

# NetBrake ATEX Dynamic Brake Testing Equipment

The World's Most Advanced Dynamic Brake Testing Solution for Hazardous Environments

## 1. Certifications & Safety Ratings

- **ATEX KA MA International Certified**
- **MOT Approval Certified**
- **Mining Class I Rated**
- **Coal Safety Class I Rated**
- **Petrochemical Class II Rated**
- **Intrinsically Safe** for underground use (IP68 explosion-proof protection)

Designed explicitly for use in hazardous and industrial settings, NetBrake ATEX is suitable for mining, petrochemical, coal, and other environments that demand the highest level of safety compliance.

## 2. Industrial-Grade Hardware

- **8-Inch Industrial-Grade Tablet:** Durable touchscreen display that remains visible under challenging lighting conditions.
- **IP68-Rated:** Waterproof, dustproof, and impact-resistant housing. Withstands submersion (1 m for 30 minutes) and drops up to 1.2 m.
- **9-Axis Accelerometer:** Delivers precise measurement of acceleration, tilt, and orientation for dynamic brake testing.
- **Integrated MAX44009 Light Sensor:** Enables advanced lux and headlight testing (ambient, low beam, high beam).
- **Noise Level (dB) Measurement:** Built-in audio sensor to assess vehicle noise compliance.
- **3-Axis Vibration Measurement:** Identifies excessive vibration that may indicate mechanical imbalance or component wear.

## 3. Comprehensive Testing Capabilities

1. **Dynamic Brake Performance Testing:** Accurately measures stopping distance, deceleration profiles, and brake efficiency in real-world conditions.
2. **Static Ramp Testing (Brake Holding Test):** Evaluates brake integrity under stationary load, generating a “slip” printout for easy documentation.
3. **Light Measurement:** Tests and graphs **ambient**, **low beam**, and **high beam** conditions, confirming your vehicle meets required visibility standards.
4. **Noise (dB) Testing:** Captures average decibel levels with graphical analysis, verifying compliance with noise regulations.
5. **Vibration Analysis:** Assesses 3-axis vibration data with graphs that help diagnose mechanical faults or uneven wear.
6. **Truck & Trailer Compatibility:** Calculates and logs compatibility metrics to ensure safe and balanced braking performance.
7. **Brake Performance Tracking:** Monitors brake health over time, forecasting maintenance schedules.

8. **K-Lux Integration:** Ready for advanced K-Lux measurement, supporting specialized automotive and industrial standards.

#### 4. Data Management & Connectivity

- **Massive Storage:** Holds up to **800,000 tests**, ensuring long-term tracking without clearing memory.
- **Cloud Integration:** Automatically backs up test results for remote access and secure archiving.
- **Real-Time Analysis & Reporting:** View and interpret data on the tablet instantly or send results by email for immediate review.
- **Bluetooth Connectivity:** Pairs with a thermal printer for on-the-spot A4 or slip report generation.
- **Direct Email Reporting:** Share results directly from the device with fleet managers or compliance officials.

#### 5. Output & Reporting

- **A4 Test Reports:** Full-page summaries with 3-axis graphical representations of brake performance, lighting, noise, and vibration.
- **Slip Printouts:** Quick reference prints for static tests, noise levels, and other high-level measurements.
- **Comprehensive Graphing:** Each aspect (brake force, lux, decibel levels, vibration data) presented in clear, easy-to-read charts.
- **Legislative Compliance Check:** Built-in guidance to ensure the test meets standards like Mining Class I, Coal Safety Class I, MOT, and other local regulations.

#### 6. Intelligent Features

- **Integrated Chatbot System:** Offers interactive legislative guidance and manufacturer-specific recommendations.
- **Technical Support:** Step-by-step diagnostics and troubleshooting on the device itself.
- **Manufacturer-Specific Assistance:** Adjusts testing parameters or interprets readings based on vehicle or equipment types.

#### 7. Included Accessories

- **IP68-Rated Trolley Hard Case:** Rugged storage solution for safe transport in severe conditions.
- **RAM Ball Mount Bracket with Suction Cup:** Securely affix the tablet in cabs, cockpits, or control rooms.
- **Bluetooth Thermal Printer:** Print high-quality test reports in real time.
- **RAM Suction Arm & Bracket:** Flexible mounting for different vehicles and test environments.

#### 8. Powerful Software Suite

- **Nine Specialized Programs** tailored to mining, transport, performance analysis, compliance testing, data management, and more.

- **Configurable Settings:** Adapt test parameters for different regulatory regimes or custom internal standards.
- **Updatable Framework:** Receive new features, compliance adjustments, and performance enhancements via remote updates.

## 9. Applications

- **Mining Operations:** Verify underground vehicle safety with intrinsically safe hardware.
- **Transport Fleet Management:** Track the brake status of diverse fleets, from trucks to buses.
- **Petrochemical Facilities:** Ensure equipment meets Class II safety mandates.
- **Industrial Safety Compliance:** Streamline audits with robust testing logs.
- **Vehicle Maintenance Facilities:** Perform diagnostic brake tests, noise checks, and lighting verifications in one unit.
- **MOT Testing Centers:** Expand service capabilities with multi-parameter testing and official compliance reports.

## 10. Environmental Performance

- **Extreme Condition Ready:** Tolerates wide temperature ranges and the most demanding industrial or off-road scenarios.
- **Rugged & Impact-Resistant:** Engineered for daily use in unforgiving settings like mines, construction sites, and petrochemical plants.
- **Complete IP68 Sealing:** Water, dust, and shock resistance maintain reliability and prolong device life.

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In essence, NetBrake ATEX brings together advanced sensor technology, extensive safety certifications, and real-time data management into one versatile platform. Whether you're operating heavy mining trucks in explosive atmospheres or ensuring compliance in a petrochemical plant, the NetBrake ATEX Dynamic Brake Testing Equipment delivers accuracy, durability, and unparalleled safety.