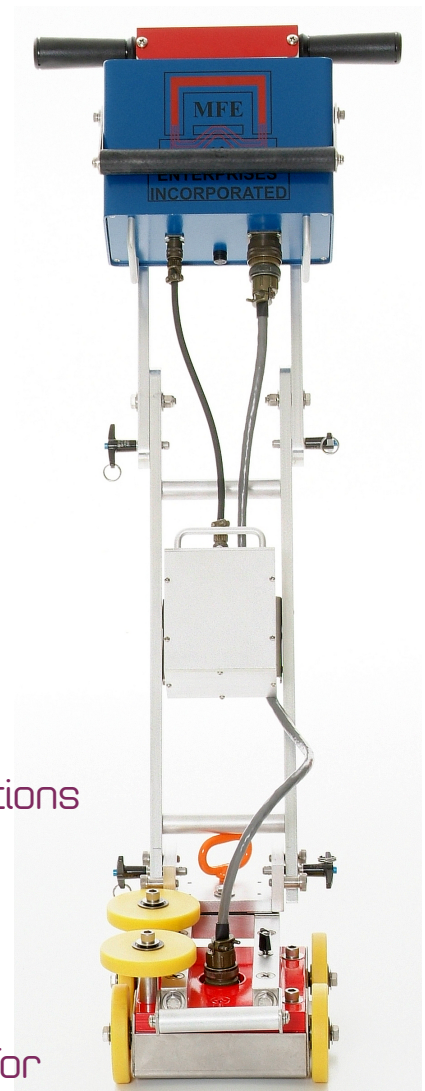
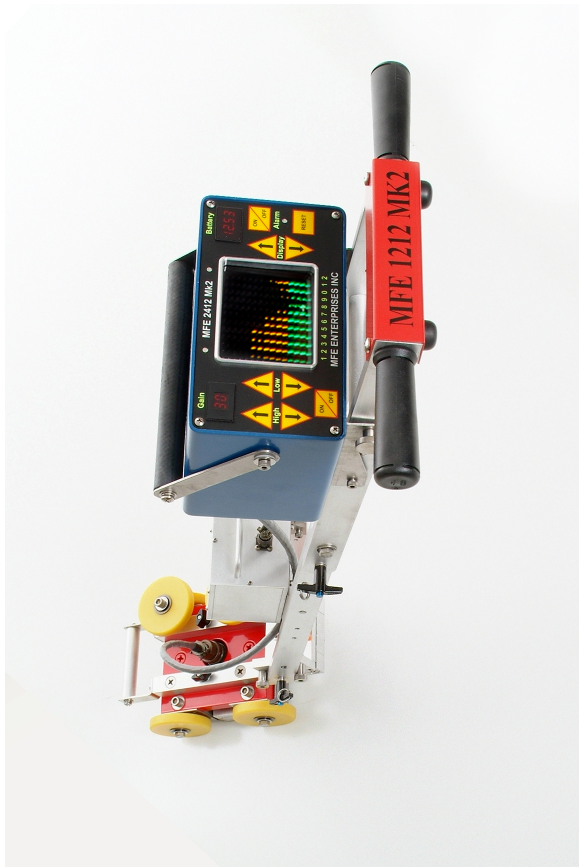


MFE ENTERPRISES, INC

MFE 1212 Mark II Edge and Hand Scanner

THE MFE 1212 MARK II SAVES TIME, MONEY, AND YOUR KNEES AS WITH THIS SCANNER YOU WILL RAPIDLY LOCATE ALL DEFECTS ON THE FLOOR TO SHELL AREA. NO LONGER WILL YOU HAVE TO PERFORM UT ON THE ENTIRE SHELL.

- RUGGED, RELIABLE AND USER FRIENDLY
- SIDE PIVOTING HANDLE
- QUICK RELEASE HANDLE TO CONVERT TO HAND SCANNER
- REAL TIME DISPLAY
- LIGHT WEIGHT AND EASY TO TRAVEL WITH



Technical Specifications

Weight- 48 lbs
In Case- 148 lbs
Scan Width- 6"
Speed- Designed for
3 feet per second

MFE 1212 MARK II

THE MFE 1212 Mk II is comprised of the following modules.

MAGNETIC BRIDGE - SENSOR BAR
BATTERY MODULE - HANDLE ASSEMBLY
POWER & SIGNAL CABLES

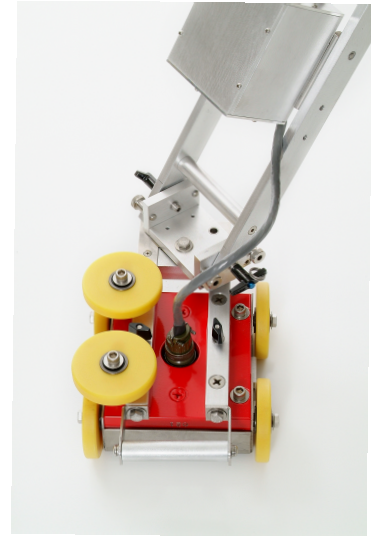
The Magnetic Bridge provides the necessary flux levels to achieve saturation of the plate thickness to be inspected. It is supported on four low rolling resistance, durable wheels at each corner allowing easy maneuverability of the scanning head. An additional set of guide wheels are attached to one side of the bridge to maintain proximity to the shell when inspecting the annular plates.

The Sensor Bar contains an array of sensors across the full width of the scanning head.

These sensors detect the leakage fields generated by the inspection process. The Sensor Bar

extends almost to the outer edge of the wheels allowing maximum possible coverage. It is suspended and spring mounted within the Magnetic Bridge by two studs and adjustable wing nuts allowing the adjustment of the height of the sensors from the inspection surface. The Battery Module contains an 8 amp hour sealed gel Lead Acid Battery that is both leak proof and can be placed in any orientation. This type of battery is not regarded as hazardous by the airlines for shipping purposes. The battery can provide power for the system for at least 8 hours of continuous use. A 3 amp fuse is located under the top cover to prevent any damage to the module should a short occur within the power supply wiring. The Battery Module can be quickly and easily removed from the scanner for charging purposes. The Handle Assembly is connected to the Magnetic Bridge using two 3/8 inch bolts, washers and nylock nuts and rests between two sets of shoulder bolts. The handle provides mounting points in the form of shoulder bolts and clamping bolts for the Battery Module and the Electronics Module and can be folded in half for transportation. When in use it is locked in place using two quick release pins. The coverage provided by the handle allows the scanner to be easily tipped onto the rear wheels for removal or moving around the floor. The handle can be pivoted sideways to ease inspection close to the shell or locked in the straight ahead position for normal scanning. The Electronic Module processes the signals from the sensors and displays the data on a twelve channel L.E.D. display panel. Only the first six channels are utilized in the MFE 1212 Mk II. The module is exactly the same as that for the MFE 2412 Mk II and can be interchanged at will. The front panel incorporates the controls for power, gain, alarm and display brightness. A voltage display is incorporated to give a real time battery voltage indication. If this drops below a nominal 12.0v reading then battery must be recharged using the battery charger provided. A fuse holder is mounted on the back panel and contains a 3 amp fuse to protect the electronics in case of a power problem. The signal cable has 24 pin connectors at both ends for connection to the Sensor Array and Electronic Module and the power cable has 2 pin connectors for connecting the Battery Module to the Electronic Module. Extreme care should be taken when making or breaking these connections. They are both keyed to prevent any possibility of improper connection.

The MFE 1212 Mk II is a supplemental scanner to the larger MFE 2412 Mk II and was designed to allow the scanning of areas that the large scanning heads could not achieve due to accessibility problems associated with the physical size of the scanner and/or the uneven nature of the floor being inspected. It was not intended as a stand alone scanner for large areas of coverage. The necessary reduction in the size of the bridge adversely affects the achievable sensitivity especially on thicker plates or through coatings.



Please visit our web site at www.mfescan.com to view a video demonstration of this scanner.