

# TROXLER CONNECTED

Unites all **Essential Components** of the Field and Lab Environment



# INTRODUCTION TO TROXLER CONNECTED

## Company Overview

Troxler Labs is at the forefront of digital transformation in the road construction and geotech industries. By providing advanced, integrated tools, we empower companies to streamline operations and harness data insights for optimized future projects and improved roadways.

## The Troxler Connected Platform

Our platform unites all essential components of the field and lab environment. It includes:

- ✓ **Troxler Connected Lab (TCL):** Seamlessly collects data from lab environments, integrating with Troxler and other compatible equipment.
- ✓ **Troxler Connected Gauge (TCG):** Provides real-time, on-site readings directly from the jobsite, minimizing manual input and transcription errors.



## The Problem

Traditional methods of data collection and reporting in road construction are cumbersome, error-prone, and lack the centralized structure needed for predictive insights. Daily processes are fragmented, leading to inefficiencies, data entry errors, and inadequate historical reporting.



## The Troxler Connected Solution

Our cloud-based platform provides:

- ✓ **Centralized Data Management:** All equipment streams data directly to a central database, eliminating manual data entry.
- ✓ **Predictive Analytics:** Gain insights across projects with analytics that reveal patterns, helping teams make proactive adjustments.
- ✓ **Comprehensive Compatibility:** The platform integrates with a range of equipment from Troxler and other manufacturers, enabling a seamless flow of information from the field to the lab and back.

# TECHNICAL SPECIFICATIONS AND CAPABILITIES OF TROXLER CONNECTED PLATFORM



## Enhanced Data Processing & Predictive Analytics

- **Environmental and Material Correlation:** The system can correlate environmental data (e.g., humidity, temperature) with material density results, helping technicians adjust on-the-fly to improve project outcomes.
- **Predictive Insights Engine:** Generates insights into mix design, project progression, and team performance by analyzing real-time and historical data, providing actionable recommendations.



## Advanced Equipment Compatibility & Retrofit Options

- **Gauge Compatibility:** Supports both legacy and next-generation gauge models, including 3430 Plus, 3440 Plus, 4590, and 4540 models. Retrofit kits are available to enable cloud connectivity.
- **Lab Equipment Integration:** Lab scales and gyros can connect via RS232 dongles, allowing data from models such as Ohaus and A&D to be directly transmitted to the platform.
- **Digital Upgrade Paths:** Offers Wi-Fi streaming for lab gyros and scales, facilitating two-way communication for real-time visibility and remote calibration options.



## Data Streaming & Centralized Database Integration

- **Real-Time Data Collection:** The Troxler Connected Platform streams data from both Troxler and third-party equipment, including gauges, gyros, and lab scales, directly to the cloud.
- **Centralized Data Storage:** A unified database captures all readings, reducing transcription errors and enabling consolidated access for both historical reporting and predictive analysis.
- **API Compatibility:** Supports integration with external reporting engines and quality control (QC) software via APIs, enabling data flow into existing project management or reporting systems.



## Security & Compliance

- **Tamper-Proof Digital Signatures:** Ensures data integrity with secure digital signatures, compliant with state requirements for authenticity in reporting.
- **State-Specific Customization:** Configured to align with state procedures, such as NCDOT requirements, including workflows for Bulk Specific Gravity, Asphalt Content, Rice (Gmm), and gradation testing.
- **Data Retention & Encryption:** Data is stored securely with encryption, meeting industry standards for data retention and protection, allowing safe access for historical audits.





## Configurable Geofencing and Alerts

- **Real-Time Asset Monitoring:** Customizable geofencing for equipment location tracking, providing instant alerts when gauges enter or exit predefined areas.
- **Automated Alerts and Logs:** Built-in notifications for asset movement, equipment check-in/check-out, and status changes, streamlining operational tracking.

This technical framework equips teams with efficient, data-driven tools for enhanced decision-making, seamless integration, and compliance with state standards—all on a single, cohesive platform.

## Key Features of Troxler Connected



### Real-Time Tracking

- Track your assets anytime, anywhere.
- Implement geofencing alerts to monitor when equipment enters or exits designated zones.



### Enhanced Gauge Utilization & Digital Signatures

- Efficiently manage gauge utilization with automated logs.
- Secure, tamper-proof digital signatures ensure data integrity and compliance with state requirements.



### Equipment Compatibility and Upgrades

- Retrofit options are available for various gauge models (e.g., 3430 Plus, 4590).
- Add connectivity to lab scales and gyros, streaming data in real time for a fully connected lab experience.



### Automated Data Collection and Reporting

- Minimize transcription errors with automated data entry from lab and field readings.
- Digital logs offer one-click data capture for technicians, with alerts for movement or status changes.

# WHY CHOOSE TROXLER CONNECTED?



## **Streamline Operations & Save Costs**

Troxler Connected centralizes your data, reducing overhead and optimizing resource allocation.



## **Comprehensive State Compliance**

Developed with NCDOT and industry partners, our platform ensures seamless adherence to state procedures. Built-in testing procedures, control charts, and digital storage simplify quality assurance and compliance.



## **Beta Program Invitation**

We invite industry leaders to join our Connected Gauge Beta Program to help shape the future of connected road construction technologies. Participate in field testing, provide feedback, and experience streamlined processes firsthand.



## **Get Started with Troxler Connected**

Transform your workflow with Troxler's state-of-the-art digital platform. For more information or to schedule a demo, contact us today!

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