# Barcode scanning in hazardous industrial areas: The integration of mobXscan on the IS940.1 tablet

## Introduction

In hazardous industrial environments, efficient data capture and processing are crucial for maintaining safety and productivity.

The integration of mobXscan software with i.safe MOBILE's new IS940.1 tablet presents a groundbreaking solution for industrial users working in explosive atmospheres.

This white paper explores how this powerful combination eliminates the need for separate barcode scanning devices while providing immediate data processing capabilities on the large, ATEX/IECEx 5G tablet of i.safe MOBILE.

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**The Integrated Solution**

mobXscan transforms the IS940.1 tablet into a comprehensive barcode scanning and processing station, offering several key advantages:

**1. User friendliness**

In today's fast-paced industrial environments, ease of use is key. The IS940.1 tablet in combination with mobXscan software focuses on user-friendliness and combines powerful functions with intuitive operation:

› The IS940.1's built-in camera, combined with mobXscan software, eliminates the need for external scanning equipment
› The clear 10.1-inch display enables immediate data visualization and processing
› 5G connectivity ensures real-time data transmission and updates

**2. Software Capabilities of mobXscan**

At the heart of this solution lies mobXscan's sophisticated software architecture. Built to handle diverse industrial requirements, it offers a comprehensive suite of features that enable seamless operation across various use cases:

› Keyboard input integration for seamless data entry
› Support for over 70 languages
› Scans all Industry standard 1D and 2D barcodes
› Advanced camera zoom settings for ultra-high density barcodes and extended range scanning
› Gesture and swipe controls for efficient operation
› No coding required for implementation

**3. Safety**

Working in hazardous industry environments demands unwavering attention to safety protocols. The IS940.1 tablet with mobXscan meets and exceeds industry safety standards, providing robust protection and security features:

› Full ATEX/IECEx certification for hazardous environments
› Encrypted data transmission
› User authentication and access controls
› Emergency communication protocols

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**Industry Applications and Use Cases**

The versatility of mobXscan and IS940.1 integration becomes evident across various industrial sectors, each benefiting from specific functionality tailored to their individual requirements.

**Oil and Gas Industry**

In the challenging environments of the oil and gas industry, where precision and safety are paramount, the integrated solution provides comprehensive monitoring and documentation capabilities:

❯ Equipment inspection and maintenance tracking
❯ Safety compliance documentation
❯ Real-time process control monitoring
❯ Immediate visualization of scanning data on the large display

**Chemical Manufacturing**

Chemical production facilities require precise tracking and documentation of materials and processes, and the IS940.1 tablet with mobXscan streamlines these critical operations:

❯ Raw material inventory management
❯ Batch traceability
❯ Quality control documentation
❯ On-site data analysis and reporting

**Pharmaceutical Production**

In the highly regulated pharmaceutical industry, where documentation and traceability are essential, the solution ensures accurate data capture and verification:

❯ Laboratory sample tracking
❯ Compliance documentation
❯ Production line verification
❯ Immediate data validation and processing

**Food Processing**

Food safety and quality control demand rigorous monitoring and documentation. mobXscan and IS940.1 combination provides the tools necessary for maintaining these high standards:

❯ Ingredient tracking
❯ Quality assurance scanning
❯ Production line monitoring
❯ Real-time batch documentation

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**Key Benefits**  The integration of mobXscan with the IS940.1 tablet delivers substantial advantages across multiple operational dimensions, creating value through enhanced efficiency, safety, and an adequate cost management.

**Operational Efficiency**  In today's competitive industrial landscape, streamlined operations are crucial for maintaining productivity. The combined solution offers significant improvements in workflow efficiency and operational effectiveness:

❯ Single-device solution for scanning and processing
❯ Immediate data visualization on the 10.1-inch screen
❯ Reduced training time due to intuitive interface
❯ Streamlined workflow with no device switching

**Safety Enhancement**  Beyond operational benefits, the integrated software provides a comprehensive approach to workplace safety, particularly critical in hazardous environments. The solution incorporates multiple layers of protection and risk mitigation:

❯ Fewer devices in hazardous areas
❯ Built-in emergency communication features
❯ Compliance with explosion-proof requirements
❯ Real-time safety protocol verification

**Cost Effectiveness**  The economic advantages of this integrated solution extend beyond immediate operational benefits. Companies can achieve significant cost savings across several areas:

❯ Additional device costs can be avoided
❯ Reduced maintenance requirements
❯ Lower training costs
❯ Decreased risk of equipment damage

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**Technical Integration** The successful implementation of any industrial solution depends on seamless integration into existing systems and processes. The combination of mobXscan and IS940.1 is a prime example.

**Implementation** Getting started with the integrated solution has been streamlined to ensure rapid deployment and minimal disruption to existing operations. The implementation process focuses on simplicity and efficiency:

› Simple installation through Google Play
› No coding or technical expertise required
› Immediate compatibility with IS940.1 tablet
› Seamless integration with existing systems

**Data Management** Effective data handling is crucial in industrial environments. The integrated solution provides comprehensive data management capabilities that ensure accuracy, security, and accessibility:

› Direct processing on the tablet
› Real-time data validation
› Secure cloud connectivity via 5G
› Comprehensive audit trail capabilities

**Summary**

The combination of mobXscan software and the IS940.1 tablet of i.safe MOBILE represents a significant advancement forward compared to conventional scanning solutions. This integration offers a safer, more efficient, and cost-effective approach to data capture and processing in hazardous environments.

The large 10.1-inch display and 5G connectivity of the IS940.1 tablet, coupled with mobXscan's versatile scanning capabilities, provide industrial users with a powerful tool that enhances productivity while maintaining the highest safety standards.

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