STANNOMetal 9000

Computerized Tin, Tin-Alloy and Chrome coating analyzer

Provides quick, accurate, and affordable Tin coating analysis under Windows™

ASTM A630 method B Coulometric tin coating weight analysis.

IP INDUSTRIAL PHYSICS

Protecting Product Integrity

Stannomatic measurement units have been in use by tin mills, can makers and research laboratories for more than thirty years. They are a standard ASTM measurement instrument for determining tin coating weight and have proven themselves to be so reliable that they are now the de facto standard worldwide.

STANNOMetal is the first Windows based Tin and Chrome measurement system to utilize the accurate stannomatic method of measuring thickness. The system has improved in accuracy, repeatability and ghost layer handling over the old Stannomatic systems.

The system uses new hardware and software to provide a more accurate thickness detection on traditional electrolytic cells.

> **The STANNOMetal 9000 is the only product to provide user-friendly, quick and accurate Tin coating analysis using the Windows™ operating system!**

Operating Principles:

STANNOMetal 9000 uses the ASTM A630 referee Method B and is the only Windows system to conform to that standard. STANNOMetal uses a method of measurement, which is a combination of the coulometric principle with an accurate human-engineered design for easy, fast and reliable quality control work.

The current performs the electrolytic dissolution of a precisely delimited area of the sample.

The amount of removed metal is calculated as a function of the relation between the area and the quantity of current invested in the process.

Sensitive electronics monitor the deplating process in order to provide the operator with a precise deplating graph.

When the deplating process is completed, the software post-analyzes the graphs and accurately locates the end of each layer. The operator can modify the layer end position, save the graphs for future reference, continue to do additional measurements, or finish the report.

The system has been designed for user-friendly operation and requires minimal training for the operators.

Features:

- Select units of measurement (gr/m 2 or LB/BB)
- Select standards from built-in tables (e.g., ASTM, EURONORM, ISO, BSI)
- Create a custom User Standard table
- Establish stripping conditions and control the rate of stripping
- Change process parameters (e.g. current) according to the size of the tested area
- Control, store, delete, sort or recall every report that has been generated
- Automatic detection of layer transition points (manual override possible)
- Review graphs of previously measured samples
- Monitor electrolytic solution usage
- Produce one-spot reports on cells
- Perform self-test and calibration verification procedures
- Perform backup procedures, or review information from backups
- Perform standard maintenance functions (e.g., cleaning)
- Perform quick measurements (i.e., no standard needs to be selected)

Operating Procedure:

The operator inserts the metal sample (or a strip) into the cell. Electrolytic fluid fills the cell and the cell is closed. Next, the measurement process can proceed with top only, top & bottom or 3x top and bottom measurements. Profiles are presented for each of the measurements.

When necessary, graphs can be zoomed and layer transition points can be modified as needed.

The operator can review old profiles and reports which were saved previously.

For 1-spot systems, the operator can perform exactly the same type of measurements (top only, top & bottom for one spot).

Reports:

STANNOMetal 9000
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Report: **2**   Date: **17/05/2023 07:06**   Last calibration: **16/05/2023**
Units: **g/sq.m**
Standard: **EN E 2.8**   Group: **EuroNorm**
Program top: **TIN + ALLOY (Fast)**
Program bottom: **TIN + ALLOY (Fast)**

	Top	**Bottom**
Nominal:	2.80	2.80
Minimal:	2.45	2.45
Maximal:		

	Date / Time		Left Top	Left Bottom				
1	17/05/2023 07:07	Ti	5.05	5.05				
		Al	0.81	0.81				
		To	5.86 +109%	5.86 +109%				

Remark: _____
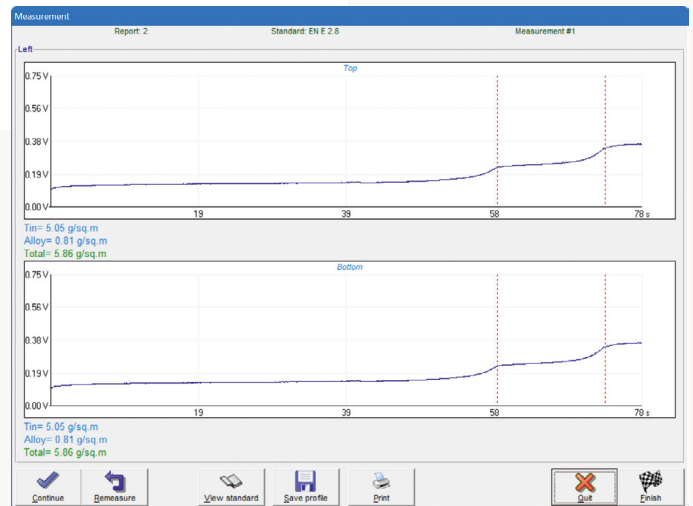
1-spot

Technical Specification:

Metal coating:	Tin, Tin-Iron Alloy, Metallic Chromium
Range TP:	0.2 to 30gr/m 2 (0.02 to 2.5 LB/BB)
Range TFS:	TFS 5 to 1000 mg/m 2 (50 to 10000 mg/ft 2)
Test Channels:	Single Side, one spot
Method:	Coulometric with two electrodes ASTM approved referee method (A636-87)
Detection:	Auto detection of end point, manual correction.
Standard tables:	Built in ASTM, EuroNorm 2002, ISO and user defined standard
Deplating rate:	Multiple choice according to nominal coating
Deplating area:	Options: Multiple choice according to nominal coating. • 645 mm 2 (1 sq. inch) • 2580 mm 2 (4 sq. inch) • Small diameter (8mm min) • Strip from beaded can (8mm min width)

Electrolytic cell:	Standard STC-4D Options: • Automatic cell (STC-4A) automatic closing and filling
O/S	Windows™ operating system
Operation:	Using mouse or remote control unit Options: • Touch screen display
Graphs:	Graphs of deplating process, live during measurement and saved graphs
Reports:	Regular reports
Database:	Storage of standards, reports and graphs
Service:	Easy maintenance and electrode replacement Easy self test for localizing problems

USB Cardbox

Contact Details

IP INDUSTRIAL PHYSICS

Quality By Vision