

Beverage & Food PERFETTI VAN MELLE Lainate - Italy



New Perfetti Van Melle distribution centre: "Goods to man" picking concept and automated material storage, transfer and outbound transport to 150,000 end customers.

The company

Perfetti Van Melle is a leading player in its sector in Italy with an active presence in more than 150 countries worldwide. The company produces and sells sweets and chewing gum and is recognised as holding an important position among confectionery manufacturers.

The third biggest worldwide in its sector, with total turnover exceeding 1,900 million euros, the group enjoys significant growth due to its constant research into new products and various acquisitions. The group was set up in March 2001 following the acquisition of the Dutch company Van Melle NV by Perfetti S.p.A. and grew further in 2006 when it took over the Spanish company Chupa Chups.

The group includes in its product range, not only several recognised brands of chewing gum, such as Vivident, Happydent, Vigorsol, Daygum, and Big Babol, but also various well known brands of sweets such as Golia, Morositas, Goleador, Frisk, Alpenlibe, Fruittella and Mentos.

Issues requiring attention and relative objectives

The figures have always spoken for themselves at the Perfetti group; constant product innovation and the strength of its distribution network have allowed the company to not only expand, but also become one of the world's leading players in the confectionery sector. The constant group growth has led to the company to currently head 32 associated companies, which distribute its products throughout 150 countries worldwide.

The continuous group growth required an increasing allocation of space for production facilities at the partial expense of distribution activities, which was often forced to use third party storage areas, with subsequent costs for product shipment and transfer. This was behind the decision taken by PVM Italia to set up a new distribution centre at Lainate in January 2009. The storage depot was set up in partnership with System Logistics, and receives not only round-the-clock product deliveries from the Lainate plant (approximately 60% of total flow) but also the other group plants both in Italy and abroad.

National distribution includes both direct delivery to key account customers in the large-scale distribution sector as well as a network of 48 logistic sites located throughout the territory carrying out sales and distribution activities.





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The solution and achieved results

The warehouse comprises an automated storage area for palletized units to be delivered, *finished products*, and *tertiary* and *transport packaging*, covering a surface area of 2,160 square metres; 23.5 metres wide at the front and stretching back (including front facade) for a total of 92 metres.

Pallets (800 x 1200 mm) are moved from the packaging lines to the warehouse feeding station. Here, the required product is automatically identified, and incoming quantity control procedures check weight, height and film wrapping. The warehouse can handle 10,400 pallets, positioned along 4 lanes with a rack feeder/carrier per lane. There are 12 levels of stacking racks, subdivided according to pallet height. The first 10 levels of racks can store pallets up to a maximum height of 1,120 mm, level 11 up to 1,300 mm and the last level for pallets up to 2,100 mm. Apart from the height of the storage area units, the lanes are also differentiated in terms of depth with the two external lanes catering to two pallets and the central lanes catering to one pallet. Order packaging is carried out according to an "opera-



tor-bound material" procedure. The units to be packaged and delivered are selected from the automated warehouse, shuttled by the System Vehicle Loop to the picking station where the operator picks the required number of items. The picking operation consists of the creation of a single-item 'delivery unit'. This may comprise more than one layer and will make up the final customer order that is sent as the 'shipment unit'. The system pre-calculates the amount of items in order to optimise shipment unit load and size at the film wrapping area.

Units are then wrapped, labelled and stacked in the shipment area prior to their being loaded onto trucks for delivery. The System Logistics WMS information system supports the order packaging process; a process computing logistic system governing warehouse shuttle and rack feeding operations.



Concluding remarks

These initial months of operations have seen warehouse automation providing the hoped-for and expected results in terms of system functionality and financial return.

The new distribution centre has also allowed us to rationalize the use of third party storage facilities and, as such, achieve not only financial benefits, but also improved customer service.

TECHNICAL SPECIFICATIONS Lainate Distribution Centre

Load unit

- Type: Europallet; 350-1000 kg

- Dimensions: 800x1200xH1140-1300-2100 mm

- Weight: 350-1000 kg

Warehouse storage

- Capacity: 10,400 pallets

- Racks: self-supporting

- Dimensions: 92.6x23.5xH21 m

- Rack feeders: 4-speed or.-ver.: 240 m/1′ - 54 m/1′

- Gripping/carrying device: single or double depth

telescopic forks

Material handling and transfer system

- SVL chain: 1

- SVL shuttle: 6+1

Picking

- Type: single package

- Average production: > 800 rows/day

- Package picking station: 4

Shipment

- Average capacity: 500 pallets/day

- Pre-shipment position: on ground

WMS

- Software: Systore®

