

Rasterscope™ EC-STM Microscope

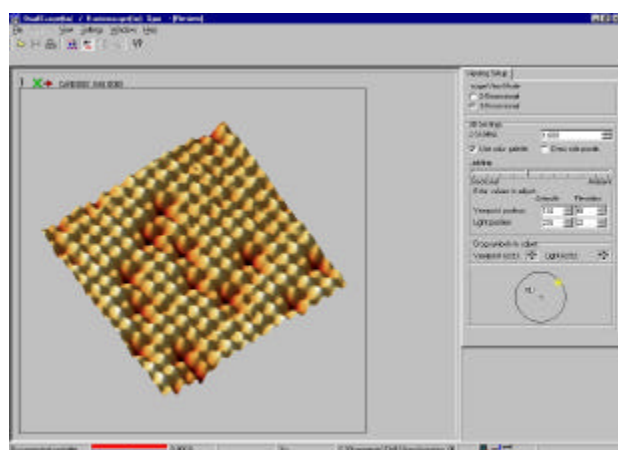
Introduction.

In collaboration with scientists, DME A/S has developed a comprehensive, versatile tool for investigating surfaces in liquids under potentiostatic as well as galvanostatic control.

Main data of microscope.

The Rasterscope™ EC-STM microscope has a measuring volume of $4.5 \times 4.5 \times 1.3$ micron with the 1.3 micron in the Z-direction.

The Rasterscope™ EC-STM microscope is supported



2012-data 0204.wpd

by our Rasterscope™ C-21 control unit [DME 2366] and our DualScope™ / Rasterscope™ SPM software for Windows [DME 2355] provides excellent possibilities of analysis of the recorded data.

Applications for the Rasterscope™ EC-STM

The Rasterscope™ ElectroChemical Scanning Tunneling Microscope (EC-STM) is a dedicated EC-STM. Therefore it is applicable to research within many different areas, e.g.

- basic atomic scale research
- battery development
- corrosion studies
- electroplating
- electropolishing
- materials science

The design of the EC-STM stand makes it very resistant towards laboratory environments: vibrations, thermal changes, and chemicals.

The EC stand has ample space for handling the electrochemical cells and allows for a comfortable tip exchange. The universal mechanical/electrical interface yields a quick mounting of cell of optional designs.

Subject to change without notice

Product specification

DME 2012


Rasterscope™ EC-STM microscope with protective glass hood and accessories

Technical specifications for Rasterscope™ EC-STM

Scanner

X,Y scan size: 4.5 × 4.5 micron
 X,Y resolution: Atomic resolution
 Z range: 1.3 micron
 Z resolution: Atomic resolution

Approach

Type: Automatic
 Length: > 1.5 mm

Sample size

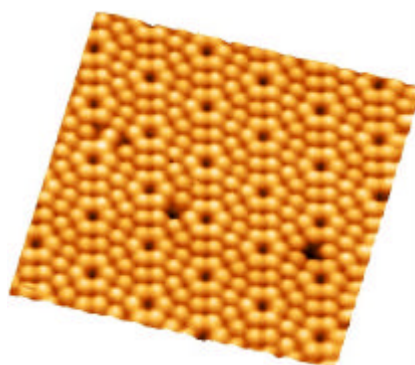
Max sample size: 5 mm diameter
 Max sample height: 1 mm diameter
 (these values can easily be increased with customer adaptation of EC)

Operation

Mode: STM
 In-situ STM
 Imaging: Topography

Material

All stainless steel



Accessories:

- DME 1744 10 pcs STM tips, Pt-Ir, mechanically sharpened.
- DME 2055 Test sample, 3 micron, 3D.
- DME 2356 Calibration grids for SPM (set).

Local representative

DME - Danish Micro Engineering A/S

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