



Shift Automotive Manufacturing into High Gear

Nine ways rugged tablets rev up speed, accuracy and visibility

Automotive decision-makers are under intense pressure to compete. That's why almost all are investing in technologies to digitally transform their plant floor operations within the next five years.



9 in 10
Number of manufacturers who plan to advance their digital capabilities over the next five years¹



Manufacturers in **Asia Pacific region** foresee a **19%** hike in ICE vehicle production¹



The forecasted rise in electric vehicles produced in **Asia Pacific region**¹

What is a critical component for their digital transformation plans? Rugged tablets.

With rugged tablets, manufacturers gain multi-shift power, stable connectivity, extra layers of security and functionality that better serves workers and workflows.

Put Accuracy and Agility at the Wheel with Rugged Tablets

Eliminate Errors and Delays from Goods In

Authorise entry of trucks with the integrated scanner & camera; access data to direct drivers to proper dock

Utilise high-res camera & large screen to take detailed photos of damages & barcodes

Release drivers faster by instantly reconciling RFID-captured cargo data with the manifest displayed on the large tablet screen

Show forklift drivers exactly where to place the raw material avoid damage



Increase Efficiency at Line-Side Parts

Expedite picking of orders with tablets mounted on forklifts

Update the inventory system in real time as operators pick and scan materials

Instantly reach workers to remediate urgent issues such as faulty materials or out-of-stocks

Sharpen Oversight of Manufacturing

Track work in progress (WIP) by scanning the barcode of a finished assembly

Increase accountability by tracking operators of machines via tablet logins

Reduce training time with on-demand tutorials that ensure compliance with standard operating procedures (SOPs)

Simplify intensive data entry tasks by turning tablets into mobile-driven workstations placed across the facility



Streamline Assembly

Enable workers to easily request line-side replenishment with the push of a button and the scan of a barcode

Verify parts before installing with the tablet's convenient built-in scanner

Provide digital assembly instructions for any station on the production line to heighten accuracy and quality

Practise Proactive Maintenance and Safety

Enable mobile Human Machine Interface by temporarily connecting tablets to the programmable logic controller for easy reading of error messages. Once done with repairs, detach the tablet and go

Visually guide workers through the steps to perform maintenance with augmented reality (AR) and vividly displayed manuals, schematics and repair procedures

Keep the industrial control team informed of maintenance by securely sharing machine test results, images and videos

Digitise maintenance records to mitigate downtime and identify bottlenecks—comparing maintenance records of similar machines



Mobilise Industrial Control System Workers

Untether industrial control system (ICS) workers from their laptops with on-the-go connectivity

Allow ICS workers to remotely make minor adjustments to control parameters from their tablets for faster response times

Connect security cameras to tablets and ICS systems for greater monitoring

Elevate Quality Control

Perform spot checks with the scan of a barcode and the snap of a photo to document quality products that passed quality checks

Pair the rugged tablet with a mobile printer to label defects and include pertinent details such as the operator, machine and time

Enable less experienced workers to accurately complete quality checks with digitised work instructions



Package with Greater Accuracy

Scan the finished product's barcode and take a photo to request warehousing to pick up the item

Reduce errors by scanning barcodes to ensure the correct items are in each package

Digitally record data about each package, such as batch number, expiration date and content to track and trace item

Ensure Flawless Goods Out

Before releasing finished goods, take a high-resolution, large-formatted photo that clearly shows their pristine condition and barcodes

When Downtime Is Not an Option, Mission-Critical Performance Is Yours with Zebra

 Rugged and Purpose-Built	 Replaceable Batteries with Health Visibility	 Highly Reliable Enterprise-Class Wireless	 Simplified Management with a Comprehensive Suite of Enterprise Software	 A Stable Ecosystem of Accessories
 Easy Integration with Your Infrastructure	 Full Coverage and Flexible Service Support	 Up to 60% Lower Total Cost of Ownership vs. Consumer Tablets over a 6-Year Period²	 A Lifecycle of up to 10 Years	 End-to-End Solutions Compatible across Lines of Business

Let Zebra Enterprise Tablets help you lead the charge in electronic production.



For more information on **Zebra's manufacturing solutions**, please visit www.zebra.com/manufacturing

For more information on **Zebra rugged tablets**, please visit www.zebra.com/tablets

Source:
1. Automotive Ecosystem Vision Study, Zebra Technologies, 2022
2. VDC Research, 2022