

CeMAT 2014: Market-driven innovation

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Hannover. CeMAT is the world's leading trade fair for intralogistics. The biennial event is staged in Hannover, Germany, and will next be held from 19 to 23 May 2014. Logistics technology providers from around the globe will be there in force to showcase the latest trends and innovations in warehousing, packaging and order-picking and to explain the big market trends that are currently defining the intralogistics industry.

One of the biggest factors that is undoubtedly shaping the intralogistics industry right now and will most likely continue to shape it over the coming years is eCommerce. The short story here is that end-customer demand for smaller orders, shorter turnaround times and guaranteed availability is feeding back up the production chain into demand for more efficient logistics systems and error-free order picking. "These demands need to be reconciled with other, sometimes conflicting, requirements, such as greater storage density, freezer storage capability, increased efficiency and guaranteed rapid access," explains Harrie Swinkels, CEO of the German logistics technology provider SSI Schäfer. "With products like our new 3D-Matrix Solution, we are able to deliver integrated systems that offer very high performance at optimal storage density, while at the same time meeting very demanding requirements in terms of sequencing and scalability." Swinkels believes one of the biggest challenges for supply chain logistics will be to provide multi-channel distribution systems that can efficiently service both eCommerce and retail stores.

Increasing process and system integration

The German automated material handling specialist Viastore Systems sees greater automation and tighter process integration as being among the defining trends in its industry. "We're also seeing the arrival of single software suites that are capable of integrating more and more processes. Our viad@t warehouse management suite, for instance, extends beyond the warehouse and into the customer's assembly plant, integrating factory processes such as kitting, assembly and transport," says Viastore spokesperson Matthias Schweizer. "Software applications for mobile devices are another key trend. More and more customers want to be able to track warehouse processes from their iPads." According to Schweizer, Viastore's CeMAT highlights will include a new app that enables customers to design their own individual warehouses. The app is intended as an early-phase planning tool. By enabling customers to explore their options in a virtual setting, it will provide a useful starting point for subsequent technology and investment decisions.

Providers of intralogistics solutions have traditionally focused mainly on distribution logistics, an area where there is undoubtedly still ample scope for optimization. "But increasingly our sector is also looking at production logistics," explains Michael Deininger, Director International Marketing at Kardex Remstar. Kardex Remstar manufactures automated storage and retrieval systems. "Production logistics is an area we want to get into, and so it will be the main theme of our showcase at CeMAT 2014." Noting the obvious tie-in with the increasingly important smart-factory themes of Industry 4.0, he adds: "It's a pretty apt description of what we do – we provide smart solutions that integrate existing systems and create added value for customers." Modern production logistics was, he said, all about flexible buffering and providing materials to assembly-line work stations quickly and seamlessly and without any redundant or manual in-factory transport or handling.

Energy-efficient, eco-friendly logistics solutions

Dr. Christoph Beumer, the Managing Director of the international intralogistics manufacturer Beumer Group, believes that intralogistics is one of the most innovative industries in the world. While in many industries the intelligent integration of different technologies, products, locations and even humans was only just getting started – hence the "Industry 4.0" slogan – it was already a well-established reality in the intralogistics sector. There, intelligent machines, parts and products were already able to communicate with one another and hence autonomously control most of their functions and handling operations. "The end-result is lean, efficient processes across the entire production chain. But that's not all. The intralogistics industry also has solutions for many of today's other challenges," Beumer said, pointing to automation technologies that streamline everyday work operations and eco-friendly production facilities that conserve energy and raw materials. "The intralogistics industry is a major problem solver for business and society – a fact that it will be demonstrating to impressive effect at CeMAT 2014," he said.

Environmental and resource conservation issues are steadily growing in importance in the intralogistics industry as a whole, with providers increasingly investing in eco-friendly plant and process technologies, low-CO₂ logistics services, sustainability, resource efficiency and energy efficiency. "Our auto ID solutions use high-performance, long-life LEDs, so we're already conserving energy and protecting the environment," says Torben Posert, the Head of Logistics Sales at German-based machine vision specialist Vitronic. "They also require virtually no maintenance, which further reduces lifecycle costs."

Customers are increasingly looking for one-stop-shop solutions. Posert explains: "They don't want to deal with multiple vendors. They want a single vendor who has the expertise to provide them with turnkey solutions that support all aspects of their projects, from planning to realization. And with Vitronic, that's

precisely what they get. That's the message we'll be communicating at this year's CeMAT – we are an integrated, one-stop provider of solutions and services for complex auto ID projects."

Industrial trucks makers turning to alternative drive technologies

Manufacturers of forklifts and industrial trucks are looking very closely at alternative drive and energy storage technologies at the moment. "It's too early to say for sure which of the various emerging technologies will successfully make the transition from research to market," says Klaus-Dieter Rosenbach, the Board of Management member in charge of engineering at forklift manufacturer Jungheinrich. "But there's a marked trend towards lithium-ion technology." This year, once again, alternative drive technologies and innovative energy storage solutions will feature prominently at Jungheinrich's CeMAT showcase. "Many other industrial truck trends will also have a strong showing at CeMAT. These include the continued use of assistance systems to boost efficiency, industrial truck automation, and systems for optimizing the control of entire truck fleets."

Matthias Klug, head of International Corporate Communications at rival German industrial truck manufacturer Still, has no doubt that the expensive and complex exhaust-gas cleaning systems mandated by tougher clean-air legislation will continue to steer R&D initiatives towards alternative drive technologies. "We anticipate further growth in demand for hybrid and battery-powered trucks, lithium-ion batteries and fuel cell-powered drive systems," he says. "This will be reflected in our CeMAT highlights this year. Visitors to our stand will be blown away by the innovations on display."

Innovations like Still's RX 60-60/80, a battery-powered heavyweight that can handle payloads of between six and eight metric tons. Or its all-new FM-X reach truck, which boasts multiple productivity-enhancing features, such as active load stabilization and holistic ergonomic design. Other highlights will include Still's range of iGo automation solutions. Klug: "We don't want give too much away at this point, but what I can say is that we'll also be presenting the outcome of a major investment in the future of intralogistics."

Demographic change driving automation

CeMAT's exhibitors will also be focusing on demographic change and its impacts on intralogistics processes. "Faced with a deepening shortage of qualified lift truck drivers and operators, our customers will increasingly look to efficiency solutions, including greater automation," says Norman Memminger, the Managing Director of Toyota Material Handling Germany. "This trend will affect all aspects of materials handling, including trucks for storage and retrieval, horizontal transport and order picking." Memminger believes the European

market will be characterized by increasingly tough competition among the European manufacturers, while providers from countries like China will be more likely to continue servicing their domestic markets than to make major inroads in Europe in the foreseeable future. "Market share will go to those providers who do the best job of giving the market what it needs and whose offerings can be differentiated from those of their competitors. That could take the form of added propulsion options, such as hydrostatic drive, a tried and proven fleet management system, warehouse logistics solutions, or any other product that gives customers quantifiable added value."

About CeMAT

CeMAT – the world fair for intralogistics – is staged in Hannover, Germany. The next CeMAT will be held from 19 to 23 May 2014, and thereafter every two years. The most recent CeMAT (2011) featured more than 1,000 exhibitors from 39 countries and attracted some 53,500 trade visitors from around the world. Half of the exhibitors and a third of the visitors were from outside Germany. CeMAT is now so important to the international logistics industry that its organizers, Deutsche Messe, have launched CeMAT spin-offs in four of the world's fastest-growing regions: CeMAT INDIA (10 to 13 December 2014 in New Delhi), CeMAT RUSSIA (September 2014 in Moscow), CeMAT ASIA (27 to 30 October 2014 in Shanghai) and CeMAT SOUTH AMERICA (30 June to 3 July 2015 in São Paulo). Related events also organized by Deutsche Messe AG are MATERIALS HANDLING EURASIA (19 to 22 March 2015 in Istanbul) and INTRALOGISTICA ITALIA (19 to 23 May 2015).

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