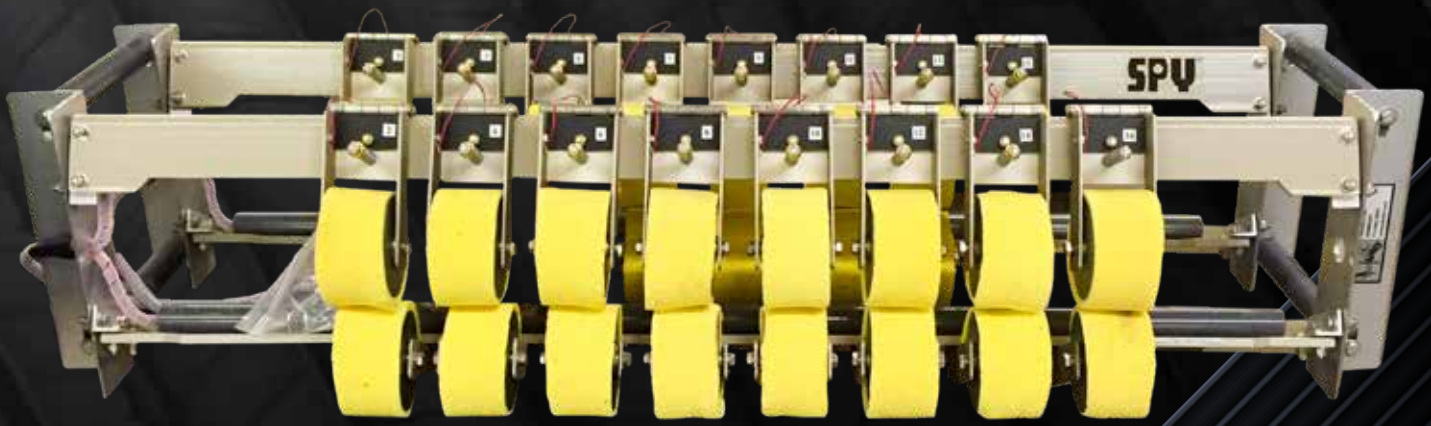
MULTI-STATION REBAR HOLIDAY DETECTION SYSTEMS



CE

SPY®
PIPELINE INSPECTION COMPANY

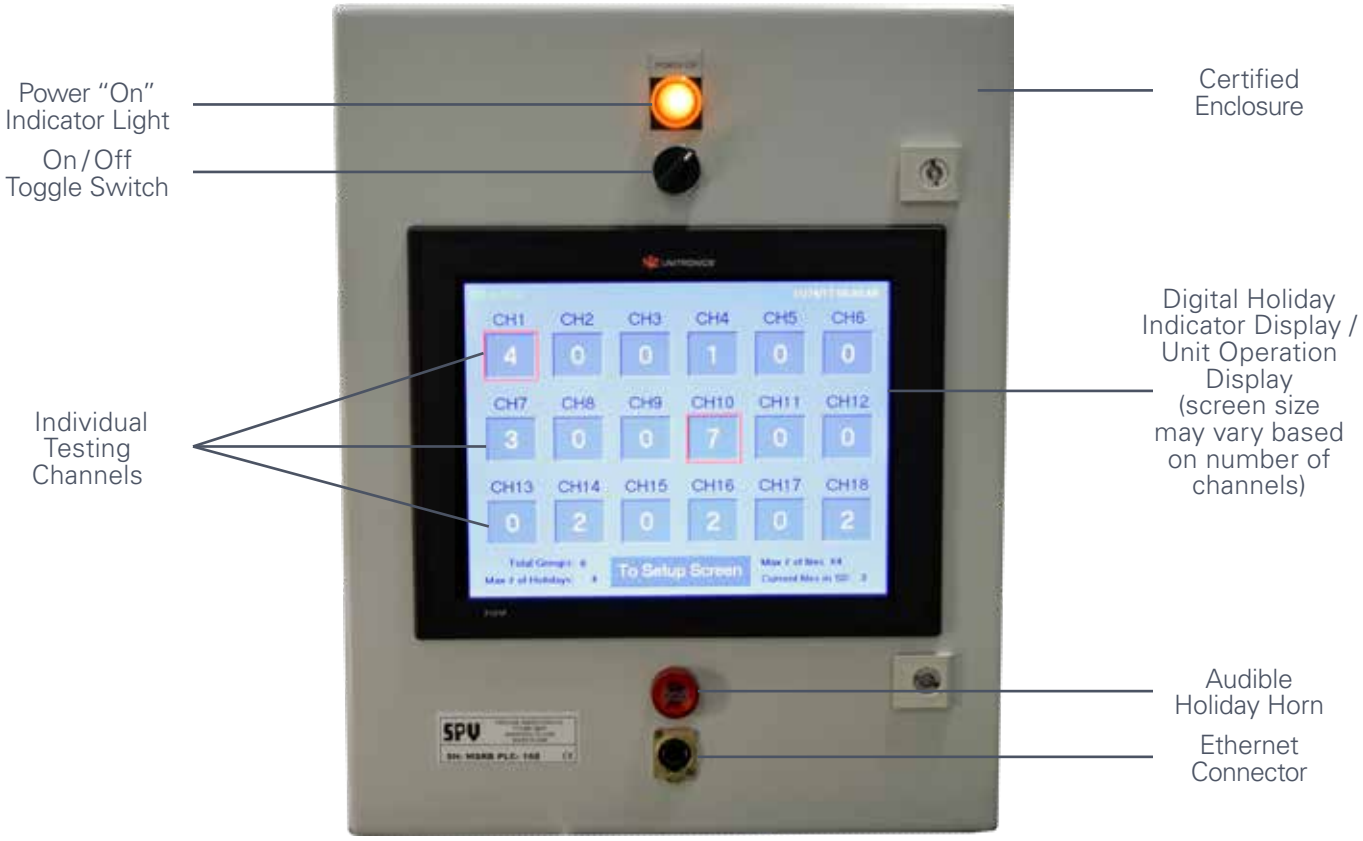
MODEL MSRB-PLC

THE NEXT GENERATION IN HIGH-PERFORMANCE REBAR HOLIDAY DETECTION SYSTEMS

THE MSRB-PLC REBAR HOLIDAY DETECTION SYSTEM uses an inductive sensor to sense the approach of a freshly coated rebar batch after the rebar exits the cooling process which then activates the MSRB-PLC Holiday Detection System to prepare for the rebar batch to pass through our dual-roller wet sponge electrodes (RBRS). Moisture from the sponge electrodes conducts a low inspection voltage (67 Volts) to the coating of each coated rebar which allows the MSRB-PLC System to detect any holiday (defect) in the rebar coating. The MSRB-PLC Holiday Detection System is pre-programmed by the operator with a predetermined holiday threshold per stick of rebar or per foot per stick of rebar, once the pre-programmed holiday threshold has been surpassed on any channel an audible alert is set off on the system enclosure and a visual alert is shown on the system display (displays shows # of holidays per channel) which allows the operator to identify which stick of rebar needs to be removed from the batch for re-coating. Once the batch has completely passed through the sponge electrodes (RBRS) the MSRB-PLC Rebar Holiday System data logs to its PLC memory the following data: date/time stamp for the batch run and the number of holidays per channel then the MSRB-PLC Holiday Detection System resets in preparation for the next rebar batch.

The MSRB-PLC Rebar Holiday Detection System is capable of testing an infinite number of channels and recorded data can be accessed later through the Ethernet connection on a PC/Laptop for further analysis.

The MSRB-PLC Rebar Holiday Detection System comes in a standard 3 channel configuration but the system can easily be customized to meet the needs of any rebar coating plant configuration.



MODEL MSRB

THE MSRB SYSTEM continuously monitors the coating line process as reinforcing bar runs through the RBRS dual-roller wet sponge electrodes unit. When a holiday is discovered, a red light flashes at the appropriate station on the detector unit for a visual indication, and the unit sends an electrical output to a plug on the back of the unit. The MSRB signal output plugs drive any 120 Volt AC customer furnished horn, bell, recorder or computer.

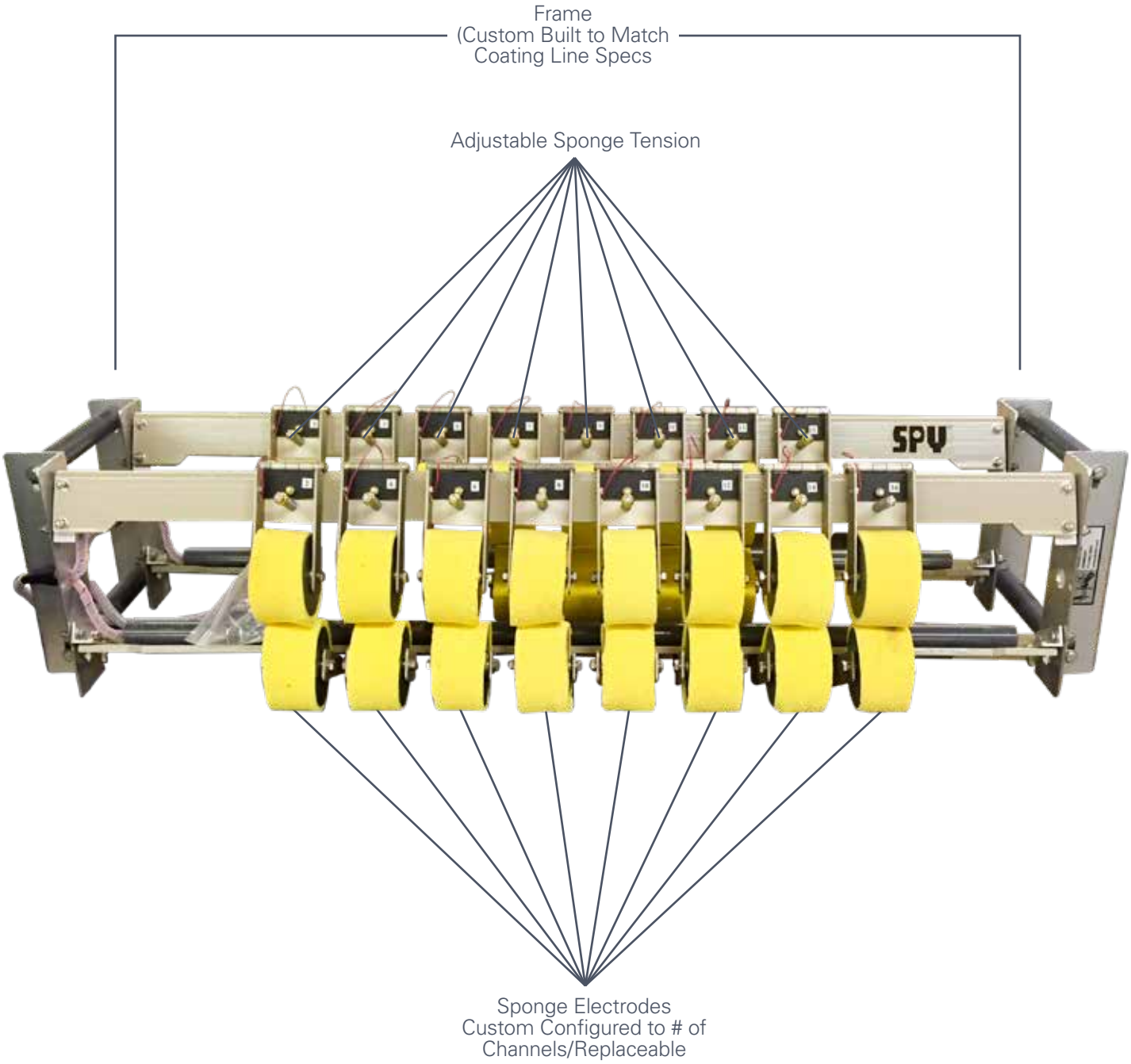
MSRB DETECTOR UNITS operate off a standard 60 120-Volt, 60 cycle single phase power source. They control output to the electrodes and detect holidays. Red signal lights on the front of the unit flash to indicate holidays. Switched signal plugs on the back of the MSRB provide for output to customer-supplied remote counter/signal systems. An individual detector can be supplied with from three to six stations as required. For rebar coating layouts with more than six lines, multiple MSRB detectors can be installed to match the number of lines as needed.

KEY FEATURES:

- Reliably detects the most minute coating pinholes, scratches and other breaks.
- Simple setup and operation.
- Operates from a standard 120V, 60-cycle single phase power source.
- Rugged, trouble-free circuitry.
- Additional MSRB units can be added to match rebar coating line layouts.
- Compact size allows placement in any control station.
- Allows visual and (optional) audible detection of alarms.

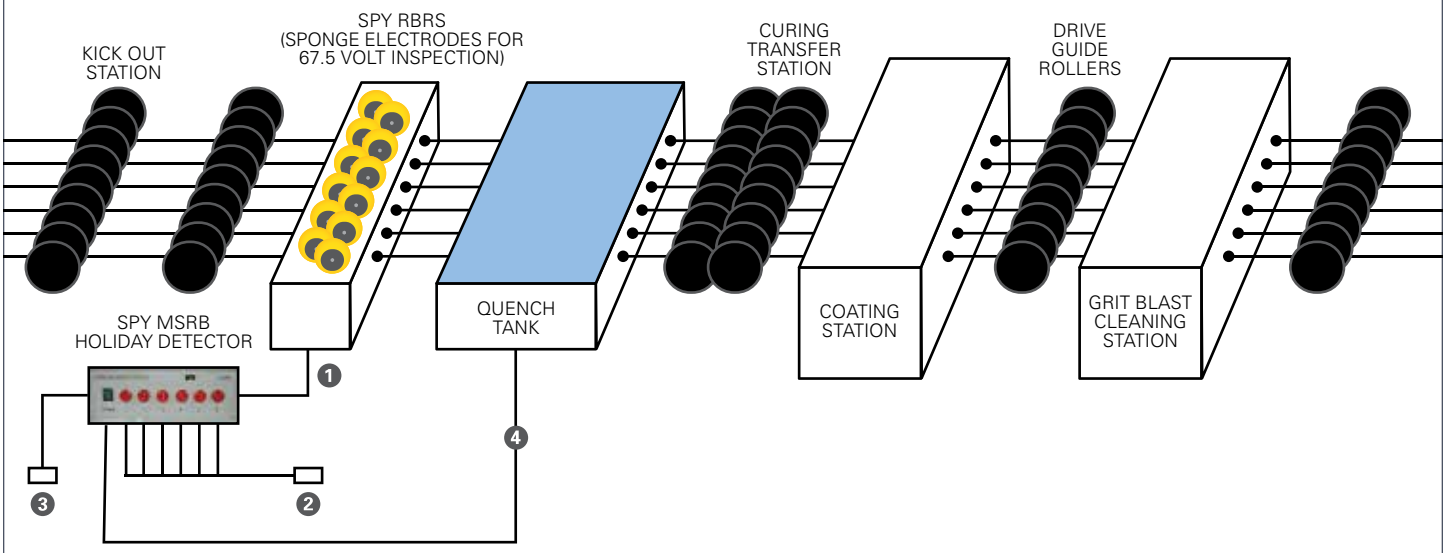
MODEL RBRS

RBRS DUAL-ROLLER WET SPONGE ELECTRODES UNIT. The system is available in 3 – 24 coating line configurations. As the rebar lines run from the quench tank through the RBRS electrode units, moisture from the sponge electrodes conduct a 67.5 low voltage inspection of the rebar coating.



TYPICAL SYSTEM INSTALLATION & OPERATION

ILLUSTRATION OF MSRB SETUP ON REBAR COATING LINE

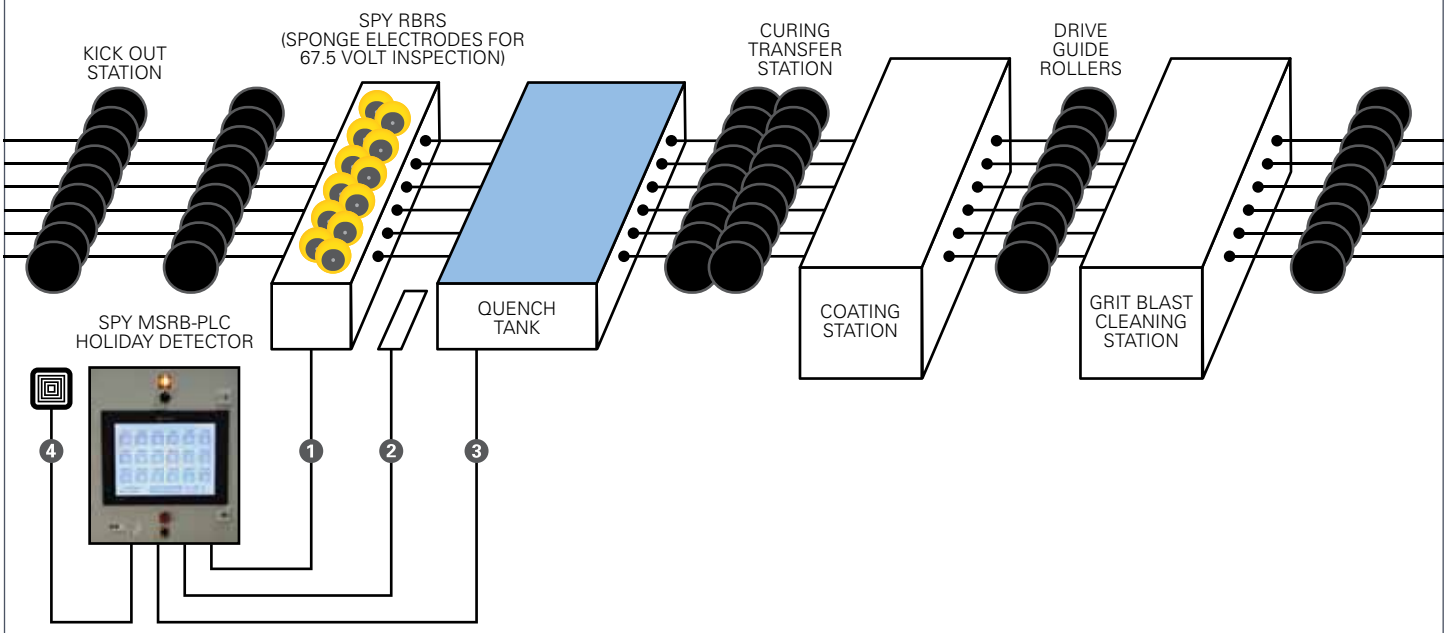


SPY® MSRB HOLIDAY DETECTOR

1. Up to 6 channels of low 67.5 volt inspection
2. Up to 6 channels of signal output for counters
3. Signal Output for optional horn or recording device
4. Ground to Quench Tank

TYPICAL SYSTEM INSTALLATION & OPERATION

ILLUSTRATION OF MSRB-PLC SETUP ON REBAR COATING LINE



SPY® MSRB HOLIDAY DETECTOR

1. Low voltage inspection to an infinite number of channels
2. Inductive Sensor to automatically test each rebar batch separately
3. Ground to Quench Tank
4. Optional Klaxon horn connection for louder plant environments

SPECIFICATIONS

MODEL	MSRB	MSRB-PLC
Voltage Type	DC	DC
Voltage Range (kV)	67.5 Volts	67.5 Volts
Voltage Output Accuracy	±5%	±5%
Coating Range (Min-Max)	1 - 20 mils	1 - 20 mils
Operating Temperature	–40°F to 148°F	–40°F to 148°F
Display Type	LED	LCD
Holiday Indicator Type	Visual / (Optional) Audio	Audible / Visual
Power Requirement	120V AC (Optional 220V – 120V transformer)	120V AC (Optional 220V – 120V transformer)
Unit Weight (lb)	10.7	20
Unit Dimensions (LxWxH)	10" x 15.5" x 6.5"	15.75" x 20" x 9"
Domestic/International Standards Unit Complies With	NACE SP0188-2006	NACE SP0188-2006
Factory Warranty	12 Month	12 Month

SPY®

PIPELINE INSPECTION COMPANY

WORLDWIDE AVAILABILITY
Pipeline Inspection Company has a worldwide distributor network to ensure that SPY® products are available where and when they are needed.

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