ProVIEW™

Process VIEW for Manufacturing

An Industrial IoT Solution

Finally, there is a solution to replace the 40-year old process of manually placing paper labels on the literally millions of containers, carts, and sub-assemblies flowing through factories every day with simple, cost-effective wireless displays:

Omni-ID’s complete material flow management solution — ProVIEW.
ProVIEW™ is the first truly paperless system based on the industrial Internet of Things (IoT)

What makes ProVIEW different than other Material Flow Management solutions?
It’s simple — traditional paper labeling provides simple visual instruction, but with minimal tracking and automation. RFID provides the tracking but fails to provide the visual instruction or two-way communication/verification necessary for workers. Only ProVIEW combines these elements to form a powerful new paradigm — instruct + track + dynamic control — enabling smart manufacturing for an IoT world.

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<th>VISUAL</th>
<th>TRACKABLE</th>
<th>WIRELESS</th>
<th>DYNAMIC</th>
<th>REAL-TIME CONTROL</th>
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ProVIEW combines the immediate reliability of paper labels with the automated tracking and control inherent in Internet of Things technologies — all with a 12–18 month customer ROI (on paper and printer savings alone)!

View™ Tag = E-paper + RFID

Build Smart Containers
Locate/Track Material Flows
Control in Real-Time with ProVIEW Software

- Containers display latest instructions
- Hands-free and wireless for operators
- Software runs as standalone or integrates with MES/ERP (hosted or premise-based)
What is ProVIEW?

You know what components have been delivered to you for processing and what finished products you’re shipping out. Now you can have complete visibility and control over what you’re building — in real time. ProVIEW replaces static paper labels with a dynamic e-paper based solution. ProVIEW allows you to view your Work In Process (WIP), and dynamically change your flow at a moment’s notice to accommodate any issues. It is the ONLY system on the market that provides you with the ability to re-send operator instructions automatically, at any point during the process. No reprinting, no manual activity and no expended human resources — simply the push of a button.

More than 80% of errors are typically eliminated when visual instructions are present.

>20% of containers are reported lost on an annual basis, costing companies millions of dollars

How ProVIEW Works

Omni-ID’s fully integrated ProVIEW system includes all of the hardware and software you need to ensure complete end-to-end process visibility, seamlessly fitting into your existing process. The differentiating products are Omni-ID’s visual display tags. These display tags directly replace paper labels with wirelessly connected e-paper displays in a variety of sizes. As with paper labels, operators can see right on the container or assembly all handling instructions. Unlike paper labels, these visual tags, and the assets on which they are placed, can be tracked as they flow through the factory in real-time. The ProVIEW DIFFERENCE: the displayed instruction can be changed at any time from anywhere as conditions merit! Don’t just collect information — give workers the ability to ACT on it immediately.
The ProVIEW System

ProVIEW is designed to manage complex material flow applications, while simply integrating with your existing processes and MES systems. The ProVIEW system collects the location and status information by individual container, providing the factory floor visibility necessary to automate or re-direct workflows in real-time.

ProVIEW Software

Flexible enough to work as a standalone application or integrated into your MES system, this platform allows you to manage all of the containers in your network, dynamically change workflows or work instruction and drive analytics for improvements. An intuitive GUI and branded or customizable dashboards ensure you have the VIEW you need to effectively manage your processes — in real time.

- Microsoft SQL platform for easy data exchange
- APIs at the hardware, application and business logic layers
- Cloud or server based options
- Simple commissioning and device management tools
- Customizable management dashboards
- Real-time visibility across the factory
- Set alarms for material flow events
- Mobile device client compatibility

View Tags

Provide operators with visual instruction without the constraints of paper. Equipped with an e-paper screen for multi-page, dynamic instruction and auto-ID for process tracking — the tags provide "intelligence" at the container level.

Omni-ID’s View tags have been designed specifically to withstand the rigors of manufacturing operations. From their rugged case to variety of screen size and shape, there is a tag for every application:

- High contrast/resolution e-paper display — image persistent even without power
- Fully configurable buttons and LED to fit application requirements (QA, completion, pick, call or other notifications)
- Rugged case for industrial use — IP 65
- Active, passive or wi-fi technologies used for communication
- Industrial strength battery — 5 years use

Solving the Most Common Cause of Factory Inefficiency

Omni-ID has worked with factories all over the world and found that the #1 problem impacting their output is the same — material flow management. Machine uptime, defective materials, operator skill/training, or resource scheduling aren’t the biggest issues. It’s simply: “getting the right parts to the right place, at the right time”. ProVIEW was designed with this in mind.

- Does production regularly come to a near-standstill as issues inevitably pile up?
- Do you often reassign/reschedule routes for work in process?
- Do you manually track down containers to apply new instructions?
- Is managing the count, sequence or status of your WIP inventory a challenge because it’s manual?
- Do you have teams of “runners” that are sent out to the floor to find specific containers for a job or inspection?

The results are often chaos by late afternoon on the factory floor. ProVIEW is the solution to those issues and more.
Replenishment

Call > Pick > Deliver

Parts replenishment is a key function in any manufacturing operation. The ProVIEW system allows an operator to “call” for parts or services by pressing a button on the View tag — immediately receiving a response via a “call sent” message right on the tag. The warehouse receives the message, the delivery is then scheduled and an instruction is sent to the View tag for pickup. Administrator and delivery driver dashboards provide the visibility into calls, picks and deliveries to ensure efficiency and opportunities for process improvement.

Work Instructions

Instruct > Route > Record

Efficient process workflows are the key to ensuring a seamless operation. The Work Instruction module provides the ability to send the appropriate instruction to the View tags on the factory floor to instruct operators automatically, based on location — ensuring the correct instruction is always provided at the right workstation. ProVIEW’s Work Instruction module also provides the ability to send new instruction by individual rack or container when issues arise, track the QA process and automatically count inventory for WIP items.

Container Management

Schedule > Track > Optimize

As factories increasingly are being asked to respond in real time to more and more product options and customized product variations from consumers, static paper labels guiding materials through the extended supply chain are unable to keep up. Smart containers that can be tracked and redirected to respond automatically to this complexity, telling operators what to do next, are the answer. ProVIEW provides an exponential leap forward in gaining full process control in our new connected world, with self-directed “smart containers”. You’ll never lose another container or be short of crucial material again.

Pick

Locate > Select > Route

Getting the right parts to the right place at the right time in any factory starts with ensuring an accurate picking or kitting of those parts from the warehouse or other “shopping” location. Paper-based processes are highly error-prone and inefficient when it comes to ensuring the correct parts are located and selected manually by operators. ProVIEW’s Pick module ensures an accurate and efficient process by providing visual cues and instruction for operators for each job with a wireless View Tag on each bin, rack or shelf.

Asset Location

ID > Find > Report

Asset Location provides the ability to track your assets and WIP items throughout the process. This simple API provides you the ability to ensure that your materials are in the right place at the right time by integrating with your existing systems.
Unlike paper and other traditional electronic tagging solutions, Omni-ID’s ProVIEW is an IoT solution that gives us the ability to not only track our materials, but control the process flows. The process visibility and control that the system provides has created a number of efficiencies for us — not to mention the savings from the paper alone. We’re now expanding to several other manufacturing lines within our facility.

– Robert Hyden, Daimler, Detroit Diesel, IT Manager

**Demonstrated Success**

Our Customers Report:

- ✔ Reduced material handling labor
- ✔ Errors and rework reduced
- ✔ ROI in less than 18 months
- ✔ Increased WIP inventory accuracy
- ✔ In operation at several global manufacturers who enthusiastically act as references
- ✔ Savings of thousands to millions of dollars from eliminating paper!

Interested in finding out more? Omni-ID can provide a turnkey solution including the largest line of RFID products, hardware and software along with the professional services to architect and deploy a complete ProVIEW system solution.

Visit [www.omni-id.com](http://www.omni-id.com) to learn more about the complete line of Omni-ID RFID products.