel as it continues along the conveyor. Even when the box reaches the end of the conveyor and packages begin to accumulate, the projected digit will remain on the same parcel until the operator collects it.

BUSINESS DEMANDS

A handling projector helps to address some fundamental industry questions. How can you increase the speed and efficiency of your existing sorting process without incurring large-scale investment and disruption to ongoing operations? How can we ensure we are flexible enough to react to fluctuating seasonal demand? How do we future-proof existing processes and plan new agile systems designed to meet the exponentially expanding e-commerce market?

The commercial benefits are clear as there is no need for a human to read the destination label during the sorting process. Not only will this improve the handling speed, but the potential number of sorting errors are equally reduced. The simplicity of the concept means that the handling projector is remarkably easy to operate and to work alongside. A very short learning curve means seasonal operatives can be quickly utilized, which offers both higher profitability and substantial savings in the costs of training.

In human terms, this solution is an important step forward for the operator. Traditionally, this part of the delivery process is very labor intensive, highly pressured and prone to mistakes. The seemingly never-ending line of parcels would build up with every unavoidable delay. Operators are forced to read address labels hurriedly and quickly assign the correct route. The handling projector removes the intensity of this procedure, so the focus of the operators can be on expediting parcels, not deciphering labels.

NEW PLAYERS

While Prime Vision is well known in the sector, Genuin Engineering is a newcomer to the market. Based in Rotterdam, Genuin is the brainchild of founder Ming Chan, who over the last few years has watched the company grow from a startup to now employing almost 25 people. Chan believes the human-factor is always a key driver when looking for the right solution.

Chan said, “My team and I spent many months working alongside the operators on the sorting line to try and learn fully how the existing operation worked or did not work from an operator’s point-of-view. We did this to understand not only the client problem, but also their employees’ pain. We believe it’s these things that ultimately gain the full respect of the client.

“One of the most important factors in the development of the handling projector was the

scalability. Our developer team quickly recognized the need for the projector to be a turnkey solution, so all the technology required is contained within. It’s incredible that each unit has recognition sensors, light projector and recognition software. This way, the system can be configured to meet both the operational and system requirements of our clients. It is the perfect first step to automation, even in a 100% manual operation.”

Multiple projectors can now work in perfect synchronicity with each other to match the throughput, length and speed of the majority of sorting locations. The plug-and-play nature of the system and ease of setup allows multiple projectors to operate as a standalone system, enabling the ability to scale up or down as operational circumstances demand. The solution can be used both as a temporary seasonal solution, but is robust and scalable enough to support even the busiest, permanent distribution centers.

FUTURE PROJECTIONS

With three systems underway, the system now has all the necessary EEC testing and certificates in place.

The first pilot approval came from Germany, which is widely considered to have the highest and rigorous industry standards in the world.

However, Prime Vision and Genuin are planning the installation of a fourth system that promises to take the system to a new level, incorporating some advanced features and a degree of technical autonomy. One new function will project a weight warning symbol onto the parcel, pre-warning the operators should any extra attention be needed for specific items.

KEY FACTS

Full-scale pilots have been established at three hubs internationally
The system has all the necessary EEC testing and certificates in place
Further development and additional features are currently in planning

