



Impressive Skyfall system for the distribution of goods in fashion logistics

Challenge / Project goal

- Semi-automatic loading and fully automatic unloading of up to 2,000 pouches per hour
- One system for flat and hanging goods (GOH)
- Faster processing and automatic order picking of customer orders
- System design already foresees the option of further sorter and buffer extension
- Flexible system to handle orders for B2B, B2C and return shipments
- Handling of multiple items per pouch

Scope of delivery and performance

- 50,000 Skyfall Shuttles with pouches for lying goods
- 8,000 Skyfall Shuttles for hanging garments (GOH)
- 2.2 km circulation conveyor ($v = 0.75\text{m} / \text{s}$)
- 10 stations for semi-automatic loading of the pouches (max. 2'000 / h / station)
- 8 stations for fully automatic unloading of the pouches and packing of the articles (max. 2,000 pouches / h per station)
- 8 stations for fully automatic delivery of the hanging garments (GOH)
- 5 dynamic buffers (total capacity up to 45,600 shuttles)
- 2 matrix sorter modules 6³



Customer details

- Mayoral Moda Infantil S.A.U.
- Family owned company, founded in 1941
- Market leader in Spain specializing in children's fashion
- 14 sales companies, 250 sales representatives in 100 countries, 260 own stores & franchises
- 10,000 points of sale
- 30 million of sold and processed items in 2019
- Turnover in 2019: EUR 356 Mio.

mayoral

Solution / Result

- Development and readiness for series production of the fully automatic loading and unloading stations within a few months
- Automatic loading station for the stable induct of hanging garments into the Skyfall system with throughput of up to 2,000 hangers per hour
- No manual work due to automatic article entry of hanging goods via barcode
- Custom-designed bag for automatic handling at loading and unloading stations
- Pouch capacity up to 3 kg total weight (goods and pouch)
- Total capacity up to 12,000 articles per hour
- Parallel processing of B2C and B2B orders, with dynamic prioritization
- Material flow control and Control system completely provided by Ferag AG
- Commissioning: 2018 - 2019
- System integrator: TGW



Reason Why

- Full customization of the concept, equipment and solution to customer's requirements
- Best possible integration into the logistics process through fully automatic loading and unloading
- Reduction of conveyor technology and increase in throughput due to multiple items per pouch
- Reduction of energy and operating costs
- Optimal use of space

