

## Sophisticated Logistics Right Up to the Operating Table

# Implants & Co.

Implants from Zimmer, the orthopaedic surgical products specialists, are now being delivered from Germany.

The global leaders for artificial hip and knee joints are supplying half the world's markets from Eschbach near Breisgau.

The ground-breaking ceremony for the new distribution centre in the Breisgau Business Park took place on 11<sup>th</sup> April 2008. Just one year later, Zimmer has completed its new distribution facility located on the 3 hectare site on the Max-Immelmann-Allee in the Breisgau Business Park. With an option on a further 3 hectares, Zimmer has the potential to double its capacities over the next 15 years. According to Senior Project Manager Ernst Balmer of Inova Management AG, expansion plans have already been drawn up. Zimmer customers are highly demanding. Implants and orthopaedic surgical products must be available at all times. To ensure optimal delivery capability, Zimmer needs to maintain highly efficient distribution centres at strategic locations.

### Location benefits of Eschbach

The Breisgau Business Park has its own motorway junction that allows the Euroairport Basel-Mulhouse, vital to Zimmer's operations, to be reached in just 30 minutes. All orders are processed and delivered ex-inventory on the same day. Explains Thino Baumer, Head of the EMEA Distribution Centre of Zimmer International Logistics GmbH, «While everything has to happen fast here, errors must be avoided».

«Consequently, overnight deliveries are an integral part of our distribution concept», he adds. «In addition to the ideal geographic location, the outstanding and efficient support of the Business Park administration facilitated the rapid and effective implementation of the project», mentions Thino Baumer.

### Enormous diversity of products

The new building has a gross floor area of 10 000 square metres. In the construction of this state-of-the-art distribution centre, 3800 cubic metres of concrete and over 600 tons of steel were used. This centre is supplying all of Europe, Africa and parts of Asia with implants and orthopaedic surgical products. Some 40 000 different products are stored in Eschbach. When the facility came on stream, no less than 1 800 000 articles were in inventory, ranging from the tiniest screws right up to artificial hip joints. High-volume small parts are kept in the automated small-parts warehouse. Storage and retrieval of the single-batch products is via standardised tote boxes. Contained in multi-parameter sterilisation pouches, the products are identified by multilingual labels applied at goods inwards. The bar code printed on the label is scanned and the relevant data input into the warehouse management system. The entire logistics concept that efficiently and rapidly processes the orders was delivered by the Dematic company. «The Dematic MultiShuttle System provides the specified high levels of performance and reliability, plus virtually infinite scalability», says Ernst Balmer. The «Advanced Pick-by-Light» system caters for picking of up to 1400 items per hour. In the small-parts warehouse, up to 140 000 bin locations can be managed. The entire installation is controlled and monitored from a centralised control station. On 1<sup>st</sup> June 2009, Zimmer had a manpower strength of 80 employees in Eschbach.

### FDA imposes strict requirements

In addition to Zimmer's own strict quality and process safety standards for its orthopaedic products, government legislation is equally rigid. «The regulations of the Food and Drug Administration for computer aided systems are extremely demanding», explains Ernst Balmer. The FDA directives lay down how the installation is to be qualified and the processes validated. «Even the inspection equipment itself has to be qualified and validated», adds Balmer. The comprehensive acceptance and validation tests at the new Distribution Centre were successfully completed in May 2009. Zimmer also offers a leasing service. Smaller hospitals can lease the instruments necessary for the operations they are undertaking. This service also includes the inspection and cleaning of instruments. A dedicated hygiene and decontamination room has been set up in Eschbach specifically for cleaning, inspection and repackaging the instruments. Access is only granted to authorised personnel. In this sector too, the FDA regulations impose strict access controls, manipulation safety and retraceability of data and user activities. According to the FDA directives, each step must be fully documented and retraceable. «We must be able at any time to prove who, what, when and why the process was implemented», explains Ernst Balmer. ||

Joachim Heldt

### Zimmer Holding Inc.

The company was founded 1927 by Justin O. Zimmer in America. The founder's motto of «Never stop learning, always try to improve yourself and don't let anyone tell you that something can't work» drove the company to world leadership. Headquarters are in Warsaw, Indiana, USA; the European offices are located in Winterthur, Switzerland. Six years ago, Zimmer acquired the Swiss company Centerpulse, global leader for orthopaedic devices. According to its own statistics, Zimmer has 7000 employees and

markets its products in over 80 countries. Zimmer is the world's biggest producer of implants and reports a turnover of 2.5 billion euros. Some three quarters of its net sales are generated through artificial hip and knee implants alone. The product portfolio ranges from minimally invasive solutions for reconstructive orthopaedics, trauma and spinal surgery, to dental implantology. The range is complemented by a variety of orthopaedic surgical products.

Key Data	
<b>Conveying Technology</b>	
▪	14 lanes, 29 levels and 90 000 storage bins in the small-parts warehouse
▪	140 000 storage locations incl. partitions and manual slots
▪	1000 metres conveying length for bins and cardboard boxes; conveying technology is completely redundant
▪	150 km electrical and data cables
<b>Storage Capacity</b>	
▪	1 800 000 articles on stock
▪	40 000 different products
▪	110 000 article/batch combinations; goods are stored at article/batch specific level