

Material Type: PLATING

Type of Testing: **STRESS**

MTT SPIRAL CONTRACTOMETER



Model No. EFTF.SM0001.10

ASTM.B0636.10

Specimen Size or Difference Between Fixtures

N/A

N/A

Acrylic, plastic, and stainless

Construction

Acrylic, plastic, and stainless

steel

Temperature

Ambient

Ambient

Test stress levels of plating tanks Specimen: Type

Fixture: Mounting Titanium anode basket Weight 11 lbs approximately

Dimensions 8" x 6" x 12"

Standard Manufactured in compliance with ASTM B636

QUOTE

Internal stress exists as an inherent force within electroplated and chemically applied metallic deposits. This induced stress can be tensile or compressive in nature, causing the deposit to contract or expand in relation to the base material. High levels of stress in deposits produce micro-cracking and macro-cracking, and in severe cases produce a lack of deposit adhesion in the form of blistering, peeling, and flaking. The best way to evaluate the internal deposit stress in metallic coatings is the Spiral Contratometer method.

MTT's Helix are constructed from 0.010 inch thick stainless steel and mounts on the Contractometer which allows the plating on the entire outside surface reduces deposite on the inside of the helix.

Model No. EFTF.SM000.10 - Spiral Contractometer

The Contractometer is used for measuring stress in plating tanks. By submerging the helical sensor portion of the Contractometer in the plating bath solution, and allowing approximately 0.0005" of metal to be deposited on the outside of the helix, the stress can be determined. The helix will contract or expand depending on the stress involved. The Contractometer includes a stand, the handle, body, weight system with (2) weights, circular scale, and (2) helixes. Constructed of plastic, acrylic and stainless steel. Manufactured in compliance with ASTM B636.

ACCESSORIES

Bench Testing

Model No. EFTF.SM000.11 - 4,000 ml Pyrex Beaker Model No. EFTF.SM000.12 - Titanium Anode Basket Model No. EFTF.SM000.13 - Stirring Hot Plate, 115 Volt

Model No. EFTF.SM000.14 - Precision 10A Power Supply with Timer, 115 Volt

Tank Mounting

Model No. EFTF.SM000.12 - Titanium Anode Basket

Model No. EFTF.SM000.14 - Precision 10A Power Supply with Timer, 115 Volt Model No. EFTF.SM000.17 - Tank Mounting Bracket for Contractometer

Model No. CERT.SM000.15 - MTT Certification that Fixture Meets Standard Requirements

SPARE PARTS Model No. EFTF.SM000.15 - Extra Helix for Spiral Contractometer Constructed of stainless steel and plastic. The spiral helix mounts on the contractometer in a manner that permits plating on the entire outside surface of the spiral helix and discourages deposition on the inside of the spiral helix. Thus, there is no need to estimate the surface area that has been plated.

Model No. EFTF.SM000.16 - Spare Parts Kit - (2) Set Screw 4-40, (2) Set Screw 6-32, (4) Set Screw 6-32 by 1/4", (4) Set Screw 6-32 by 1/2", (16) #6 Flat Washers, (2) #6 Hex Nuts, (4) Flat Washers, (8) Pan Head 6-32 by 1/2", (8) Pan Head 8-32, (4) Pan Head 4-40, (8) Pan Head by 1/4", (1) Hex Ball Driver 1/16", (1) Hex Ball Driver 0.05", (1) Screwdriver #1 Tip, (1) 6" Long Scale, (1) 7/64" Drill Bit, (1) 13/64 Drill Bit, (2) Calibration Weights

COMMON SIZE ADAPTERS

Not available

EXTRA PHOTOS:





