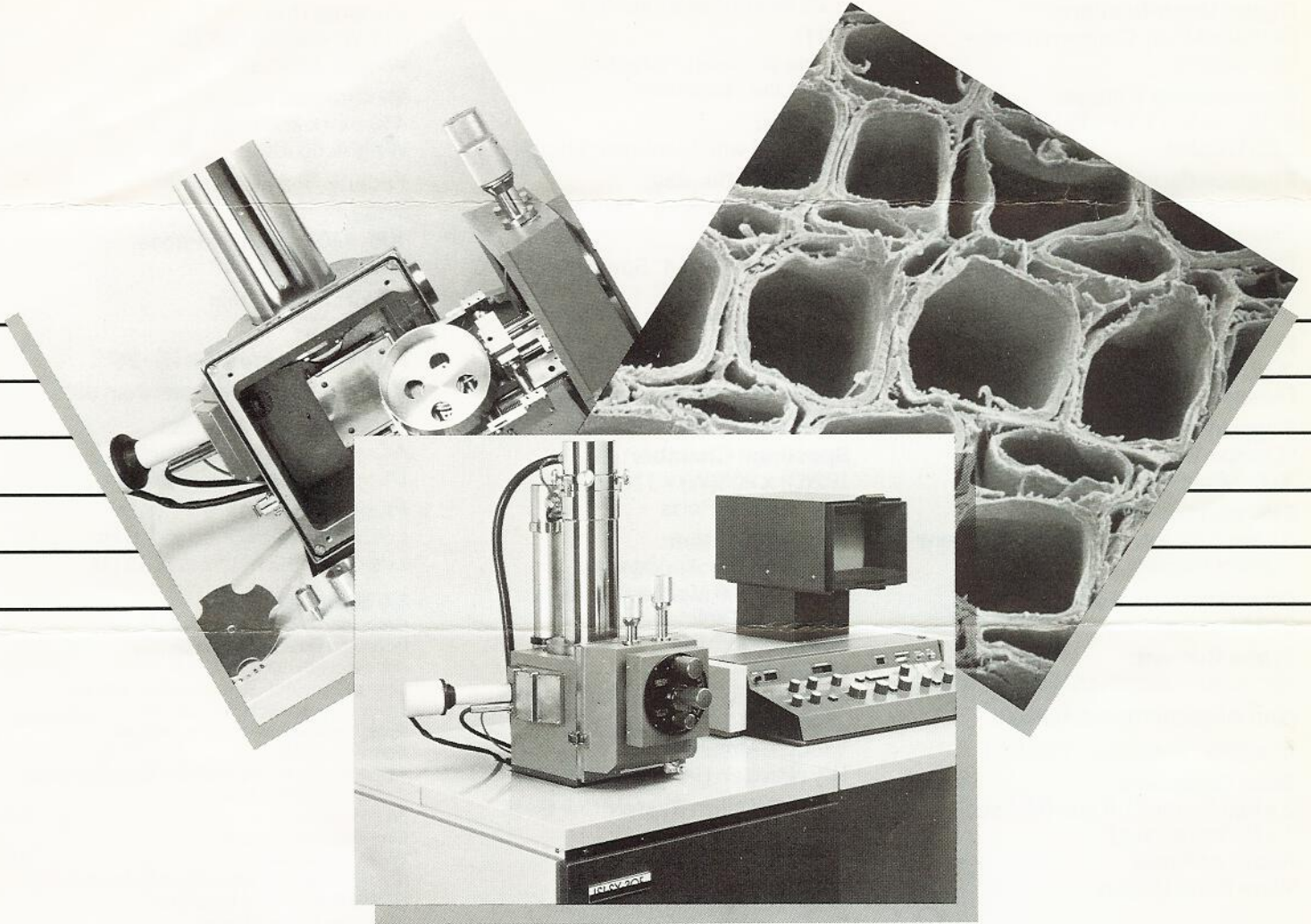


**ISI** International Scientific Instruments  
The SEM Innovators will improve your image

**New!**

# **SX-30/E4** Scanning Electron Microscope



## **Big Instrument Features at an Affordable Price**

The SX-30/E is the logical successor to the well proven/workhorse SX-30. Large Stage and chamber capabilities, Variable kV, and EDX compatibility are a few of the outstanding features incorporated into the SX-30/E. The

extreme simplicity of the operating controls makes it the perfect instrument for multiple user situations, for dedicated applications in quality and production control, and for research and teaching.

### **Key Features and Advantages**

- Resolution: 70 Angstroms
- Variable kV: 5, 15, 25
- Full Coverage of 4" Specimen
- "Compu-Focus" Monitor
- "Compu-Stig" Monitor
- Accu-Range Exposure System
- Auto-Micrograph Identification
- Safety Interlocked Vacuum System
- EDX Compatible
- Auto-Brightness

# Specifications

**Resolution:** 70 Angstroms

**Magnification:**

15X to 100,000 (22 steps)  
Zoom (1X to 3X)

**Digital Magnification:**

Standard-Fully Compensated—  
LED Display

**Accelerating Voltage:**

5, 15, 25kV, 1 x 10<sup>-5</sup>/10 min. stability  
LED Display

**Electron Gun:**

Self Biased Triode with Tungsten  
Filament  
High Brightness and Long Life  
Cartridges  
Motor Driven Bias Control

**Focus:**

"Compu-Focus" Monitor  
Dynamic Focus

**Stigmator:**

"Compu-Stig" Monitor  
X-Y, 8 Pole Electromagnetic

**Electron Optics:**

3 Lens System, 5 x 10<sup>-6</sup>/10 min. Lens  
Current Stability

**Objective Aperture:**

200 Microns Fixed

**Probe Current:**

10<sup>-7</sup> to 10<sup>-12</sup> Amps, 1% Hour Stability

**Gun Alignment:** Mechanical

**Imaging:** Secondary Electron

**Scan Generator:**

2 x Full Frame (1.6 and 0.07 sec)  
1 x Photo (80 sec)  
Reduced Rapid  
Wave Form Display

**Brightness/Contrast:**

Accu-Range  
Auto-Brightness

**Image Shift:**

± 20 Microns at 8 mm W.D.

**CRT:**

Single 9" Green Phosphor  
1000 Line Resolution

**Camera:**

Polaroid® with Electronic Shutter

**Auto Data Display:**

Film No., K.V., Mag., Micron Bar No.

**Stage:**

Full Coverage of 4" Specimen  
Eucentric Tilt - 10° + 70°  
X Motion 56 mm  
Y Motion 56 mm  
Rotation 360°  
Working Distance 8-40 mm  
BNC Connector

**Specimen Chamber:**

192(D) x 205(W) x 173(H) mm  
4 Accessory Ports

**Vacuum System:**

Safety Interlocked/Manual  
160 Liter/Min Mechanical Pump  
Reservoir Tank  
400 Liter/Sec Diffusion Pump,  
H<sub>2</sub>O Baffle  
10<sup>-6</sup> Torr Vacuum Gun and Specimen  
Chamber  
Vacuum Meter  
Dry Nitrogen Backfill Connection

**Anti-Vibration System:** Air Bags

**Dimension and Weight:**

**Column Unit:**

600(W) 880(D) 1240(H)  
Weight: 450 lbs.

**Console Unit:**

615(W) 860(D) 1270(D)  
Weight: 500 lbs.

**Mechanical Pump:**

440 mm x 260 mm  
Weight: 60 lbs.

**Facility Requirements:**

**Power:**

100-120V—Single Phase,  
60 Cycle, 1.5 KVA

**Water:** 2 Liters/Min  
5°C-20°C

**Room Temperature:** 20-25°C

**Relative Humidity:** less than 60%

**Stray Magnetic Fields:**

AC—less than 3 Milligauss  
DC—less than 10 Milligauss

**Floor Vibration:**

Less than 10 Microns at 1.5 Hz  
Less than 0.3 Microns at 45 Hz

**SX-30 Accessories**

Retractable Robinson BSE Detector  
Robinson Detector Power Supply  
Accessory Mode Select Unit  
Charge Free Anti-Contamination System  
Cathodoluminescence Detector  
Specimen Current Imaging Module  
Spare Parts Kit  
Alpha-Numeric Character Generator, 16 Lines—  
32 Characters/Line  
35 mm Camera  
6 x 9 Roll Film Camera  
Water Recirculator  
Sputter Coaters/Carbon Coating Attachments  
Critical Point Drying Apparatus  
Specimen Current Meter  
EDX Systems  
X-Ray Module: Spot, Line  
Interface Adaptor for Digital Scan Control  
25 Pin Feed Through

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