

WACO®

DIGITAL ENAMEL RATER III



QUICK & ACCURATE ENAMEL COVERAGE READINGS - IMPROVED RESOLUTION AND USER INTERFACE

The newest version of the WACO Digital Enamel Rater ensures quick and accurate measurements of the enamel coating on the inside of food and beverage cans. It displays an index of the metal exposure due to incomplete enamel coverage on an easy to read digital LED display.

The Enamel Rater III features a new LCD screen for easy menu selection and adjustment of settings. It also features a 5-digit digital LED display for milliamp readings and a 2-digit LED timer display. The voltage is set at the industry standard 6.3 VDC, but is operator adjustable from 4 – 9 VDC. The Enamel Rater provides a constant voltage across the can body and the electrode that is immersed in the electrolyte-filled can, allowing measurement of the resulting current. The operating range is 0 – 500 ma, with an improved, accurate resolution of .01 ma.

The instrument is set to the industry standard 4 second mode, but can also be put into continuous or programmable modes. In the 4 second test mode, the timer and test will stop at 4 seconds and

display the milliamp reading. In continuous mode, the reading will be displayed continuously alongside the elapsed time, with the reading at 4 seconds automatically stored to memory for recall. In programmable mode, the operator can select a customized amount of time for the test.

Location of exposed metal can be determined by reversing the voltage, causing bubbling to appear at the metal exposure point for easy visual identification. A Fill Height Sensor ensures that tests will only begin when the can is filled with a sufficient amount of electrolyte solution. Similarly, can contact sensors require good electrical contact with the can before any test can be run.

A sturdy enclosure and sealed membrane keypad protects the main circuit board from moisture and corrosion, providing long life and reliability in factory environments. Both RS232 serial and USB virtual serial ports allow easy transfer of data to computers, printers, or data collection systems. Both 110 V and 220 V models are available.

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Specifications

Display:	2-digit LED timer & 5-digit LED milliampere readings 2 row LCD screen for menu options and selection	Remote Sensing Power Supply:	Improves accuracy by measuring and regulating voltage at the can
Power Supply:	Constant voltage, factory set @ 6.3 V, adjustable from 4 V to 9 V	Display Hold:	Pauses display, returns to real time reading when pressed again
Range:	0 – 500 ma	Voltage Reverse:	Reverses polarity of the electrode to indicate location of exposed metal
Resolution:	0.01 ma	Rear Panel:	Power Cord Socket; RS-232 and Virtual USB Serial Ports; Test Fixture(Can Holder & End Panel Holder) Socket; On/Off Switch
Mode Selection:	<u>4-second</u> – automatically reads and displays 4 second reading <u>Continuous</u> – displays changing readings with elapsed time, stores and recalls 4-second and programmable readings <u>Programmable</u> – automatically reads and displays the reading at any elapsed time set by the operator	Net Weight:	7 lbs
Fill Height Sensor:	Electrolyte must be filled to proper level to start test	Shipping Weight:	12 lbs
Can Contact Sensor:	Good electrical contact with can must be established to start test	Dimensions:	Console – 6 ¼" x 4 ½" x 7 ½" Can Holder – 8" x 12" x 12"
		Shipping Dimensions:	14" x 14" x 14"

Ordering Information

<u>Catalogue No.</u>	<u>Description</u>	<u>Catalogue No.</u>	<u>Description</u>
10790-00	WACO Digital Enamel Rater III, 110 V, complete with Standard Test Fixture	10788-17	Cable Adapter/Footswitch – required to connect DER III to WACO End Panel Holder & Special Test Fixture
10790-50	WACO Digital Enamel Rater III, 220 V, complete with Standard Test Fixture	10788-19	Test Resistor – 6.3 ma
10790-01	WACO Digital Enamel Rater III, 110 V, electronic console only	10788-19C	Certified Test Resistor – 6.3 ma
10790-51	WACO Digital Enamel Rater III, 220 V, electronic console only	10788-20	Test Resistor – 12.6 ma
10790-10	Standard Test Fixture for beverage and food cans - includes Base, Arm Assembly & Wiring	10788-20C	Certified Test Resistor - 12.6 ma
10790-12	Arm Assembly & Wiring only	10788-25	Test Resistor – 126 ma
10790-65	Special Test Fixture for small diameter containers, aluminum tubes, aerosol cans, etc. – requires cable adapter/footswitch	10788-25C	Certified test Resistor – 126 ma
		10788-30	Test Resistor – 252 ma
		10788-30C	Certified Test Resistor – 252 ma

