

# Itoh Denki: automated conveyer solutions delivering the fully-integrated package

**Incorporating both software and hardware, Itoh Denki's fully-integrated conveyer solutions enable customers to reach the cutting-edge of logistics technology.**

Over the coming years both the global e-commerce market and the demand for factory and warehouse automation will continue to expand at a rapid pace. Both of these trends bode well for Japanese company Itoh Denki, a global leader in modular automated conveyer solutions for logistic centers and factories.

Driven by both its capabilities in robotics and the urgent need to address its own domestic labor shortage issues due to its shrinking and aging population, Japan has placed itself at the forefront of factory automation in the Industry 4.0 era, thanks to a large base of innovative manufacturers like Itoh Denki, whose vision is to build "Technology for Tomorrow".

Established in 1946, innovation has always been at the core of Itoh Denki, which developed the first 24V brushless DC powered roller for conveyer lines, the Power Moller 24, in 1988, which became a safer, quieter and more energy efficient alternative among clients in Japan's reputed manufacturing sector. Having entered the United States more than two decades ago, Itoh Denki played a pivotal role in the modernization of the U.S. Postal Services' (USPS) logistics system and today boasts world-class technology centers in Amsterdam and California as it looks to continue its global expansion in the US, Europe and beyond.

Drawing on its 75-year experience in motor manufacturing, Itoh Denki aims to develop market-leading automation solutions for factories and logistical centers based on innovation, modularity and security.

"Our goal is to combine software technology including control and communication, and



hardware technology, including conveyor modules, on top of our motor technology to achieve the connected factory, seamless logistics, and eventually contribute to the solutions to address the labor shortage," says Tetsuya Itoh, president of Itoh Denki Co.,Ltd., which continues to update its Power Moller® (MDR or Motor driven roller) to incorporate the latest Industry 4.0 solutions, enabling customers to reach the cutting-edge of logistics technology.



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Tetsuya Itoh,  
President,  
Itoh Denki

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"To be more specific, having our Power Moller® (MDR or Motor driven roller) as a master cell, we build up our own MDR-based intelligent platform, where every peripheral device is connected through autonomous decentralized control, so as to combine the internet and computer with the physical conveyer equipment. Though these efforts, we endeavor to achieve conveyor innovation for the next generation, by capitalizing on Big Data from the logistics site to achieve predictive maintenance as well as a waveless workload."

With traditional material handling and factory automation equipment being big, heavy and cumbersome, Itoh Denki's key concept is based on developing solutions that are "light, thin, short, and small". Itoh Denki's motorized roller, for example, is

the ideal replacement for conventional handling equipment that requires a compressor to produce air through high pressure, as Mr. Itoh explains.

"What we are trying to achieve is to introduce our motor technology to every part of the material handling process. Interestingly, the airless technology which eliminates pneumatics is drawing a lot of attention from every segment of material handling."

Based on the "light, thin, short, and small" concept, idPAC, is one of Itoh Denki's popular solutions defined as a "point and click solution". Enabling quick, easy and efficient installation, idPAC systems come with complete modules, including rollers, transfer modules, circuit boards, frames and software. With everything preassembled, wired and ready to be put together, installation costs and time are drastically reduced, ensuring an early start of operations and a fast return on investment.

Having cemented its reputation as a leading supplier of automation equipment among clients in Japan and across the world, Itoh Denki aims to reach a wider base of global clients looking to get ahead with the highest-quality and highest-performing modular automated conveyer solutions.



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