Database System

Upgraded operator touch panel and integrated database computer for MPI Benches

The Database System is a 12" touchscreen operator interface with custom software to help improve inspection quality and productivity. The database system is available as an upgrade on D-Series and MD-Series magnetic particle wet benches.

The process control system reduces operator variability / human error while using mag equipment, eliminates manual record keeping, and improves traceability for parts, jobs, customers, operators, and more. The database system is designed explicitly for NDT teams focused on operational excellence that are looking for a solution to maximize time and increase throughput.

BENEFITS

Improve quality control and traceability

- Enhance quality control capabilities with prompted and adjustable frequency checks, and standard reports for proactive error management
- Reduce manual record-keeping and human error for reliability
- Control user access to machine settings and test parameters with secure, password-protected log-ins

Minimize part processing time

- Speed up the inspection process by automating part entry and test parameter selection
- Electronically access your part-specific technique sheets on-screen to minimize time away from the machine
- The Barcode scanner reads the job bar code or QR code to automatically pull up the correct test parameters and then log the part information in the database
- Eliminate manual wet bench parameter entry so inspectors can focus on part processing

Automated Record Keeping & Report Generation

A built-in database enhances quality control reporting capabilities by recording critical inspection data points, including:

- Inspection date & time
- Part number
- Customer
- Pass/ Fail status
- Recipe number & name
- Test parameters, including output current type and amperage
- Operator ID and comments

Save long-term costs and increase facility throughput

- Save approximately 10 minutes per job by automating record keeping, locating the technique sheet for the part, and entering all the inspection parameters
- Reduce bottlenecks caused by lengthy magnetic particle inspections
- Utilize on-screen prompted process checks and reference materials to help with personnel onboarding, equipment training, and company best practices
- Spend less time on paperwork or reporting and more time inspecting parts

FEATURES

- Resistive 12.1 in / 30.7 cm touch screen UI operator interface with

- Microsoft Windows 10 Enterprise LTSC and 64 GB of storage space

- Microsoft SQL Server Express database (2014)

- Barcode scanner capable of reading barcodes and QR codes

- Expanded library of customer-programmable testing techniques

  - D-series: 3,000 techniques
  - MD-series: 1,000 techniques

- 100 programmable custom user profiles to control access

- Network capable — Ethernet or wireless

- Automated process control prompts to record daily UV light and bath concentration checks— the ability to record and view up to 30 days of trend data.

- Dedicated interface to consistently conduct tool steel ring tests, weekly checks, and monthly checks.

- The interactive user interface provides real-time feedback to alert if daily, weekly, or monthly checks are outside ASTM ranges.

- Bath concentration, UV light strength, white light, ambient light, and ammeter accuracy default settings are based on ASTM standards and can be customized to customer requirements.

- Machine software-generated lot reports stored on the hard drive and export capability through external media or network connections

PROPERTIES

Upgrade for	D-Series and MD-Series Magnetic Particle Wet Benches

Magnaflux magnetic particle equipment is built to order. Please download and complete the MPI checklist and contact us for a detailed quote if you are interested in the database system.