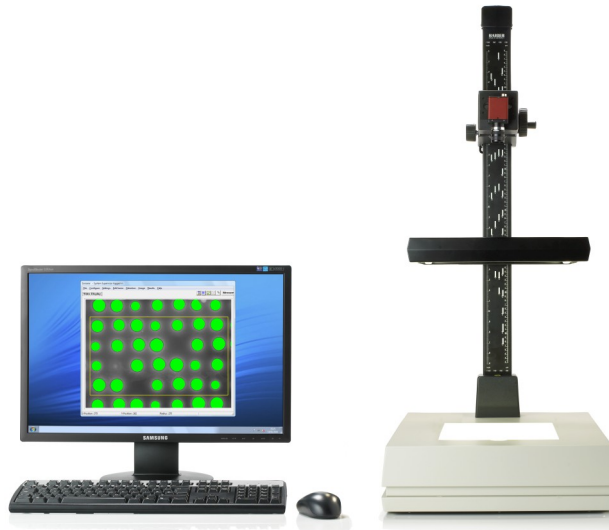


## IMAGE ANALYSIS SYSTEM



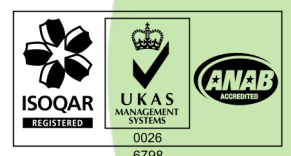
Sorcerer is a powerful, automatic image analysis system which can be used for a wide range of applications in life and materials sciences. Sorcerer has been developed to provide a versatile and fast analytical tool for research and quality control.

- 
- Automatic & interactive measurements
  - Rapid, accurate, easy to use
  - Powerful macro builder
  - Data transfer to Excel and Oracle
  - Electronic signature and GLP compliance
  - High speed particle size analysis
  - Wide range of proven applications
- 

Sorcerer uses a monochrome FireWire CCD video camera to view the sample to be analysed, either with a microscope, Petri-viewer, or macro stand & lens. Various optical and illumination techniques are available to ensure an optimal picture is presented for analysis. The computer monitor displays the live image within a window together with status and tool bars.

The system detects and measures objects by virtue of contrast differences and has a resolution of 1392x1040. This allows accurate sizing of microscopic particles less than one micron in diameter.

**PERCEPTIVE**  
INSTRUMENTS



# Sorcerer Image Analysis



Sorcerer utilises a real-time matrix detection algorithm for situations where shading is encountered, either induced by the sample or the illumination used. The image can be reversed to allow those objects which appear lighter than the background to be analysed.

Circular, rectangular and user-drawn measurement frames are available to suit the sample type and to select particular regions for analysis. These are positioned and their dimensions adjusted using the computer's mouse.

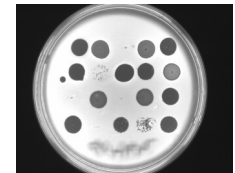
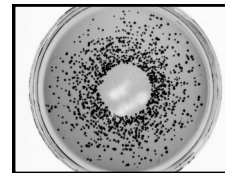
An easy to use macro builder allows you to create a sequence of operations for a particular type of analysis. For example, to prompt the user to enter sample details, perform image processing functions, measure and transfer the data.

Sorcerer has software for both field and feature specific measurements. Field measurements include count, area, perimeter, grey level and PPM. Feature measurements which relate to individual objects include, area, diameter, longest dimension and position.

Size classification tables are defined by the supervisor and can include up to 50 classes in any progression and on any feature measurement parameter. Feature measurements can be used as include/exclude filters singly, or in logical and/or combinations.

Sorcerer data is transferred directly to Microsoft Excel and can be processed as required with macros set up either by Perceptive Instruments or by the user. It is also possible to instruct Sorcerer to perform a measurement from within Excel or other applications. Data can also be transferred directly to an Oracle database. Images captured by the camera can also be saved to disk for future retrieval and transfer to document processing software.

Sorcerer is designed for use in regulatory environments and includes auditing of all system settings and data, reason for edits, password protection, time-outs etc. It is fully compliant with the FDA 21 CFR Part 11 Final rule on Electronic signature and records.



**Applications include:**

- Colony counting and sizing
- Antibody susceptibility, multipoint, MIC assays
- Unscheduled DNA synthesis (UDS)
- Particle size and shape analysis
- SBA and OPA assays
- Mouse lymphoma assay
- Direct Epi-fluorescent filter technique (DEFT)

## **PERCEPTIVE INSTRUMENTS**

Blois Meadow Business Centre • Steeple Bumpstead • Haverhill • Suffolk • United Kingdom • CB9 7BN  
Telephone: +44 1440 730773 • Fax: +44 1440 730630  
sales@perceptive.co.uk • www.perceptive.co.uk