



## Rauland Collaborates with Panasonic Connect North America to Increase Factory Productivity with Automation Solutions



### CHALLENGE

Rauland, a subsidiary of AMETEK, is an American manufacturing company based in Mount Prospect, Illinois that produces workflow and life-safety solutions for hospitals and schools worldwide. Constantly growing as an organization, they recently set internal mandates to **increase manufacturing capacity by 30%**, while initiating a more data-driven approach across their business. To do this, the Rauland factory team of 350 workers had to directly **address day-to-day challenges such as labor and inventory shortages, increasing changeover**

**times and unknown scrap rates while working with 4,000 unique parts across four SMT lines.** The Rauland team also wanted to improve their overall manufacturing productivity, efficiency and controls.



### SOLUTION

To achieve their goals, Rauland looked to Panasonic Connect North America to provide the company with automated manufacturing technology to turn its factory – and its workforce – into a data-driven operation. With Panasonic PanaCIM® Manufacturing Execution System (MES) software, Rauland was able to achieve exactly what it set out to do. Rauland worked with Panasonic Factory Solutions consulting service to walk through the technology they would need and set internal goals – from reducing scrap to preventing wrong parts being placed as well as include enhanced traceability of placed components onto the printed circuit – and answer challenges as Rauland set about introducing new technology to its employees. The Factory Solutions team integrated Panasonic PanaCIM software into Rauland's existing software products communicating in a networked environment to solve key production challenges. The PanaCIM software applications work to directly meet Rauland's top objectives of **reducing defects, scrap and rework; eliminating wrong part placement; improving process throughout; and reducing change over time.**





Once Rauland walked through its business goals with Panasonic and the software was put in place, they began to see positive results immediately. Whereas at one time, Rauland was placing wrong parts into its line every week, once the PanaCIM software was installed that number dropped nearly to zero.

With the data presented by the MES software, the Rauland team has also been able to save money by eliminating incorrect material counts due to virtually non-existent scrap rates as a direct result of installing the PanaCIM Material Verification and Material Control modules, which when combined verifies that the correct components are loaded in the correct location, tracks and updates the estimated current quantity of material items with information obtained from productions machines and handheld scanners. The team also created a common and fixed carriage plan and sequencing, which reduced changeover time on a particular SMT line by **63%**.

### About Rauland

Founded in 1929, Rauland transformed its business from manufacturing throughout the Depression era to, in 1979, establishing itself as a leader in nurse call communication, to then, in 2017 being acquired by AMETEK Inc., a leading global manufacturer of electronic instruments and electromechanical devices with manufacturing, sales and service locations across the United States and globally. Rauland responds to market needs worldwide with its long-standing commitment to the cutting edge of communication innovation providing solutions that fit its customers' needs and initiatives.

Working with companies like Panasonic, Rauland was able to **digitally transform its factory operations**. Before Panasonic introduced Rauland to its PanaCIM solution, Rauland workers relied on fully manual processes. As workers once stood at machines writing performance data down, critical pieces of information were frequently accounted for inaccurately or not at all. As the new PanaCIM software shares critical data automatically, **Rauland has significantly been able to reduce scrap by 33%**, reduce the time it takes to count inventory from seven to two days, and eliminate downtime due to low inventory in the machines.

**"We want to do more with less** – just as everyone else wants to," Jimmy Crow, Manager, Manufacturing Engineering at Rauland. "The data that PanaCIM provides

is allowing us to monitor and control virtually the entire manufacturing environment in our SMT department. Data-driven is the key to our newfound success. We know exactly what is going on at all times, and this real-time data provided by PanaCIM Production Analysis module helps us not only improve operations, but also impact the bottom line of our company. **The decisions we make now are made on facts – not just a feeling, tribal knowledge or anecdotal pass down as it once was.** Having a notification system like the PanaCIM Production Monitoring & Dispatch module, which utilizes real-time data to identify events that can impact production and to dispatch tasks and activities to the necessary labor resource, is critical to our continued progress."

Prior to implementing the PanaCIM modules and with manual processes in place, the team at Rauland used to order **15%** extra product just in case there was more waste than anticipated. Within a very short time of using the new technology, issues of over ordering were nearly eliminated completely. Using warehouse data and material control services, Rauland now has consistency and an ability to repeat best practices, which has eliminated the wasteful variability the team was used to prior.

"Not only has the PanaCIM software changed our physical business processes, but it has also helped to change our company culture," said Crow. "Today we can be so much more confident and proactive in what needs to get done and when. **There is a strong cohabitation between the automation technology and our workers, who have become much more technical than we ever imagined possible.**"

Crow also highlights Rauland's ability to "take ownership" of PanaCIM while allowing the solution to provide exception handling for out of control conditions based on machine data collection and analysis as the major contributor to their success.

Between the increased accuracy and productivity offered by PanaCIM and Rauland's reinvigorated workforce, the Rauland team was able to seamlessly integrate a newfound culture and confidence into everything that they were doing and seeing the additional benefits to its customers.

"Our relationship with Panasonic is extremely professional, courteous and productive – that's just the way they do business," said Crow. **"As shops get leaner and we continue to put out more product, embracing automation technology will be critical in helping the business case of our customers.** It is great getting to work with Panasonic to help us and our customers enhance bottom lines and user satisfaction."

<https://na.panasonic.com/us/factory-equipment-solutions/smart-manufacturing-solution/factory-automation-solutions>

©2022 Panasonic Corporation of North America. All rights reserved.

Jimmy Crow, Manager,  
Manufacturing Engineering  
at Rauland

