



Android in Manufacturing

REDUCE DOWNTIME, ASSURE COMPLIANCE AND
IMPROVE QUALITY WITH ZEBRA FOR ANDROID

The Challenge:

MAINTAIN AND IMPROVE QUALITY, REDUCE DOWNTIME AND IMPROVE TRACEABILITY

Every detail counts, from the moment a component arrives at a goods-in bay, to the moment a finished item is shipped. Mobile technologies are rapidly moving into every area of manufacturing, but it is in traceability, quality assurance and process compliance that mobile computers are making the most immediate impact.

Industry 4.0 is adding momentum, with machine-to-machine communication and increasing automation, driven by digital technologies. In this scenario, accurate data capture and real-time collaboration between teams become critical concerns.

With global competition and perpetual economic volatility, margins are under continuous pressure. Customers expect outstanding just-in-time service, while demanding rock-bottom prices. Every second of downtime saved, and every small efficiency gain, can quickly add up to significant competitive advantage.

The Solution:

USE ZEBRA FOR ANDROID TO IMPROVE DATA CAPTURE, CONNECT TEAMS AND TRACK ASSETS

Zebra for Android bridges the gap between people and machines in the era of automation. The global dominance of Android (the world's most popular mobile operating system) means there is a shorter learning curve for users, because so many people are now familiar with the intuitive touch screen interface. It also means that users will be more willing and able to make full use of the apps and communication capabilities now available to them.

For example, the MC9200 mobile computer combines industrial-grade strength and resilience with the versatility and ease-of-use of Android. It's tested to more than 2,000 tumbles, and has a scratch and shatter-proof scanner window, as well as a shock-resistant housing and added corner protection. Zebra for Android moves the familiar, consumer-style Android interface firmly into the demanding world of work.

Zebra's Mobility Extensions (Mx) add an extra layer of security and control to Android, helping to ensure the security and integrity of data. And with the Zebra Mobility DNA software ecosystem, Zebra for Android devices can easily be integrated into your existing systems.

The World's Most Comprehensive Android Range For Manufacturing

Zebra for Android devices are engineered for long working lives, maximising your return on investment. You can expect at least three years of operation, with a further three years of technical support.

- Mobility DNA software ecosystem incorporates scanning and document capture optimized for manufacturing requirements
- Battery life is optimized for long-life performance
- Devices support VoIP and PTT voice communication
- Centralized management simplifies upgrades and troubleshooting

Traceability And Quality Assurance

Zebra for Android devices such as the MC9200, TC8000 and TC56 are used in all areas of quality assurance and asset management. Their rapid and accurate data capture capabilities, including scanning, imaging and manual data entry, help to move components and work-in-progress smoothly through stages and gates, enabling automated and manual stop/go decisions wherever they are required.

Production lot tracking, maintaining quality of raw materials, compliance with environmental regulations, tracking of samples and many other key tasks are all made simpler and more accurate, with reduced risk of error. Manufacturers save time and improve both quality and performance, by capturing stage-level data throughout the supply chain.

Process Compliance

Compliance with internal policies and regulatory requirements means capturing data and maintaining complete and accessible audit trails. Even in areas where manual processes are still required, access to digital information in real time is essential to ensure compliance. Transparency is a key issue; quality, maintenance and operations teams must all have visibility of the records they need, and must also be accountable for their parts of the process.

Zebra for Android devices - with Mobility DNA - can incorporate functions such as image capture, full document scanning and multi-dimensional barcode scanning. Teams can keep digital records of machine settings and performance, and make them instantly available to colleagues who need them.

Support for RFID allows tracking of assets, and of the devices themselves, to help prevent theft or loss. With Zebra for Android, the risk of human error is reduced, while the potential for human productivity and collaboration is enhanced.

All of these devices are further enhanced on the inside with Zebra's Mobility DNA – a comprehensive suite of applications, utilities and development tools. This provides access to a whole range of off-the-shelf end user apps, robust administration utilities and effortless app development tools, so you can reach new levels in efficiency, productivity, security and accuracy.

Mobility DNA Components

WORKFORCE CONNECT

With push-to-talk, text messaging and the ability to function as a mobile PBX desk phone, users can perform all tasks on one device. Voice and data workflows can be fully integrated, reducing the number of steps required to complete just about any task.

TEKSPEECH PRO 4

TekSpeech® Pro 4 marries speech with all the capabilities of Zebra for Android mobile computers to create multi-modal, speech-directed solutions. With Workflow Builder, you can easily create applications to streamline manufacturing processes and ensure the productive capabilities of your devices are fully employed, improving your return on investment.

ENTERPRISE HOME SCREEN

Built on Mobility Extensions (Mx), Enterprise Home Screen improves productivity by ensuring devices are utilized only for work. You can create a single-purpose device with Kiosk Mode, control available applications and device features and secure your Enterprise Home Screen environment, all with an easy-to-use administrator tool that does not require developer expertise or programming knowledge.

SIMULSCAN

This is the next generation in automated document capture for Android. The contents of an entire form can be captured in a single scan, including bar codes, text fields, phone numbers, images, signatures and even check boxes. Applications can be populated instantly with accurate data, saving time and reducing the risk of errors.

ALL-TOUCH TERMINAL EMULATION

Convert legacy green screens into modern, all-touch user experiences, with no need for HTML5 coding. The all-touch terminal emulation engine is designed specifically for wireless connectivity, providing the fast screen refresh rates today's users expect, and allowing users to move seamlessly between Wi-Fi and cellular networks.

SWIPE ASSIST

Swipe Assist allows users to capture barcodes, documents and photos at the touch of a fingertip. A virtual data capture button can be created on the screen, bringing the simplicity and flexibility of touch computing to data capture. Users can simply tap the onscreen button to scan a barcode, capture information on a document, or take a picture, with no need to use the physical data capture button.

ENTERPRISE KEYBOARD

The standard consumer Android soft keypad is not always compatible with the needs of busy manufacturing professionals. Key size, lack of auto correction for technical terms and other factors combine to reduce data entry efficiency and accuracy. Enterprise Keyboard is designed specifically for ease of use in the workplace. It enables rapid entry of accurate data, helping to reduce errors and increase productivity.

MOBILITY EXTENSIONS (MX)

Mx is pre-installed on Zebra for Android devices at no extra cost. With Mx, you get robust enterprise-class security and manageability, with professional data capture support and superior Wi-Fi connections. You are in complete control of which optional features you want to activate. You can extend the features in your current MDM to your Zebra for Android mobile computers, while aligning your device management strategy with the needs of your users.



FIND OUT HOW ZEBRA FOR ANDROID CAN IMPROVE ACCURACY, ASSURE COMPLIANCE AND ENHANCE QUALITY AT [ZEBRA.COM/ANDROID](https://www.zebra.com/android)

Or to discuss your needs in more detail, contact Zebra using the details below.



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