

# 6000 Thickness Testing System

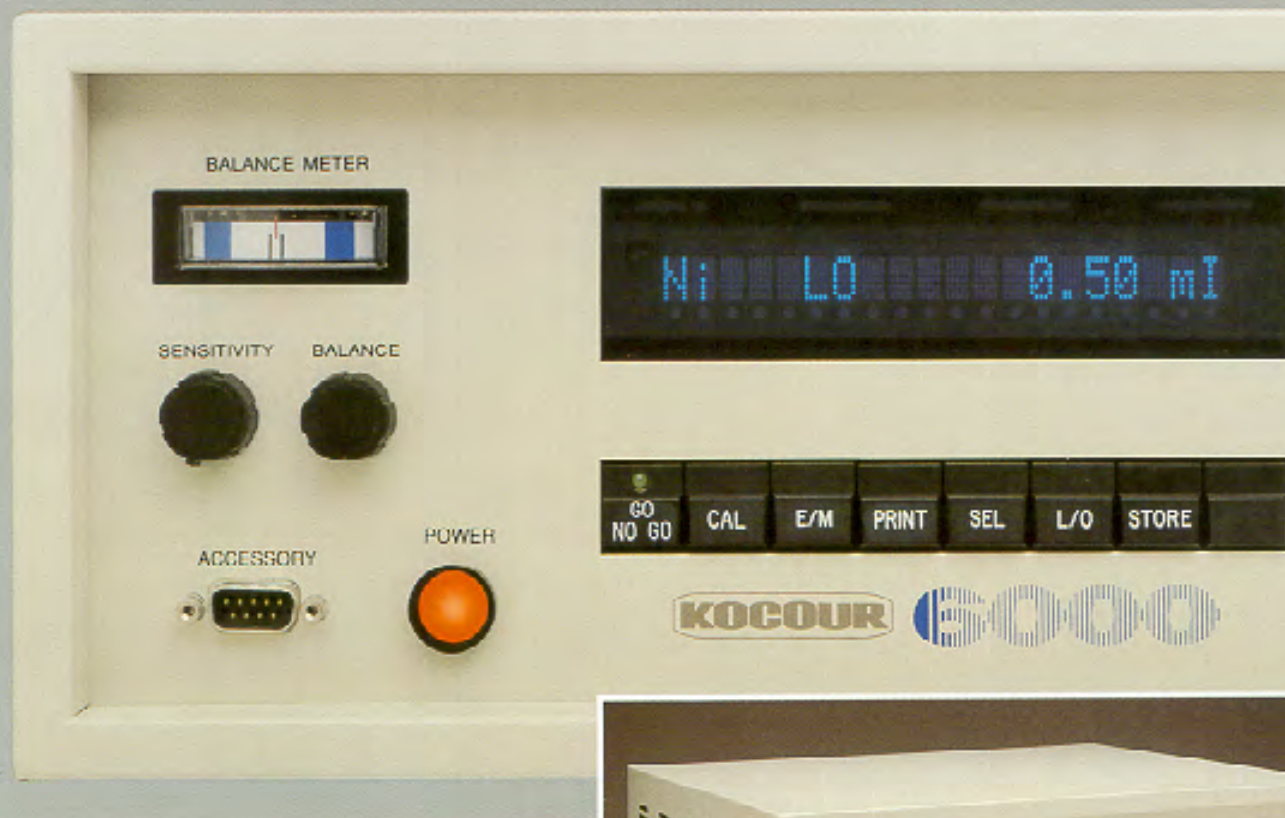
## KOCOUR



Pioneers in Control for the Plating Industry Since 1923

## **KOCOUR** Model 6000

*The newest, most versatile and accurate Thickness Tester yet!*

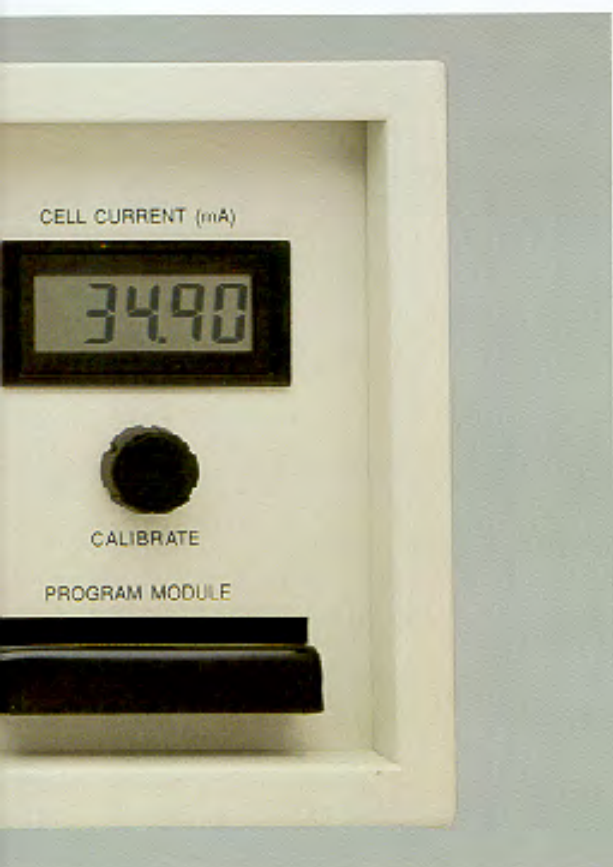


**M**ore experience equals more versatility. Which is why Kocour packs more capability into its thickness testers than anyone. And Kocour hands it all to you in a compact, easy-to-use, quick-learning instrument. The 6000 breaks new ground and sets new standards in accuracy and performance with an exceptional combination of capability and price. Recognized as the developer of the first commercial coulometric tester, more Kocour testers are in use today than all other competitive makes combined.

While all Kocour systems are designed to the same standards, they don't all deliver the same performance. The 6000's microprocessor based circuitry offers access to over 300 coating/substrate applications. From parts as small as a #2 screw to as large as an electro-galvanized coil, or from multilayer coatings to alloy layers formed during manufacturing, the 6000 meets the demands of modern industry with unmatched precision.



- Accuracy, 98%+
- Direct Readout
- Print Capability
- Evaluation of Intermetallic Layers
- Digital Calibration
- STEP



## Specifications

### Model 6000 Tester

Line voltage 110V, 50 or 60Hz & 220V, 50 or 60Hz standard. Regulating features maintain even current output.

Dimensions: 15"W x 12"D x 6.5"H (38.1cm x 30.5cm x 16.5cm)  
Net Weight: 20 lbs (9.0kg)

### NF6 Stand

Dimensions: 6"W x 10"D x 14"H (20.3cm x 25.4cm x 35.6cm)  
Net Weight: 8 lbs (3.6kg)

## Applications

Measures almost all electro-deposited metals on metallic or nonmetallic substrates.

Measures multiple coatings and gives individual readings.

Measures plating thickness on wire.

Measures very thin coatings such as decorative chromium and gold. Readings in millionths.

Measures the electro chemical potential difference between duplex and triplex nickel layers (STEP).

Measures electroless nickel.

## Measuring Principle

The Kocour 6000 Digital Thickness Tester utilizes the coulometric principle. A small test area is anodically depleted with an electrolytic solution applied at a constant current. Because the testing solution is selective, it removes only the plating.

Thickness is determined by the current and time required to remove the plating. When the substrate is exposed, the 6000 turns off automatically and displays the thickness on the instrument panel.

The 6000 meets the requirements of ASTM Specifications B504, B298, B355 and ISO Standard 2177.

## Versatility

Kocour Testers offer the ultimate in versatility. Regardless of the number of plated layers, each can be individually measured. Base material, shape, surface roughness, electrical or magnetic properties do not affect results. Measure anything from 0.002 mil (0.05 microns) to 2 mils (50 microns).

## Accuracy

98%±

## Speed

30-60 Seconds per test

## Operation

Six simple steps. Easy to learn. Accurate and repeatable measurement even by the most inexperienced operator.

## Construction

Built to operate reliably under all conditions, shop or lab. Heavy gauge corrosion-resistant steel case resists occupational wear and tear.

**Wire Accessory WT**

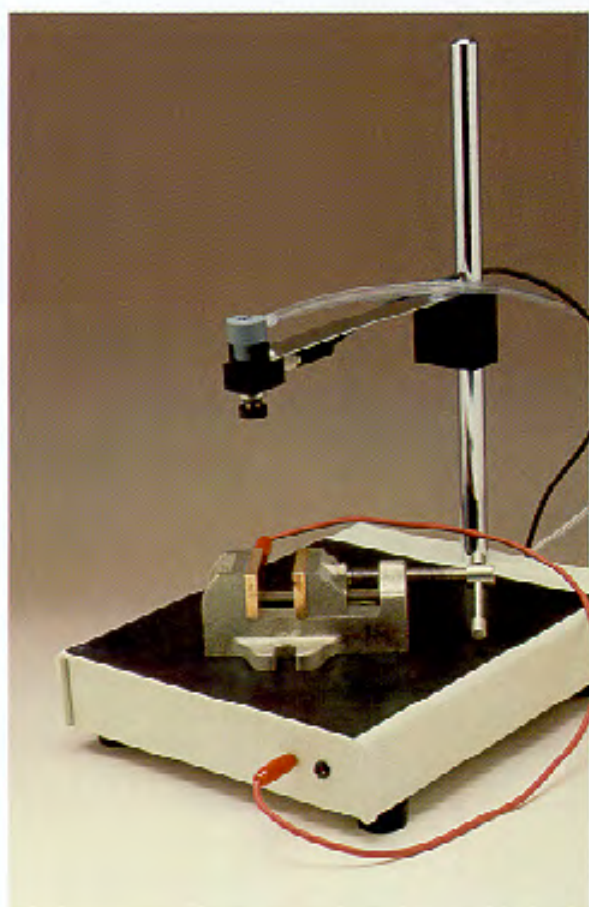
Determines the thickness of plating on wire. Stand WT plugs directly into 6000 and measures the thickness of plating on wire from 8 to 45 gauge. Can also be used for evaluation of inter-metallic layers and other special wire applications. Meets ASTM B-298, B-355.

**SPC Processor**

The economical DP-1HS Processor is versatile and easy to use with simple 4 key operation. The 1 3/4" wide printer provides both a hard copy of tester readings and an SPC analysis in mathematical and chart form.

**Thickness Standards**

To insure the accurate performance of the 6000, a periodic check should be made utilizing Kocour Thickness Standards. These uniformly plated discs guarantee accurate measurement. When necessary, calibration adjustments are easily made. Traceable N.I.S.T.

**NF6 Stand**

Versatile and simple with connecting cable and air agitation system. Consists of base, vertical arm, horizontal arm, cell and stirrer assembly. Other stands available. Accessories to accommodate bumpers, large odd shapes, flat stock & small parts are also available. Pictured vice is an optional accessory.

**Program Module**

Programmable by application dedicated plug-in module.



**Program Module A**  
*Test spot diameter: 0.136"*

Supplied as standard equipment with each new unit. Designed for general use.



**Program Module B**  
*Test spot diameter: 0.10"*

For measuring smaller parts and recessed or ledged areas which are not accessible with standard instrumentation.



**Program Module C**  
*Test spot diameter: 0.063"*

For small parts.



**Program Modules D**  
*Test spot diameter: 0.030"*

For very small parts, such as miniature contacts and all types of fasteners. Requires special accessories.



## Test Solutions and Standard Applications

• Applicable, samples required for evaluation.

Coating	Brass	Cadmium	Chromium	Cobalt	Copper	Gold	Indium	Iron	Lead	Nickel	Electroless Nickel	Nickel-Iron Alloy	Tin	Tin-Lead	Tin-Zinc 78/22	Silver	Zinc
Substrate																	
Aluminum	R-44	R-45	R-51	•	R-44			•	R-55	R-54	R-57	•	R-51	R-49		R-44	R-46
Aluminum Bronze		•	•	•	R-44					•	•	•	•	•	•	•	•
Beryllium Copper		•	•	•	R-52	•		•		•	•	•	•	•	•	•	•
Brass		R-45	R-47	R-54	R-52	R-56	R-59		R-55	R-54	•	R-54	R-47	R-49	R-47	R-48	R-46
Cadmium			R-47		R-52								Π-47				
Chromium	•	•		•						R-54							
Cobalt	•	•	R-47	R-54									•		•	•	•
Copper	R-44	R-45	R-47			R-56	R-59	R-51	R-55	R-54	•	R-54	R-47	R-49	R-47	R-48	R-46
Copper-Tungsten Alloy	•	•		•	•	•				•				•		R-48	•
Electroless Nickel	•	•	•	•	•	R-50		•		•		•	•		•	•	•
Inconel	•	•	R-51	•	•	•		•		R-54	•	•	•	•	•	•	•
Inconel 600	•	•	R-51	•	•	•		•		•	•	•	•	•	•	•	•
Kovar	•	•	•		Π-44	•		•	R-55	R-53	R-57		•	•	•	•	•
Lead					R-52			•								•	•
Magnetic Stainless Steel		•	•	•	•	•		•		•	R-57	•	•	•	•	•	•
Molybdenum					R-44					R-51			•				
Nickel		R-45	R-51		R-44	R-56	R-59		R-55				R-47	•	•	R-48	R-46
Nickel-Iron Alloy	•	•	R-51	•	R-44			•			•		•	•	•	•	
Nickel-Silver		•	R-47		•			•		R-54			R-47			R-48	
Non-Metallic	R-44	R-45	R-51	•	R-44	•		•	R-55	R-54	R-57	•	Π-47	Π-49	Π-47	R-44	R-46
Silver					R-44				R-55	R-54							
Silver-Tungsten Alloy																R-48	
Stainless Steel	•	•	R-51	•	•	•		•		•	•	•	•	•	•	•	•
304-Stainless Steel	•	•	R-51	•	•	•		•		•	•	•	•	•	•	•	•
Steel	R-44	R-45	R-51	R-54	R-44		R-59	•	R-55	R-54	R-57	R-54	R-47	R-49	R-47	R-44	R-46
Tin									R-55							R-48	R-46
Tungsten		R-45			R-44					R-54							
Uranium					R-44					R-54							
Zinc Alloys			R-58		R-52												

Pioneers in controls for the Plating Industry since 1923. With innovative wet chemistry, control equipment, and state-of-the-art instrumentation Kocour remains unchallenged as an industry leader.

The terms "Kocour Test" and "Kocour Certified" are universally accepted at standards of quality and accuracy.

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