

PROGLOVE

Innovating
human-centered
productivity

ProGlove and Manufacturing innovating human-centered productivity

These three words, innovating human-centered productivity, best describe why we do what we do - to bring transformative value to your warehouse and distribution operations.

It's our passion and our mission.

Let us show you how you can benefit from the speed, accuracy, and ergonomics of our products, and our vision for a smarter, more productive (and predictive) future.

Manufacturing must increase shop floor productivity to compete

The road to competitiveness and profitability for manufacturers inexorably leads to the shop floor.

There are three warehouse processes where profitability varies with accuracy, efficiency, and productivity:

1. **Inventory management**
2. **Production logistics: the staging, sequencing, and picking of materials**
3. **Production: pre- and final assembly**

The primary variable throughout is the worker. Manufacturers have the opportunity to enable these workers by providing them with the next generation tools and technology to buoy workflows to new and higher levels of productivity.



Worker safety and satisfaction

The application, and the benefit becomes clearer in examining the three issues they must overcome.

- **Increasing worker safety and satisfaction**
- **Improving efficiency and productivity**
- **Reducing cost**

These challenges are both separate and intertwined. The results of one are entirely dependent on the other.

A powerful catalyst for change and achievement is ProGlove. It's where productivity starts.

The truth is that the manufacturing warehouse has a reputation. It's seen as being an arena for hard, repetitive work - very hot (or very cold), dirty, and unsafe. With concerns about pandemic transmission, it's no wonder that it is hard to find and retain committed, skilled workers.



Here is what our customers achieve with ProGlove

SAVING FROM

2-6

seconds
per scan



EXPERIENCING UP TO

33%

fewer errors



UP TO A

20%

increase in
productivity



Maintaining the physical environment and strict adherence to OSHA regulations are table stakes. Technology becomes a tie breaker because it offers the worker empowerment, to make the working environment safer and more satisfying. We think scanning is the logical place to start because it is central to all manufacturing processes. Also, scanning is relatively undeveloped from the heavy, unwieldy scanners of old.

Workers cite two scanning issues that drive safety and satisfaction, and the reputation of the working environment:

1. Ergonomic design and a hands-free flow
 - Full dexterity and range of motion
 - Less injuries from repetitive motion
 - Lightweight, accommodates hand size and right / left preference
2. Empowerment to do your job easier, faster, and better
 - Easy to activate
 - Focuses on task instead of scanning
 - Instant feedback



Increasing productivity in the warehouse and assembly lines

Improvements to the scanning process directly cause improvements to warehouse and assembly line productivity. The faster and more accurate the scans, the greater the increase. The benefits of “faster” are obvious. Customer report saving 4 seconds or more per scan.

Improvements in accuracy are far-reaching. Customers report 33% fewer errors. Not only does it contribute to “faster”, because of much fewer rescans, but it yields the data that the rest of the corporation needs.

As better information is fed into the system, subsequent processes that rely on this data are improved. This includes, for example, forecasting, which, with the help of more precise data, leads to improvements in purchasing, production, shipping, sales, and ultimately customer satisfaction and ROI. The device technology that makes the scan faster and more accurate empowers the human to have greater control, and a safer, easier, more logical environment.

Reducing cost

Reducing cost is a business imperative. With supply chain costs spiraling up, manufacturers are doing everything they can to reduce the overall cost of doing business. Opportunities for serious improvement are welcome-providing the opportunity does not impinge upon, or affect the quality of their product(s).

Increasing warehouse productivity - making scanning faster and more accurate, while also increasing worker safety and satisfaction - is the most effective option available to seriously reduce cost.

Scanner productivity is the lever for success

To offset these challenges, manufacturers need their warehouses and distribution centers to become as accurate, productive, and flexible as possible.

Barcode scanning has become the essential activity within all logistics and supply chain processes with every part scanned multiple times from inception to delivery. Absolutely everything depends on productivity - the speed and accuracy of the scanning process.

ProGlove is the partner of choice for logistics warehouses and distribution centers. The speed, accuracy, and ergonomics of our wearables has boosted productivity for customers by 20% or more.

PROGLOVE

Where productivity starts

OUR PARTNERS IN PRODUCTIVITY

Manufacturing

KUKA

FESTO



thyssenkrupp



BOSCH

Technik fürs Leben

HORSCH

Your eyes and ears on the warehouse floor

Significant increases in productivity are in the hands, and on the hands, of your workers. Innovating human-driven productivity is our mission and our passion.



Here are 6 use cases where ProGlove's ergonomic scanners and future-oriented solutions expand warehouse productivity horizons

1 Increasing Worker Health and Safety

2 Enhancing Employee Satisfaction and Retention

3 Augmenting Worker Guidance and Workflows

4 Reliable Scanning Accuracy and Quality

5 Improving Mobile Device Management

6 Optimizing Process and Layout



1



USE CASE

Increasing worker health and safety



Goal

Investments in the health and safety of our workers is the bedrock of productivity (and loyalty).

Challenge

Scanners are heavy, not ergonomically designed, and require awkward or repetitive motions to operate. They are also inaccurate, causing numerous instances of rescanning. These lead to fatigue and injuries on the job.

ProGlove Delivers

We build industrial wearable scanners that are the lightest, smallest, toughest and most accurate wireless barcode scanners in the world. Our patented technology provides unparalleled comfort and full dexterity for greater productivity. Our innovation is based in a thorough understanding of the physical effort required by your workforce, every day.

Our scanners are preferred by workers because our ergonomic design integrates with their natural motion, which puts safety first.

- **Our wearable design accommodates hand-size variations as well as left / right preferences**
- **Ergonomic trigger position, field tested to ensure limited fatigue and full dexterity**
- **Stretchable Velcro bands for easy fastening and maximum flexibility**

ProGlove's scanners maintain speed and accuracy while documenting every step, all handsfree, providing a safer and more ergonomic working experience for your employees. Workflows are uninterrupted and workers get more done with our wearable technology.

2



USE CASE

Enhancing employee satisfaction and retention

Goal

Greater warehouse productivity requires a full complement of trained, engaged, and retained workers. Each warehouse wants to be known as a preferred workplace. Worker satisfaction becomes a strong lever retaining existing workers and hiring new workers.

Challenge

There are three components to attracting and maintaining a professional, experienced, stable workforce:

1. **Pay**
2. **Benefits**
3. **Working environment**

The warehouse floor can be transformed into a safe and satisfying advantage in hiring and retaining workers. Organizations that introduce ergonomically designed and accurate tools hold a “word of mouth” advantage in this highly competitive employment environment.

ProGlove Delivers

Scanners that workers understand, appreciate, and trust. These scanners also fuel their productivity and contribution. This is a significant component of an attractive work environment as workers are able to complete their assignments easier, quicker, and with fewer errors or re-scanning.

Employees appreciate the strength, ergonomic design, comfort, and capabilities of ProGlove scanners. These scanners integrate with their natural motion, which means less exertion and fewer injuries. Moreover, our devices can cover both scanning and validating with just one button - without the time and effort of having to pick up another device.

Additionally, ProGlove’s Insight software enables management to rebuild the physical environment (whether a station, a location, or company-wide) to localize ProGlove devices and implement more logical and efficient workflows.

3



USE CASE

Augmenting worker guidance and workflows

Goal

Warehouse workers get at least 5% more work done without an ounce more effort or a minute more time.

Challenge

Today, warehouse management must do more with less. Increasing productivity is a mandate. Optimizing employee workflows and productivity is a critical success factor in meeting KPIs, especially if staff levels may be leaner than desired.

ProGlove Delivers

ProGlove Insight software provides information from the shop floor - knowledge you may be missing, and that certainly impacts worker guidance and workflows. ProGlove Insight Analytics provides you extensive data to your scan performance and tracks your improvements.

Get continuous time and motion studies for a complete picture of your shop floor processes. Improve your understanding of the physical efforts of your workforce. See cycle times, walking times and group activities as clear process steps - identify and act on process gaps.

- **Optimize worker movements by minimizing physical activity per workstation**
- **Reallocate resources to distribute workloads evenly**
- **Identify and remove bottlenecks. Document quality issues.**

Avoid the extra work from a false pick rate by providing information directly to the hands of your workers in real-time with a OK / NOK signal. Enable your employees to work smarter by using the feedback options to problems and delays in production.

4



USE CASE

Reliable scanning
accuracy and quality



Goal

- **100% accuracy**
 - **Increased process flow**
 - **Minimal rescans**
-

Challenge

Warehouses need scanners that perform reliably in both normal and challenging circumstances.

Marred barcodes, multiple barcodes, poor warehouse lighting, etc. lead to time-consuming rescans and supply chain errors.

ProGlove Delivers

Our scanners enable your team to work smarter and more productively by optimizing their scans while maintaining speed and accuracy. Eliminate picking errors with our instant feedback features to improve the quality of the process.

Workflows move faster and smarter with our devices. You can rely on ProGlove's error-free recording of product data.

- **Reduce false pick rates by providing feedback directly to the hands of the workers in realtime. The Worker Feedback function translates OK / NOK signal into visual, acoustic and haptic feedback.**
- **Every scan marks a workflow checkpoint. ProGlove Insight Analytics lets you evaluate the performance on your processes right away. Benchmark sequential job activities across any timeframe and process detail, so you can apply learnings across the company.**
- **Identify barcode quality based on barcode content, symbology and avg. scan time.**

Management can optimize technical performance by inserting scanning events into order fulfillment workflows to examine and remove bottlenecks. Our ProGlove Insight Analytics documents quality issues, outliers or other process documentation tasks.

5



USE CASE

Improving mobile device management

Goal

Make sure your entire ProGlove fleet of scanners are accounted for, available and ready for use.

Challenge

Expensive devices break, wear out, disappear, and batteries die.

That's why you need scanners that report location, condition, and battery status.

ProGlove Delivers

Know everything about every ProGlove device all the time. Effectively manage device lifecycle, including battery health, tracking of devices, and analyzing workflows. Know where all your devices are at any moment.

Minimize the risk of process disruptions with easy-to-follow advice on optimizing battery health, more efficient configurations, etc.. Use enhanced device settings in the configuration to keep your devices in top shape, while updating your device fleet with the newest firmware and configurations with zero-touch.

- **Maximize availability and connectivity with all meta data in one place**
- **Identify active, idle, out-of-service, misplaced and lost devices**
- **Perform remote configurations and predictive maintenance**

Understand your ProGlove assets across sites, by use-case, or by station. Unify views and shift devices if needed. Build out zones in your physical environment to localize your devices and compare process performance. Keep an overview of active, idle or out-of-operation devices - and identify outliers.

6



USE CASE

Optimize process and layout



Goal

Greater productivity from more efficient workflows, processes and warehouse layout.

Challenge

Warehouses are laid out to maximize space, not process flow.

“With the right data, I know I could design the layout more efficiently and optimize how my people pick so they walk less and can complete their work faster and safer.” - Warehouse Manager (customer)

ProGlove Delivers

ProGlove gives you access to critical shop floor data that will help you to optimize layout and worker flow. We give you a faster, simpler way to access worker-based data without complex WMS programming.

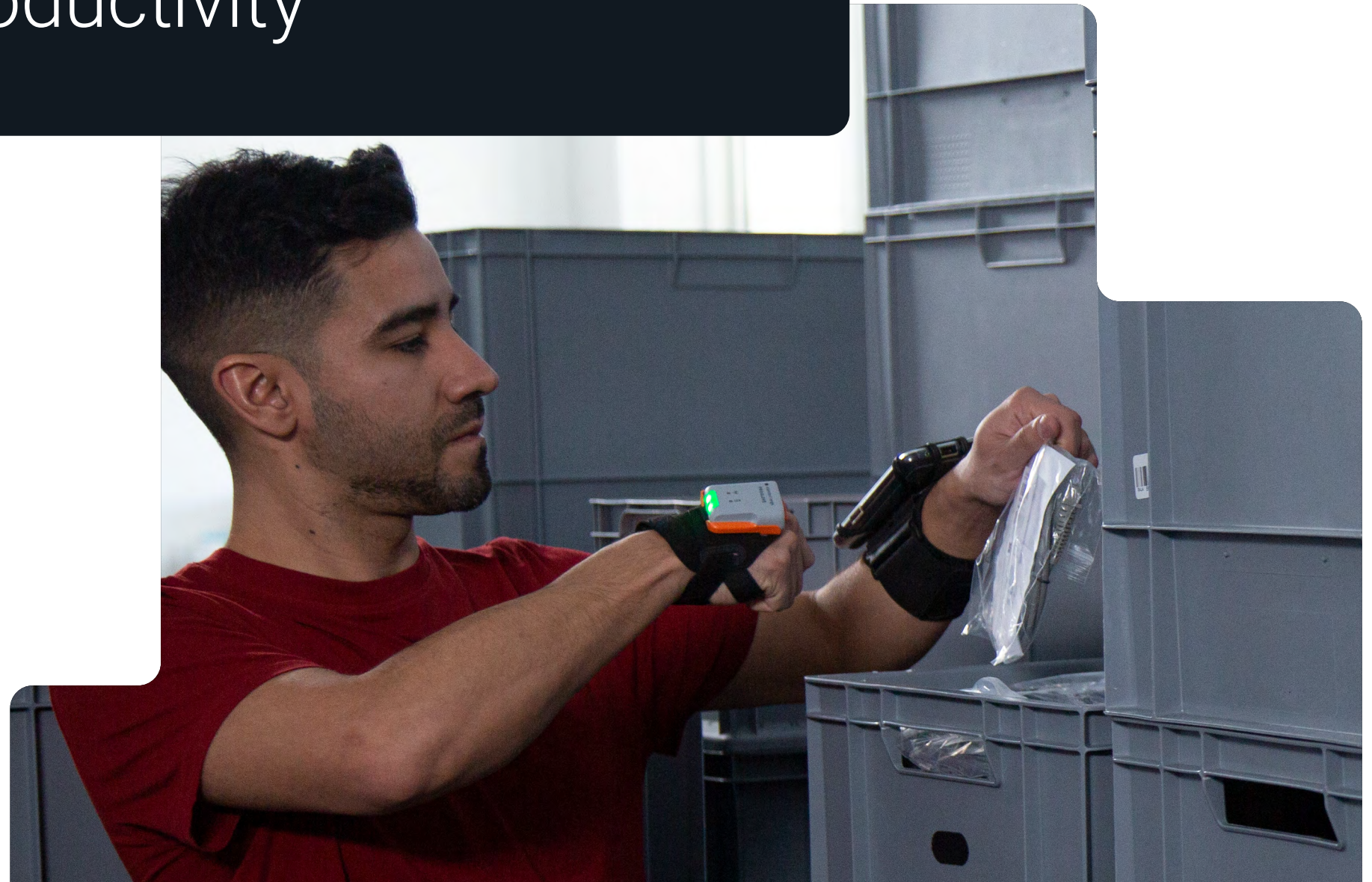
Close the gaps in your shop-floor knowledge through a feed of narrated insights, continuously updated and tailored to you. You will gain insights into spatial awareness, process layout, and time & motion studies to understand how the shop environment can be optimized to improve how workers move around.

- **Provide a seamless start to a work shift with fast, intuitive connection between the wearable scanner and the host device with a simple barcode scan**
- **Enable your employees to work smarter by using the feedback options to surface edge cases in production**
- **Mass charging stations efficiently charge any of your ProGlove scanners at one time, in one place**

Optimize your shop floor to minimize worker exertion, improve safety, and maximize productivity. Understand your ProGlove assets across sites, use-cases, or stations. Unify views and shift devices if needed. Maintain speed and accuracy while documenting every step, all handsfree, providing a safer, more ergonomic working experience for your employees.

PROGLOVE CASE STUDIES

Proof points on driving productivity



Bosch



“Thanks to the simple connectivity of ProGlove's technology, we will achieve significant efficiencies in both manufacturing and logistics.”

ARMIN SCHWAB
Plant Manager, BOSCH
Thermotechnology

BOSCH Thermotechnology is a leading manufacturer of energy-efficient heating products and hot water solutions for both commercial and residential applications.

Challenge

Packing station workers are often called upon to multitask - operating a crane while managing up to 12,000 scans per shift.

Solution

BOSCH deployed ProGlove in their assembly lines, logistics, and packaging department enabling a dynamic, hands-free workflow.

Result

MARK scanners gave the workers the ability to scan, assemble, package, and operate cranes safely. All at high-speed.



FESTO

“I think the benefit of ProGlove is obvious and the acceptance on the worker side is extremely good.”

ALFONS RIEK

VP Technology and Innovation, Festo

FESTO is a multinational manufacturer of pneumatic, electrical control and drive technology for process automation.

Challenge

A continuous flow of “tugger trains” bring materials, components, and finished products into the warehouse. Each product needs to be scanned, processed and moved. The volume of scans per workflow can reach upwards of 20,000 scans a month. Productivity depends on the speed and accuracy of the scanning process.

Solution

FESTO uses ProGlove’s wearables to scan items that a tugger train collects during the manufacturing process.

Result

This helps the company save valuable time, increase ergonomics and improve efficiency since regular handheld scanners are no longer used.



KUKA

“For us, the factory of the future is a smart factory – in other words, the human remains the focal point of operations and is supported by the robot. The cooperation between ProGlove and KUKA is an important step for us toward this factory of the future. “

MARKUS HIRSCHMANN
Head of Logistics Operations, KUKA

KUKA is a worldwide manufacturer of intelligent automation solutions and offers tailor-made automation solutions for industry, including industrial robots.

Challenge

Working with conventional hand-held scanners caused time-consuming disruptions and delays – especially when loading carriers at shipping and receiving centers.

Solution

When KUKA introduced ProGlove to enable hands-free scanning, they experienced a direct impact towards optimizing tighter workflows.

Result

ProGlove erased the handling time for their scanners and integrated documentation as an intuitive part of their workflows, so that there were less and less delays and a noticeable increase in accuracy and worker satisfaction.

Would you like to know how partnering with ProGlove can bring substantial productivity gains?

Please contact us. We'll put you in touch with one of our experts, and schedule your virtual demonstration.

info@proglove.com

www.proglove.com



The background features several thick, stylized lines in shades of orange and brown. These lines are arranged in a way that suggests movement and growth, with some lines curving upwards and others extending diagonally. The overall aesthetic is modern and tech-oriented.

PROGLOVE

Where productivity starts

PROGLOVE

