

# The private dental distributor in the U.S. implemented a pick module as part of its expansion and legacy

**Uprooting Benco Dental: a customized warehouse to speed up picking**



In January 2010, dental equipment supplier Benco Dental teamed up with Interlake Mecalux (IKMX) to create the nucleus of its rapidly swelling business: a new home office doubling as a distribution centre and lavish product showroom. After a decade that saw the Pennsylvania company open distribution centres throughout the USA, Benco Dental's next step was to bring the corporation back home.

The founder Ben Cohen put down roots in Pennsylvania in the 1930s and formally started Benco Dental in a modestly sized Wilkes-Barre Township office. Benco grew the business there for the next 30 years. In Wilkes-Barre, the enterprise was hampered by, among other things, limited and undersized pick locations, pockets of scattered secondary stock, and bins with inefficient replenishment.

"The most bang-for-your-buck happens [when companies] receive product, stick it in its primary location and pick it," said a Benco spokesperson. "That's the philosophy we took when we designed the new facility." In its latest move, Benco swapped a 6,400 m<sup>2</sup> installation for over 14,900 m<sup>2</sup> just 11 km away in Pittston.

## **Mecalux steps in**

Bob Novak, Interlake Mecalux's East Coast marketing manager, explained that he first got

involved with Benco Dental after one of its lift truck distributors came to him for help designing Benco's pick module in Fort Wayne. He noted that after IKMX's involvement with the Indiana installation, Benco Dental commissioned the well-known Spanish warehouse solutions provider to install racks in its future installations.

As it often does, the evolution of this process started with Benco Dental's conceptual drawings. After the sides volleyed their ideas back and forth, the concept was whittled down to a final design.

"We went in as the experts on pick modules and have worked with Benco ever since," said Novak. "It worked out pretty well," top Benco managers replied, reflecting on both Benco's reenlistment of Interlake Mecalux and the six-week installation.

Today, more than 400 employees work out of the Pittston facility – not just in the distribution warehouse, but in the offices, classrooms and showrooms built into the structure's design. "We have the biggest single place in the U.S., where dentists can come see all kinds of working operatories," a spokesperson continued. Twenty-six office sets display the products and technologies Benco distributes.

### **Challenge and success**

Relocating a company is a tough business, even if it only means moving you 11 km away. The Pittston installation rests in a never-occupied building within a storage park that was adapted by Mecalux according to Benco's specifications.

Benco Dental's team realized how tricky the several months preceding the move were going to be. It meant having to manually move 34,000 items one-by-one from old pick slots to new ones. "Maintaining customer satisfaction during the move was the biggest challenge," Benco management explained, "We didn't shut down for one day."

### **Benco Dental reinvented**

The design and size of Benco Dental's installation ensures that it isn't strained by constant restocking demands. Warehouse dimensions aside, the dental product distributor uses its space wisely by also building up and canvassing each square meter with efficient operations. Benco's floor plan certainly fulfils all of its basic requirements, but it is the system's bells and whistles that add a unique efficiency exclusive to that Pittston facility.

In addition to the improvements the racks inherently create on the premises, the expert innovations and specialized flourishes of the Pittston location optimize production. Mobilizing Mecalux's knowledge into innovative solutions is what helped solidify Benco. "I approached Interlake Mecalux with a basic design in mind, they tweaked it, and we both added some great features," said a key Benco manager.

Here are Pittston's biggest **customisations** – and why they are necessary:

- **Adjustable decks:** make it easier for anyone to stock top shelves. The solution was to incline the deck on the higher end of the carton flow module by several inches and install multiple catwalks connecting the two. The end result is a seamlessly equal reach for personnel on both sides.
- **An overpass:** in addition to the catwalks, Novak and the IKMX design crew were able to create an overpass connecting the second floor of the pick module with a structural mezzanine for greater throughput.
- **Extra shelf picking area:** the design also called for shelf pick areas allowing for maximised

order fulfilment or just-in-time shipping. Shuffling the product out the door or back into the system is easier to do the more shelf picking areas one has. Once a pallet is unloaded onto the dock, lift trucks transport the pallets to their locations throughout the module.

- **Steel-encased flow rail:** the ground level pallet flow rails were last-minute additions designed to maintain a productive picking speed of oversized products. It keeps product both stored and out of the way, and protects against possible damage done by lift trucks.
- **V-shaped shelves:** Benco Dental wanted their smaller, slower-moving products to be accessible to the pick area without going to great lengths to retrieve them a common wish among facilities with similar products. For this, the group designed V-shaped shelves. The 20-inch deep units hang above the conveyor accessible, but out of the way.
- **Bonus storage:** adding more storage space to each level meant that Benco would have extra floor space where pallet storage would have been. The extra floor space can be used by forklifts to unload additional goods faster.

### Pick module safety

How Interlake Mecalux worked with Benco Dental to ensure safety.

1. **Safety straps.** The operator is hooked into a harness, as well as a safety strap. The strap rides along a trolley line that runs the length of each module level (other than the ground floor). **Galvanized safety deck.** Once a pallet is fully picked, personnel relocate the pallet. The galvanizing ensures an easy, undamaged course of the pallet to a return lane, and the safety of personnel below from wood shards. **Safety netting.** The netting extends past the safety deck in order to deter personnel from approaching the edge of the pick module, and to protect them if they do.

### Advantages for Dental Benco

- **Design and dimensions:** special design features and the large-scale installation ensure that they are able to supply the continuous demands of restocking products.
- **Space optimization:** Dental Benco uses the available space intelligently, taking advantage of every square meter for efficient operations that contribute to the strong performance of the installation.
- **Development of made-to-measure products:** the customization of the system, in accordance with the needs and requirements of the client, gives the installation unique efficiency. The application of Mecalux's technical knowledge, in regards to innovative solutions, has helped Benco to stand out among their competitors.
- **Enhanced productivity:** as a result of the incorporation of massive picking modules from Interlake Mecalux and other systems in the Pittston installation, Benco estimates that has increased its productivity by 12 % in comparison to what it earned in its previous facilities.

Company sector(s): [Health Care Wholesalers](#)

### Products used in this project



[Live storage for picking](#)

[Mezzanine floors](#)

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