

WHAT IS SORTABLE?

The challenges to innovate in the logistics market are many and varied

One of the main focuses of recent years, and most probably for the foreseeable future, is to enhance the environmental friendliness of products and solutions – the improvement of energy efficiency and the use of recyclable materials has been the driver for the latest product developments. In this field Fives Cinetic always represented a benchmark, thanks to its leading-edge innovations implemented in sortation, singulation and transport technologies.

As an example, in the past two years Fives Cinetic has developed and presented to the market two product upgrades in the SBIR crossbelt family, both intended to improve the energy efficiency and reliability of the sorter:

- A new-generation friction driving unit that guarantees energy efficiency in excess of 90 percent, three times the efficiency of solutions based on induction linear drive motors and almost two times better than the latest linear synchronous drives.
- The new generating wheel scheme, which greatly improves efficiency in the transfer of power to onboard devices, and at the same time creates a fully redundant and fault tolerant power system, resulting in the highest reliability of the operations.

But true innovation is something even more. It is being able to solve in a creative way the changing needs of customers, improving their operation efficiency and results. The history of Fives Cinetic is full of experiences based on this approach – the launching of the crossbelt technology in the 1980s, the creation of automated singulation in the 1990s, the introduction of the crossbelt width-wise loading method in 2000, and more.

The challenge that remained unsolved was the automation of ‘non-conveyable’ items handling. This appears to be a contradiction in itself: how can you automate something that is not conveyable? Actually the classification of an item as non-conveyable is very much linked to the available technologies: moving from shoe



sorter and tilt-tray sorter to crossbelt technology has already widened the spectrum of sortable items, but there are still a large number of difficult items that need manual handling, which is costly, time consuming and subject to a lower level of accuracy.

Fives Cinetic's most recent development, the Slide Sorter, has been expressly studied, designed and configured to be able to sort any kind of item, despite its physical characteristics, such as dimensions, surface and shape. It is able to do this because of its very simple and robust design that does not require a bulky and heavy installation. Of course a sorter that is able to sort difficult items is also capable of handling regular ones, thus we can recognise two fields of application:

- In major systems the Slide Sorter can be installed beside the main sorter to handle the difficult items separately and deliver them automatically to the same reload positions.

Above: The slide sorter also handles non-conveyable items
Left: The diverting sorter unit

- In small depots it can be used as the backbone of the operation, as a universal sorter to handle regular as well as irregular items. The ability to operate the system in both directions enables simple reconfiguration of the installed equipment to cope with the different needs of the outbound and inbound flows.

With the introduction of the Slide Sorter, the portfolio of Fives Cinetic's products and technologies enables the company to extend the definition of 'sortable', to include more kinds of items into the automated sorting process. This confers a clear benefit on the reliability and efficiency of operations in sorting centres.

Fives Cinetic can help its customers analyse their operations and logistic flows, in order to study and propose the best combination of solutions and technologies to develop a tailored solution that results in the greatest efficiency in the customer's business.

FIND OUT MORE

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