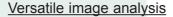


SPEC*SCAN

Spec*Scan is a scanner-based image analyser for quantifying dirt specks, shives and stickies.

As the world's leading software for measuring and analysing impurities in pulp, paper and paperboard, users rely on Spec*Scan to:

- · optimise pulp screening and bleaching systems
- maintain cost control for raw materials and pulp mixing
- provide accurate, reproducible results for day-today, reel-to-reel dirt content quality control
- control stickies content in recycled fiber



Spec*Scan combines a desktop scanner with advanced image analysis technology. It generates reports, stores the image for close inspection on screen and can send the image to your printer for inspection and archiving. Spec*scan provides extensive sample data including definable-area histograms, grey-scale statistics, speck coordinates and sizes, sheet summaries and category listings.

Operating modes

Spec*Scan 2000 analytical

Presents the operator a full grey scale specimen sheet image for manipulation and analysis using the gray scale analysis tools and is used to set the measurement parameters for the production mode. All set-up parameters are displayed on a single screen.

Reverse threshold for measuring objects lighter than the background, data base management and image zooms to 1:64 are included.

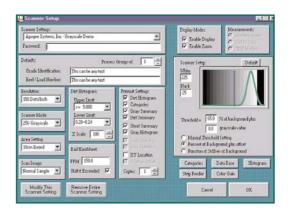
Spec*Scan 2001 mill operations

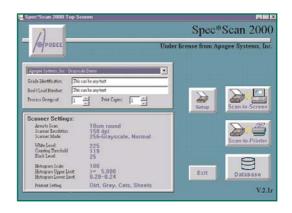
Runs rapidly using the parameters set in the analytical mode to quickly display and print out the critical measurements as numbers and does not permit measurement parameter changes. The automatic data base manager can record all measurements for subsequent review.

In both operating modes, test data can be automatically transferred to a local area network server.



Spec*Scan 2000/2001





Standards

TAPPI T-213, T-437

Features

- This system analysis, measures, counts and sorts specks, dirt, residual ink, pulp shives, printed patterns and other objects that optically contrast with the paper substrate by their size and reflectivity
- The accepted standard in laboratory testing and for quality control of paper - more than 250 units are sold worldwide
- Ten speck classifications can be determined following size and/or grey scale and/or eccentricity
- Total grey image (false color projection) with higher resolution can be printed immediately
- Two histograms are displayed :
- frequency division within speck surface
- frequency division over total measuring surface
- User-friendly set-up options that support over 100 scanner configurations, threshold settings, print output and operational modes
- Threshold setting can be done manually or automatically depending on the requested test procedure
- Inverse threshold for sticky analysis on black filter paper
- Transmission light can be used for dirt analysis on black filter paper

- Sample dimensions: following TAPPI or freely determinable in centimeters or inches (circle or rectangle)
- Specks can be enlarged up to x 64
- Calculation of average, max. and min. grey scale value
- Calculation of diameter, eccentricity and coordinates of dirt speck location
- Operates with Windows® 95 and higher
- Compatible with Umax Powerlook, HP and Epson scanners

