



SpeckCheck 2

SpeckCheck 2 is a powerful system for the measurement of dirt, residual ink and other contaminants in pulp, paper and paperboard. It combines the latest computerised scanning technology with sophisticated software to provide a versatile paper inspection tool for research and quality control.

- Detects dirt, ink and other contaminants in pulp and paper
- Comprehensive measurements include area, intensity and shape
- Conforms to TAPPI specifications T213 and T563 (EBA)
- Displays detected objects and full grey-scale image
- Scanned regions adjustable for circular and rectangular samples
- Multiple configurations optimised for each application
- Definable size classification and statistical summary
- Direct OLE links to Excel via spreadsheet

Samples are placed face down on the desk-top scanner which links to the system computer. SpeckCheck 2 scans the sample to capture a high resolution image showing detected dirt, ink or shives highlighted in red. These objects are rapidly measured and classified into a size distribution table which is displayed on screen.

The SpeckCheck 2 program can be accessed at user, or supervisor level which is password protected. Supervisors have unrestricted access to the program allowing them to create configurations optimised for each application or test procedure. In routine use, a single key press or click of the mouse starts the scanning and measurement cycle.

PERCEPTIVE
INSTRUMENTS





The captured image of the sample is held in the computer's memory allowing any part to be displayed on screen. You can pan and scroll to any part of the image and zoom in to examine any detected object in detail. Furthermore, measurements for an individual object are shown by pointing to it with the cursor.

SpeckCheck 2 measures area, grey level intensity and many other parameters within seconds. Special image processing algorithms ensure accurate detection and measurement even where there are variations in paper brightness and formation.

SpeckCheck 2 classifies each particle into a customised size distribution table having up to 50 classes in any progression. Unwanted objects such as shives or fibres can be excluded according to their size, shape or intensity. Size distribution tables are available for standard test methods for visible dirt and others can be created to suit other procedures. SpeckCheck 2 also provides statistical analysis based upon accumulated data including total count, ppm, scanned area and count per sq.m

Results may be printed directly in user-formatted tables including title and headings such as Machine No., Grade, Reel etc. SpeckCheck 2 is closely integrated with Microsoft Excel allowing automatic transfer of data to the spreadsheet. This offers complete flexibility regarding tabular and graphical presentation of results. Data may also be saved in other industry standard file

formats for transfer to alternative spreadsheets, statistics programs or information management systems.

Though primarily designed for dirt and ink measurements, SpeckCheck 2 also quantifies fibres, shives, pin holes and stickies. Other paper characteristics that can be tested include print quality and mottle.

Scanned Area

Up to 8.5" x 11.7"

Resolution

Smallest detectable object 0.002 mm²

Measurements

Area, Perimeter, Longest dimension, Fibre length, Fibre width, Position, Axial ratio, X feret, Y feret, Circularity, Mean grey level, Equivalent Black Area (EBA)

Detection

Choice of object thresholding algorithms to compensate for shading within and between samples

Results Table

For each class, it includes; Count, PPM, Area, Count/sq.m, EBA and user defined parameters for last scan and cumulative scans.

Statistics

Last scan and cumulative summaries include: no. of scans, objects within range, total area of objects, total scanned area, area fraction, mean size within range, count precision, count/sq.m, PPM and EBA PPM

Data Files

Microsoft Excel, CSV and others

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