

Magnetic Stripe Analyser

Mag-Tester Revo

Tests, analyses and delivers certification standard measurement accuracy for the widest range of magnetic media

The Mag-Tester Revo is the most accurate magnetic stripe analyser available today for testing media of all types, shapes, sizes and thicknesses including cards, tickets, ATBs and bank-books. Certification standard measurement accuracy is achieved through a linear optical encoder, automated operations and powerful data analysis tools, making the Mag-Tester Revo the first choice of Certification Laboratories worldwide, as well as manufacturing QC.

SUPPORTED SPECIFICATIONS

- ISO/IEC 7811-2:2018
- ISO/IEC 7811-6:2018
- ISO/IEC 7811-8:2014
- ISO /IEC 10373-2
- ISO /IEC 8484:2014
- JIS 6501 Type I and II
- JIS 6502
- Mastercard CQM 2.19
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- IATA 722e

Custom test limits can be set by the user.

Other standards available as variants.



Solution Highlights

- High precision testing of unencoded and encoded HiCo, LoCo and 650 Oersted mag-stripes to ISO and other standards.
- Suitable for all types and sizes of magnetic stripe media (tape or on laminate), including cards, powered cards, tickets, ATB, Edmundson tickets, bank passbooks and other documents.
- Achieves certification standard levels of test measurement accuracy with the use of a Linear Optical Encoder.
- Perfect for any magnetic stripe manufacturing, bureaus or QC environment.

Typical Applications

- Production Quality Control** – Card manufacture and personalisation bureaus, verifying the integrity of unencoded and encoded mag-stripes, original tape manufacture, reader/encoder manufacture, verifying equipment performance and quality.
- Expert Diagnostics** – Analysing the performance characteristics of the recorded (or encoded) magnetic signal and data, and the magnetic stripe media.
- Test Laboratories** – Certification standard tests and analysis.
- Development** – Producing special cards, tickets, encoders, readers and other items.



THE BARNES ADVANTAGE

Barnes is the chosen test tool of Banks & Issuers, Card Manufacturers, Personalisation Bureaus and Test Laboratories worldwide.

Here are some reasons why:

BUSINESS AGILITY

Barnes test tools are easy to use by both technical and non-technical users, and speed up card development and payment scheme certification.

COST ELIMINATION

The high business costs and wasted resources of producing and issuing invalid cards are eliminated.

RISK REDUCTION

The reputational risk of issuing invalid cards and tickets to end customers is reduced.

FUTURE PROOFED

Barnes works in partnership with all major payment schemes. As scheme rules evolve, Barnes rapidly makes updated test script packs available to customers via the Barnes website.

SERVICE EXCELLENCE

Our clients have every confidence that, whatever their test requirement, the Barnes team is always on-hand to deliver expert advice and fast support.

Features and Benefits

All of the features of Mag-Tester Revo are designed to deliver the highest levels of test-result accuracy and convenience to any magnetic stripe manufacturing, bureau or QC environment.

Precision Reciprocating Flat Test Table

This acts as the carrier for analysing the widest range of magnetic stripe test piece shapes, sizes and thicknesses.

Linear Optical Encoder

Integral to the Mag-Tester Revo is a linear optical encoder, which directly monitors the movement of the card under test to a resolution of 0.5micron (0.00002") to provide unmatched levels of test measurement accuracy.

Fully Automated Operations

Unlike other flat test table analysers with error-prone manual settings, the Mag-Tester Revo is fully automated for head selection, loading and track positioning.

Multi-level User Interface

The Mag-Tester Revo is designed to be easy to use by the non-technical operator with colour-coded Go/Stop, Pass/Fail displays; at the same time it provides detailed technical information for engineering staff. Comprehensive magnetic stripe analysis displays and diagnostic facilities for Encoded and Unencoded cards are available, as well as script-based modules which allow many of the tests and reports to be customised.

Durable Test Heads

Sensitive test heads are loaded onto test cards only when actually reading or writing – reducing wear rates on the read and write heads by 50% and 25% respectively compared with manual systems.

Protective Covers

Critical components, such as the sensitive test heads, have protective covers to allow the Mag-Tester Revo to be used in all environments and by all personnel. If necessary, experts and developers can remove the covers to use the analyser in an "open-architecture" mode.

Test Card Clamping System

This ensures quick and accurate card loading and removal without any risk of damaging or marking the test card / ticket.

Batch Testing & Data Analysis

Media can be batch tested; batch test data can be exported to external database programmes (MS Access, Excel) for further analysis (Gage R & R, Six Sigma), if required. Data analysis includes statistics, histograms and performance trends right through to the automatic generation of test certificates.

Convenient USB Interface

A USB connection enables the Mag-Tester Revo to be installed on any laptop or PC running Windows 7 and 10 (32-bit and 64-bit), (32-bit and 64-bit), in the most demanding production environments as well as laboratories and bureaus.

Encoded Stripe Analysis

- ✓ ISO 7811-2, ISO 7811-6 / ISO 7811-8 Tables 2-7 tests
- ✓ Automatically test any or all 3 ISO tracks
- ✓ Variable Test Track location
- ✓ Character Count, Data, Parity, LRC
- ✓ Leading/trailing zeros, start/end sentinel locations
- ✓ Signal amplitudes, signal waveform
- ✓ Bit density, Bit spacing
- ✓ Bit/Bit spacing variation (Jitter)
- ✓ Reverse & Repeat read tests (encoded cards)
- ✓ Test to Mastercard CQM requirements

Unencoded Stripe Analysis

- ✓ ISO 7811-2, ISO 7811-6 / ISO 7811 Table 1 tests
- ✓ Magnetic saturation curve – multiple curves
- ✓ Erasure
- ✓ Extra pulse
- ✓ Resolution
- ✓ Demagnetisation (HiCo)
- ✓ Waveform (HiCo – forward and reverse)
- ✓ Programmable Waveform test method
- ✓ Can test to other standards