Hamé Distribution Centre
THE PLATFORM

If transport continues to grow at the same rate as the economy, this will become both an economic and an environmental problem. Increasingly congested roads are as much a disadvantage to European business as they are to society at large. The bestlog project, initiated by the European Commission, will establish an exchange platform for the improvement of supply chain management practice across Europe.

OBJECTIVES

• To improve logistics practice and logistics education
• To raise the overall standards of practice across Europe
• To set high standards for logistics education and practice
• To create economic growth and job opportunities as a result
• Achieve a better match between EC policy and business decisions

SOLUTIONS & ACTIVITIES

• European platform for sharing logistics best practice
• Online directory of logistics best practice case studies
• Online directory of European logistics education opportunities
• Benchmarking online for European companies
• European conferences to share logistics best practice
• Web forum, award directory, media directory, and more
• Industry workshops
PROBLEM DESCRIPTION

The original situation was criticized for system inconsistency, the low level of cohesion (flow warehousing, limited floor footage, more than one forwarding department, external buffer warehouses for peak volumes and multiple trips between individual sites), low transmission quality and delays in information flows, the handling of goods and paperwork in depots, manual processing of documents, the high rate of damages, the high error rate and additional costs due to the transport of goods from plants to depots, buffer warehouses, and between individual depots. Problems were also identified in the following areas:

- Complicated distribution system
- Long response time to customer orders with limited options for the consolidation of final deliveries.
- High warehousing and transport costs.
- Traditional warehousing technology with a high proportion of manual work.

The company has defined the parameters of the new facility in depth; using modeling and suitable simulation techniques, the most appropriate warehousing and handling technologies have been designed in cooperation with various suppliers.

The goal of the new set-up is to provide a solution which simplifies day-to-day operations, speeds up order response time and optimizes utilization of both warehousing technologies and transportation capacity. If the company had not decided to pursue these ambitious goals, its market competitiveness would have been severely threatened in years to come.

Hamé a.s., the leading Czech food manufacturer, has experienced rapid growth of its operations in the last few years not only in the Czech Republic, but also in other European countries – Slovakia, Poland, Hungary, Ukraine, Moldavia, Romania and Russia. The vast increase in flows of goods and the strict requirements applying to the majority of Hamé production lines created an urgent need for the construction of a new customized distribution facility with European coverage. The chosen combination of the solution concept and the technologies used makes the approach unique and ensures that it meets all the requirements defined in the preliminary stage of the project. As a result, Hamé has cut its logistics costs, reduced negative environmental effects by making substantial cuts in total kilometers driven and reduced the damaged goods and error rates as well as the amount of time the goods stay in the DC; the solution is also characterized by increased utilization of technologies, improved labor safety, higher productivity, increased service speed and better service accuracy.

COMPANY FACTS

Company name: Hamé a.s.
Location: Kunovice near Uherské Hradiště / Czech Republic
Industry/sector: Production
Company size: Large
Employees: 3,200
Turnover: 185 million € (2007)

Services/products offered:
Full range of canned and processed food products (non-refrigerated)

Further case related logistics figures:
- Warehouse size: 19,000 m²
- Storage capacity: 35,000 pallets
- Daily turnover: 3,000+ pallets
The massive increase in flows of goods and the strict requirements for the majority of Hamé production lines have recently resulted in the construction of a new distribution center tailored to the needs of the company.

Parallel to this, Hamé launched a special project with the ultimate aim of developing a tailored technological solution based on a unique combination of the most state-of-the-art technologies offered by the world’s leading manufacturers of warehousing equipment.

The warehousing and dispatch system used in the European distribution center of Hamé comprises standard line shelves, BT Radioshuttle deep-reach warehousing and a Jungheinrich Drive-In-System (DIS), substantially increasing the efficiency with which the existing warehousing space is used. The combination of DIS and the central dispatch tunnel is unique in our environment; this solution is used for the dispatch of combined pallets with high turnover rates in order to radically speed up the entire process.

Jungheinrich Drive-In-System with dispatch tunnel with sloping roller conveyor featuring hi-density flow shelf system with a capacity of over 2,880 pallet positions, continuous pallet dispatch in the tunnel, controlled shift of pallets in flow channels by satellite trolleys.

BT Radioshuttle is also a hi-density flow shelf system offering a capacity of 3,920 pallet positions, continuous...
pallet dispatch in the tunnel, a depth of 10 pallets for full truck loading, controlled shift of pallets in flow channels by satellite trolleys WiFi technology with remote (wireless) terminals and bar coding.

Advanced handling technology structured and designed on the basis of mathematic modeling. Brand new DC building meeting all modern standards with main warehousing area, inbound section and outbound section.

As a result, Hamé successfully reduced logistics costs, negative environmental effects and the time the goods stay in the DC; it increased utilization of technology, work safety, productivity, service speed and service accuracy.

In addition, the chosen solution sets new standards for the internal flow of information with the highest possible level of its security. State-of-the-art technology is driving the demand for higher staff qualification - and this will result in the creation of a tailored corporate training system for company employees on all levels. All this positively influences the corporate culture, reflecting the changes occurring at all levels of the company.

CHALLENGES

- Improvement of warehouse KPIs
- Redesign of company processes
- Online communication between the warehouse management system and company IS
- Reduction in external “buffer” warehousing operations
- Merging of 5 dispersed dispatch centers into just 1
- Capacity increase and stock optimization
- Use of latest handling technologies (automatic identification, WiFi, modern remote terminals, etc.)
- Staff reduction
- Focus on environmental issues
- Reduction of handling times (resulting in lower energy consumption)
- Reduction in the frequency of errors and damage

All handling technologies and equipment have been extensively customized to ideally meet the needs of the distribution center.
Implementation of a new WMS delivered instant results by highlighting numerous redundant functions, inefficiency and other examples of poorly planned utilization of systems which – despite the well-meant efforts of personnel on all management levels – were no more than the logical result of obsolete technology.

- New people, new layout, new building, new technology – all these factors created brand new challenges for the management as well as for all staff.

- The initial phases, especially in terms of reaching consensus on the necessity for change in order to increase overall efficiency, were the toughest ones in the entire project. The reason for this was that some of the people who had been „emotionally involved” in driving the huge growth of the company were forced to make more „rational” decisions.

The solution is unique and innovative with regard to the:

- unprecedented combination (in the Czech Republic) of two state-of-the-art warehouse technologies and their integration to form one common warehouse system.

- implementation of an advanced warehouse management system which takes account of both the features of the deployed technology and the requirements of company logistic processes.

- highly beneficial ratio between the necessary investment and the benefits achieved.
**SUSTAINABILITY**

**The Benefits**

Flexibility, the quality of all logistic operations, accuracy, labor productivity, staff qualification, work safety and profit margins have all increased since the project was launched; at the same time, system failures, discrepancies, accidents, injuries, warehousing costs, transportation costs, transportation needs and total personnel costs have been reduced.

**Economic**

The chosen solution combines economic benefits of two kinds: firstly, it centralizes existing operations in a single facility, which substantially reduces logistics costs (while achieving better results with fewer negative overall effects). At the same time, it also ensures improved utilization of state-of-the-art technology by achieving a critical mass of items handled.

**Environmental**

Significant reduction in the number of unnecessary truck trips to customers.

**Social**

The new logistics organization of the plant and associated services has provided better working conditions for the truck drivers.

**Transferability**

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<th>Transferables</th>
<th>Limitations</th>
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<td>The selected solution can be applied anywhere regardless of industrial, geographical, or company specifics - the only limitation being the partly customized adaptation of the warehouse management system to specific company processes and the in-house information system. Warehousing and handling techniques would have to be tailored to the actual product lines or product ranges.</td>
<td>Low volumes of stored and handled products; small company size which would not justify substantial financial investment.</td>
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++: very high, +: high, o: neutral, -: low, --: very low
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