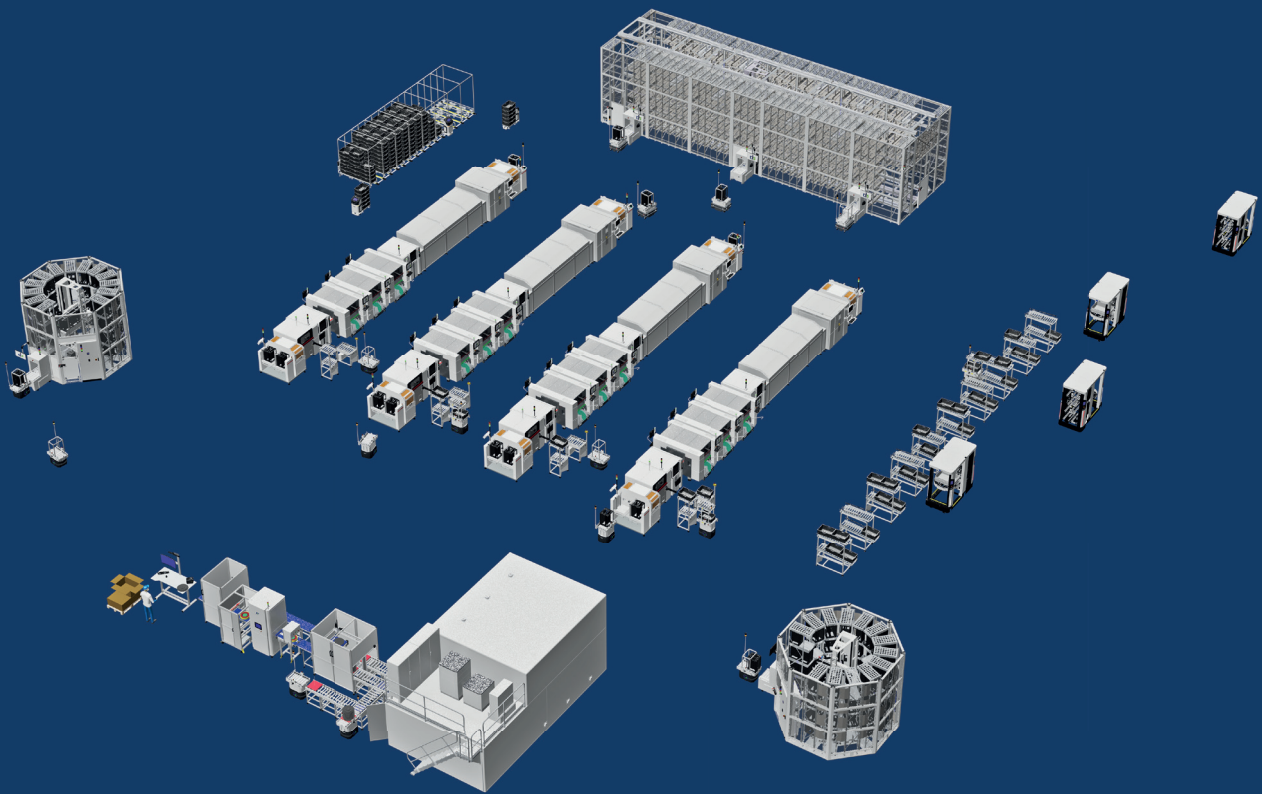




Your journey to the Smart Electronics Factory starts here.

Unlock higher throughput, reduce downtime, and ensure precision with automation tailored to your needs in electronics manufacturing.



Intralogistics, but build for electronics manufacturing.

Transitioning to a Smart Electronics Factory means tackling today's manufacturing challenges head-on. From labor shortages to rising costs, smart factory integrations streamline operations, enhance flexibility, and deliver real-time insights. Embrace a system that evolves with your needs, ensuring your factory is always one step ahead.

Your advantages: Scalability, throughput, real-time insights



Employee upskilling

Automation empowers your team with high-value skills



Increased throughput

Supercharge production without needing extra labour



Reduce material damage

Protect your components with precise automation



Enhanced inventory visibility

Take total control with real-time tracking of your material



Scalability

Seamlessly expand as demand increases without disruption



Optimized space use

Maximize every inch of your existing facility and shop floor



Fast, accurate order picking

Ensure every component is where you need it to be in time

Big project, big cost? Not with us. Pay as you go. Start mini.

We understand the concerns you may have about adopting automation. What if it doesn't work as planned? What if the costs spiral out of control? That's why our solutions are designed to grow with you. Start small with our Mini Smart Warehouse and scale up as your needs evolve. By taking a modular approach, you can avoid unnecessary upfront costs and spread out your investment as you see results.

Instead of relying on manual labor, imagine a system that frees your skilled workers to focus on high-value tasks while automation handles repetitive processes. Worried about implementation? We provide comprehensive training and ongoing support to ensure your team feels confident every step of the way. With our solutions, you're not just investing in technology - you're investing in stability, growth, and peace of mind.

With our holistic approach, you're not just adopting technology - you're creating a future-proof, efficient, and scalable production environment.

Get in touch with us via
our website form



How do you overcome today's challenges?

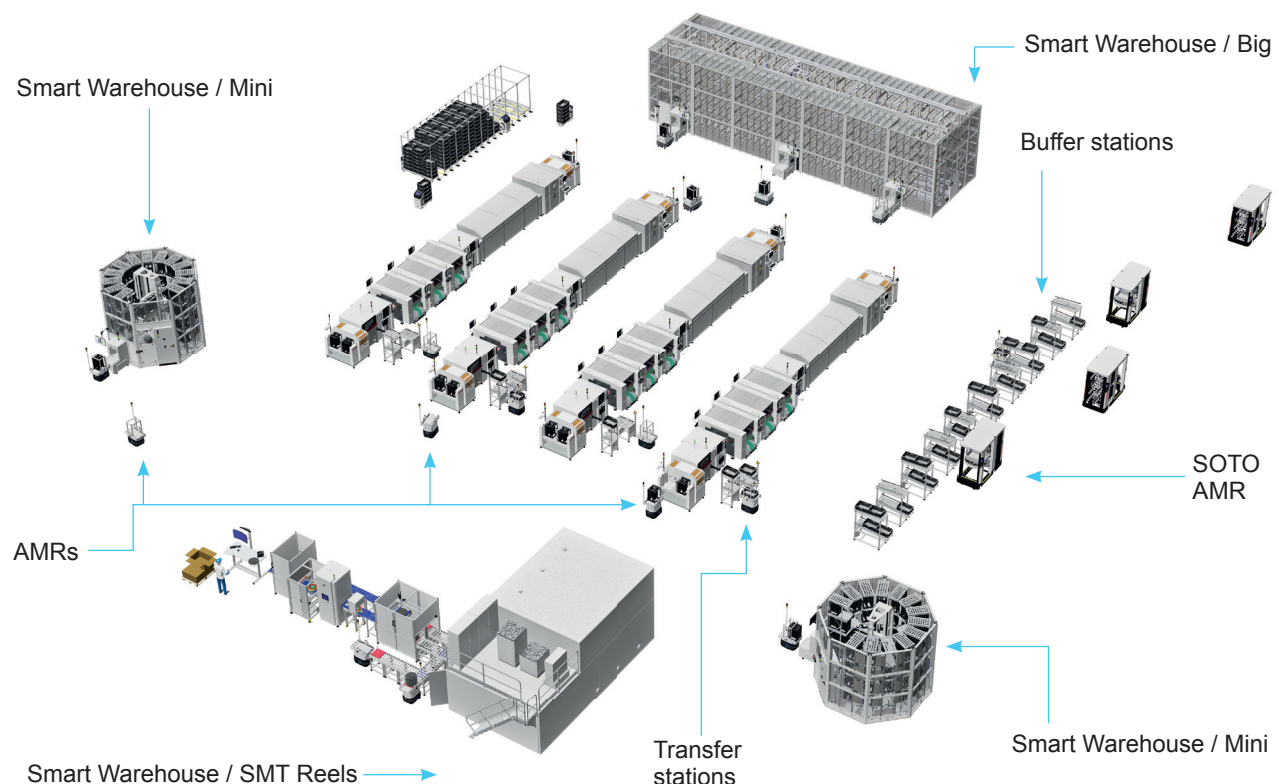
From increased regulatory demands to the constant need for precision, modern electronics manufacturers face hurdles daily. Here's how the Smart Electronics Factory addresses these pain points:

- » **As a Production Manager or Operations Leader** in modern electronics manufacturing, you face constant bottlenecks caused by the misalignment between supply chain data and factory workflows. These delays lead to downtime and missed deadlines.
- » **As a CFO or Head of Procurement**, you are hesitant to invest in smart technologies due to high upfront costs and concerns about ROI.
- » **As a Process Engineer or IT Manager**, integrating advanced technologies like AMRs with your existing ERP or MES systems feels overwhelming and disruptive.

Our Smart Electronics Factory solutions automate your production workflows with low-maintenance, reliable technology, designed to address the unique demands of modern electronics manufacturing.

More precision. More efficiency. More confidence.

Gain full control of your intralogistics and production flows with real-time tracking and automation that adapts to your needs. From material handling to component placement and order picking, our solutions optimize every step, empowering you to deliver with speed, precision, and confidence. **The Smart Electronics Factory** ensures your operations are always one step ahead, meeting demand with unmatched reliability and flexibility.



The cts Group drives innovation to revolutionize your electronics production.

Smart Warehouse / Mini: Precision storage for various components

The challenge on the market

Many existing systems lack the flexibility and scalability required to adapt to the dynamic demands of modern production environments.

The result of automation

With the **Smart Warehouse / Mini**, you overcome outdated, rigid systems that competitors still rely on. Its modular, scalable design ensures seamless expansion, while real-time tracking and dynamic in/out ports eliminate material flow bottlenecks.



- ✓ Store up to 400+ PCB magazines, trays, bins and totes without wasted space
- ✓ Higher output capacity without increasing factory size
- ✓ Achieve seamless integration with AMRs, ERP systems, and smart logistics

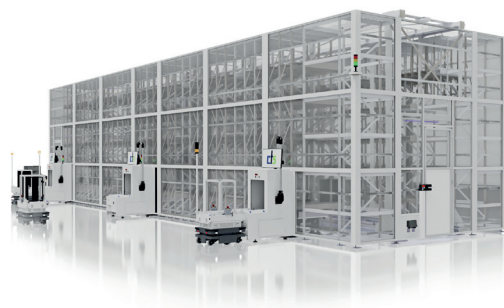
Smart Warehouse / Big: Powering large electronics manufacturing

The challenge on the market

Conventional systems often can't scale efficiently or handle the complexity of high-volume electronics production, causing delays and wasted space.

The result of automation

The **Smart Warehouse / Big** outperforms traditional systems with modular scalability, enabling seamless growth as production needs increase. Dynamic material flow ensures zero delays, real-time tracking prevents errors, and optimized space usage reduces overhead.



- ✓ Maintain material availability and eliminate stockouts
- ✓ Reduce dependency on manual labor for material handling
- ✓ Store 400 to 2,000+ PCB magazines, trays, bins, and totes without wasted space

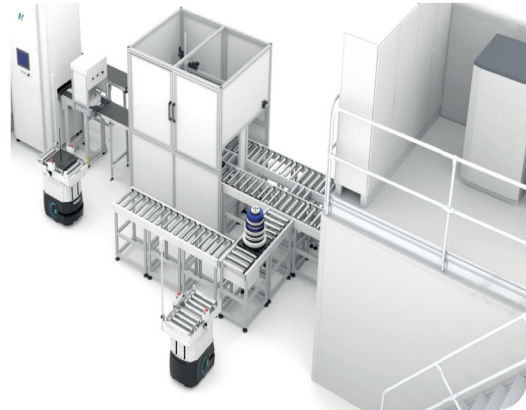
Smart Warehouse / SMT Reels: Revolutionize reel storage logistics

The challenge on the market

Conventional warehouses struggle with high-density reel storage, inefficient material handling, and lack of traceability, leading to bottlenecks and production delays.

The result of automation

The **Smart Warehouse / SMT Reels** maximizes space with storage for over 50,000 reels in just 50 m². Automated handling and real-time tracking ensure precision, traceability, and increased production efficiency, solving the challenges of modern electronics manufacturing.



- ✓ Central hub for electronics material and logistics management
- ✓ Optimized space utilization for high-density reel storage
- ✓ Enable the implementation of controlled storage zones for MSD components if required

Mini buffers & transfer stations: Keep production flowing

The challenge on the market

Unexpected production delays, surges in material demand, and inconsistent material flow disrupt operations, leading to downtime and reduced efficiency.

The result of automation

Mini Buffer Transfer Stations eliminate production bottlenecks by acting as dynamic, short-term storage on the production line. Integrated with AMRs, they ensure automatic, precise material staging and seamless flow, preventing delays caused by unexpected surges or disruptions.



- ✓ Short-term storage buffers on the production line
- ✓ Temporary material staging to handle unexpected needs
- ✓ Optimized to maintain consistent production flow

**We make your electronics
production line future proof.**

Get in touch with us via
our website form



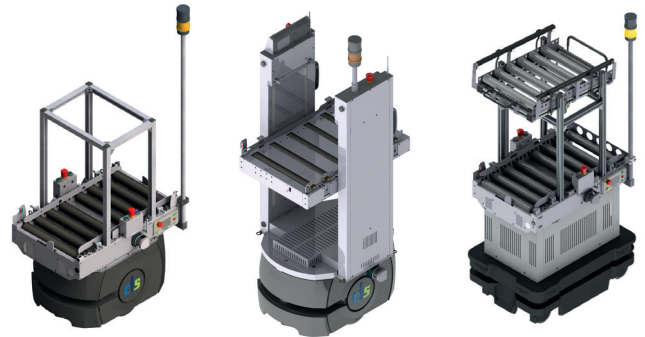
AMRs: Smarter, faster, more efficient material handling

The challenge on the market

Manual material handling is slow, error-prone, and labor-intensive. Standard AMRs often lack adaptability, forcing manufacturers to compromise on material transport efficiency.

The result of automation

AMRs automate material transport with intelligent navigation, reducing manual errors and ensuring consistent, efficient workflows. Our customizable top modules allow AMRs to handle a wide variety of transport tasks, from reels and totes to trays and magazines - tailored to your production needs.



- ✓ Connect AMRs directly with storage systems and SMT lines
- ✓ Reduce the need for multiple transport solutions with one adaptable system
- ✓ Expand automation step-by-step without halting production

Optimized material flow for maximum efficiency.

The importance of smart material flow in electronics manufacturing

Efficiency in electronics production isn't just about assembling components - it's about creating seamless, automated workflows, ensuring precise material availability, and maintaining scalability without inefficiencies. Every decision in your material logistics impacts productivity, costs, and competitiveness. Optimized storage, intelligent automation, and real-time traceability determine whether your production remains resilient, cost-effective, and adaptable in a rapidly evolving market.

Why the cts is your ideal partner

Choosing cts means more than selecting storage and transport solutions - it means partnering with experts who understand your production processes and design solutions that truly make a difference.

Our modular Smart Warehouses maximize storage efficiency, ensuring optimal material flow even in space-constrained production environments. Our automated material handling eliminates manual errors, reducing downtime and improving process stability. With customizable AMR top modules, we enable seamless integration into existing production lines, ensuring just-in-time material supply and full traceability across all logistics processes.

We don't just provide automation; we engineer precision into every step of your material flow. Our solutions are modular, scalable, and fully integrated - delivering higher efficiency, reduced costs, and future-proof production.

Get in touch with us via our website form



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How we stand out from the competition

Stay ahead of supply chain disruptions & labor shortages

- ✓ Less reliance on manual labor – AMRs & automation replace workforce gaps
- ✓ Resistant to supply chain disruptions – Smart Warehouses optimize stock levels
- ✓ Faster production scaling – Adapts instantly to demand fluctuations

Know exactly where your material is - at all times

- ✓ Track every material movement in real-time – from storage to production line and back
- ✓ Seamless handover between warehouse, AMRs & SMT lines – no missing components
- ✓ Multi-format storage flexibility manages reels, magazines, KLTs, and trays in one system

Reduce factory footprint & operational costs

- ✓ Up to 40% more space for production instead of storage
- ✓ Lower energy costs – only controlled environments where needed (e.g., MSL zones)
- ✓ Optimized logistics – automated storage and retrieval eliminate bottlenecks

Keep production running - even in volatile times

- ✓ No more line stoppages due to missing materials
- ✓ Just-in-time & just-in-sequence supply – from storage to SMT line
- ✓ Predictive inventory management – avoid overstocking or material shortages

Flexible automation that adapts to your production needs

- ✓ Seamlessly integrate with Omron, Agilox, MiR and AMRs from other manufacturers
- ✓ Customizable top modules & transport solutions adapt automation to your unique setup
- ✓ Modular storage solutions – adjust warehouse capacity and functionality as needed

Eliminate complexity with a fully managed automation ecosystem

- ✓ One partner for AMRs, storage, software & service – full-stack automation
- ✓ Global service & support – keeping your production running, anywhere
- ✓ Long-term scalability – solutions grow with your business



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