

# SPS- 1200 Analytical Probe Station for 200mm wafer testing

[Data Sheet](#)

**micro**  **act, inc.**

*The SPS-1200 Series adapted for up to 200mm wafer testing is a scale down version of MicroXact's SPS-2200 manual probe stations that still keeps all relevant specifications of the higher priced system. Small, ergonomic and convenient to use system is ideal for laboratory testing and characterization of semiconductor devices and circuits.*

## Features

- Fully manual stage assembly with precision cross roller bearings with 200mmx200mm range of motion. A pre-load slide for easy loading and unloading of wafers or samples is included.
- Convenient manual control of platen with coarse and fine adjustments and range of 12mm or 25mm.
- Smooth magnetic steel platen holds up to 10 magnetic or vacuum-based positioners.
- High quality stereo zoom microscope with up to 200mm working distance and high-intensity LED lighting provide outstanding vision at magnifications ranging from 3.5X to 180X. Includes camera port.
- Isolated feed-through terminals located on both sides of station for convenient connection to micropositioners can be customized for BNC, Triax or DC pin connections or standard RF connections.
- Standard boom mount assembly for full-range XYZ positioning of microscope. XY range of 50mm x 50mm (higher range available)
- Available high resolution micropositioners with up to 200TPI screws for micron-level positioning of probes.
- Vacuum chucks offered with 3-zone adjustable vacuum with large number of vacuum zones available upon request.
- RF options available include customizable RF probes, RF biasable chuck, and shielding enclosures.



# Specifications

## Wafer Size

Up to 200mm standard, larger capacity available

## XY Stage

Travel  
Resolution

200mmx200mm  
3 $\mu$ m standard, 2  $\mu$ m optional

## Platen

Travel  
Adjustment  
Planarity  
Rigidity

12 mm or more  
Coarse and fine control, better than  $\pm 1.5\mu$ m repeatability  
< $\pm 12.7\mu$ m across 150 mm, < $\pm 5\mu$ m across 150 mm optional  
<5 $\mu$ m for 4.5 kg

## Chuck

Vacuum  
Flatness  
Breakdown Voltage  
Isolation  
Adjustment  
Fie Z adjustment

Three-zone vacuum  
 $\pm 13\mu$ m standard, down to  $\pm 3\mu$ m optional  
At least 500 V      At Least 500V  
At least 1G $\Omega$   
360 $^\circ$  coarse,  $\pm 6^\circ$  fine  
10mm with 1 $\mu$ m or better resolution

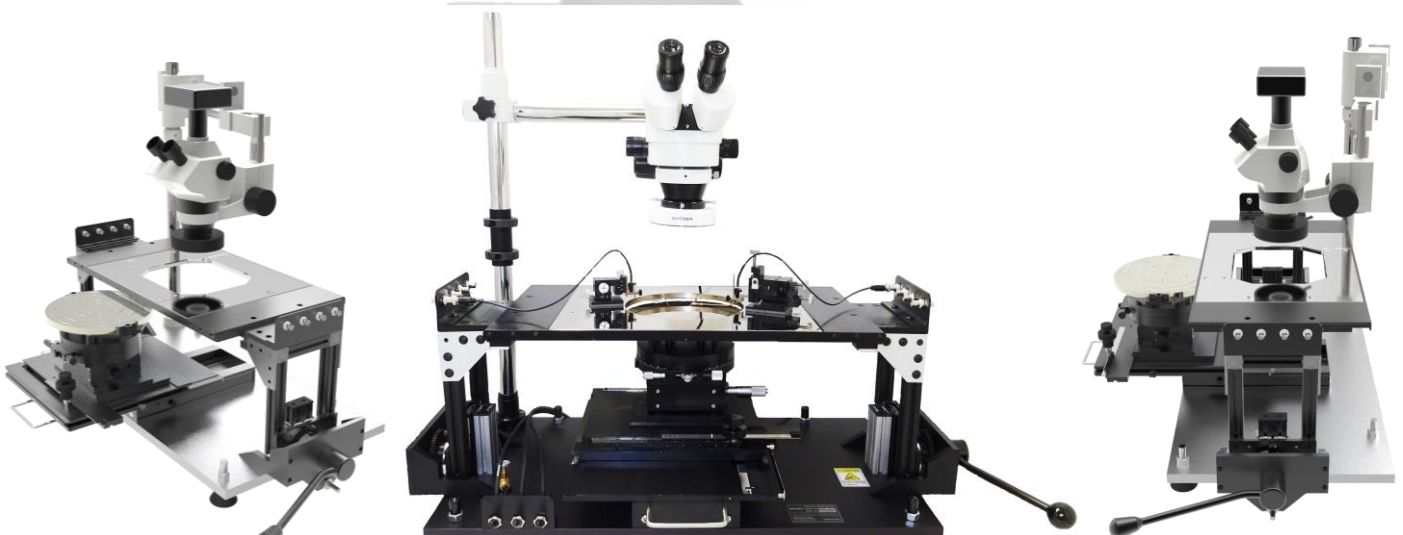
## Microscope

High quality stereo zoom with up to 200mm working distance and magnification ranging from 3.5X to 180X. Compound or digital microscope upgrades are available

## Electrical

Terminals

BNC, Triax, RF, or Banana plug



SPS-1200

[www.microxact.com](http://www.microxact.com)

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