Finish Coating Measurement System

- Detect the presence of coatings in the finish region
- Measure coating thickness with a fast, reproducible, and repeatable method
- Identify coating application problems

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The Finish Coating Measurement System (FCMS) is a precision testing instrument designed to quickly and accurately identify the presence and concentration of metallic coatings on the finish region of a glass container.

**OPERATING PRINCIPLE**
FCMS utilizes visible light technology in combination with a coupling media to measure the presence and/or the thickness of coating materials on containers. A controlled beam of visible light is directed onto the bottle surface. The amount of light that is reflected from the bottle surface is then compared to a calibrated thickness standard. The FCMS uses this data to determine the thickness of the tin coating. The results are expressed in coating thickness units (CTUs) or micro amps.

**HEAD DESIGNED TO MEASURE FINISH REGIONS**
The head of the FCMS is specifically designed to maximize the number of areas that can be measured in or near the finish region of the container. The low-profile tip facilitates coating measurement at points within the actual finish area.

**DUAL ACTION MOTORIZED HEAD**
The FCMS features a measurement head that is motorized in both the vertical and horizontal directions. With this function, the measurement head on the FCMS first scans the surface vertically, then horizontally until it finds the precise normal point in each direction. Once the head is positioned at the optimal location for measurement of the coating, readings are taken. This method of head orientation eliminates errors induced by operator placement of the measurement head and ensures that only peak readings are taken.

**REPEATABLE AND REPRODUCIBLE TEST RESULTS**
FCMS eliminates the guesswork in head alignment at the measurement point. Because FCMS automatically finds the optimal measurement point, tests are consistently repeatable and reproducible every time.

**FEATURES:**
- Optimized head design for measuring intricate finish regions
- Automatic head positioning for peak measurement in vertical and horizontal axes
- Touch screen operation
- Easy-to-understand graphic representation of test results
- Automated fluid pump
- Corrosion-resistant construction
ADVANCED USER INTERFACE
The FCMS incorporates a Windows™ style operator interface with touch screen technology. All operational and test configuration requirements are performed through a single location with a minimum number of operations. Test setup is easy and can be accomplished in minutes.

COLOR-CODED TEST RESULTS
Test data presented in graphic format enables operators to quickly verify the presence and/or the thickness of coatings. Test results are color-coded, providing operators with immediate feedback on whether the area measured meets or exceeds preset limits.

DATA OUTPUT AND STATISTICAL INFORMATION
For statistical applications, the FCMS can store up to 999 readings and summarize the minimum, maximum, and average values recorded. Test results from 1 to 999 can be exported through the built-in serial port.
ERGONOMIC DESIGN
A number of design features are incorporated into the FCMS to enhance operation and maintenance. These include positive action, quick-release clamps for maintaining bottle position during testing, a rotating test table (manual), a precision height scale, fine height adjustment mechanism, and optional foot switch.