



ELECTRON MACHINE CORPORATION

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MPR E-Scan | Boiler Cleaning



CONTROL • SAFETY • VALUE

- ▶ Data logging documentation for dilution and temperature
- ▶ Multiple product ranges and configurable set points.
- ▶ Sapphire Prism
- ▶ Daylight visible color display
- ▶ NEMA 4X
- ▶ Stainless-steel CNC machined sensing head
- ▶ 4-20mA & RS-232 outputs
- ▶ In-house manufactured in USA
- ▶ 24 Hour Service Support
- ▶ (2) Input & (6) Configurable output relays
- ▶ Configurable alarm points: high/low, setpoint/ deviation, etc.

Chemical cleaning has been considered a necessary part of boiler maintenance for many years. The objective of a chemical cleaning is to safely remove all the deposits from the inside of the boiler tubes. Proper chemical cleaning removes deposits from the inside of boiler tubes which improves the boiler heat rate, reduces tube failures and improves the stability of boiler chemistry. However, chemical cleaning can cause severe damage to the boiler if proper chemical dilution is not maintained.

The MPR E-Scan allows chemical cleaning companies the ability to control acid dilution to strict specification. This insures the proper cleaning dilution is achieved while reducing the risk of over shooting the target control point causing costly damage. By installing the instrument in-line after the dilution point, the MPR E-Scan provides real time control, trending and data logging information to operators insuring the required chemical dilution is achieved and remains constant. This will reduce the overall time needed to meet target dilution, saving time and minimizing the boiler downtime.

The MPR E-Scan can be constructed of various alloys to ensure a long service life in a harsh chemical environment. By utilizing the instrument to control and monitor the cleaning solution, chemical cleaning companies can assure customers that proper dilution was met and maintained. When the job is completed, the cleaning company can provide their customer with documentation of both the process dilution and temperature throughout the entire cleaning process.

KEY BENEFITS

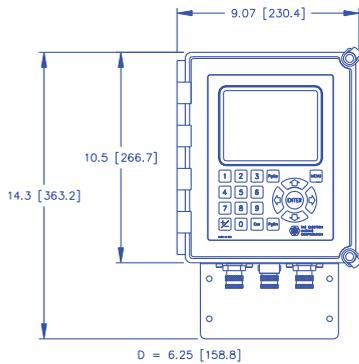
- Measurement and temperature output with data logging
- Continuous accurate control of acid dilutions to meet target
- Trend graphing
- Functional status indication of monitored parameters
- Error and Warning light indications
- Time reduction
- High-resolution color display

Model MPR E-Scan : Standard Features

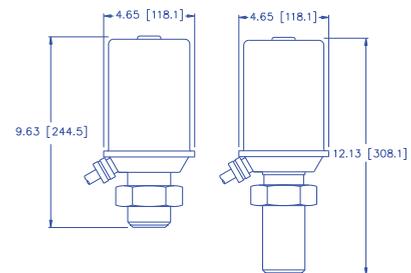
Accuracy/ Repeatability	±0.0002 RI (corresponds typically to ± 0.1% by weight)
Response Time	0.25 seconds to 3 minutes
Span	Configured for specific application for max. resolution
Display	Color TFT-LCD with LED backlighting 640 X 480 Pixel, daylight-readable
Process Temperature	Up to 150°C (300°F) without air purge
Sensing Head Wetted Materials	2205 Full Duplex S/S, Sapphire, Peek® or VITON®
Service/Support	24HR Technical hotline and fast response for repairs/parts
Standard Outputs	4-20mA non-isolated, 0-10 Vdc non-isolated, RS-232 (6) configurable output relays & (2) configurable input relays
Interconnecting Cable	6M (20FT) standard 300M (1000FT) maximum

Model MPR E-Scan : Optional Features

Sensing Head Wetted Materials	Alloy-20, Hastelloy C, Tantalum
Outputs	RS-422/484 & Isolated 4-20mA for (temperature, measurement or control)
Vortex cooled electronics console, Intrinsically safe & Severe duty for extreme vibration/heat	



Standard Extended



Lined Adapter



Spool Adapter with Hand Cleaner



In-Line NPT Adapter



Polyurethane Adapter

