

The M/K 3D Formation-Floc-Low Density Analyzer Tester: Model 1200

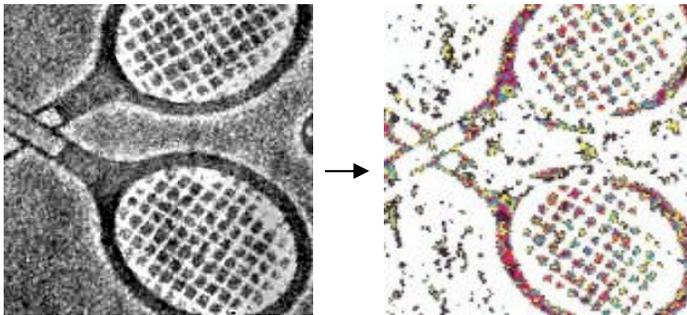
A Complete Sheet Analyzer: Transmission and Surface Reflection Technology

**Pure Transmission Formation Analysis • Floc & low density measurements
 Internal & Surface Roughness • Optical basis weight
 Watermark Analysis**



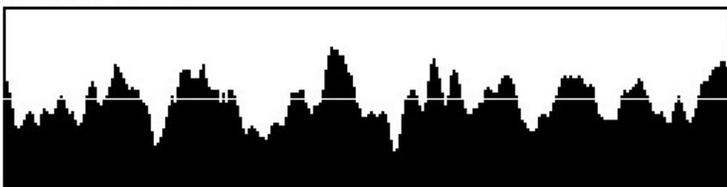
- The M/K 1200 transmits a focused precise beam through your sheet to measure its uniformity in a well-established measurement known as the M/K Formation Index. Scan a complete 8" x 11" area in one scan.
- M/K's modern light and detector assembly penetrate light through nearly **all grades of paper**, including bond, liner board, colored papers, etc.
- **M/K is the most precise formation tester available** with numerous industry references. No camera system can match this precision and flexibility. Correlate M/K data with tensile strength, as well as our optical basis weight with true basis weight.
- The M/K also reveals flocs, low density pocket details, internal roughness, and optical basis weight.

Floc and low density analysis, as well as rank formation and watermark crispness.

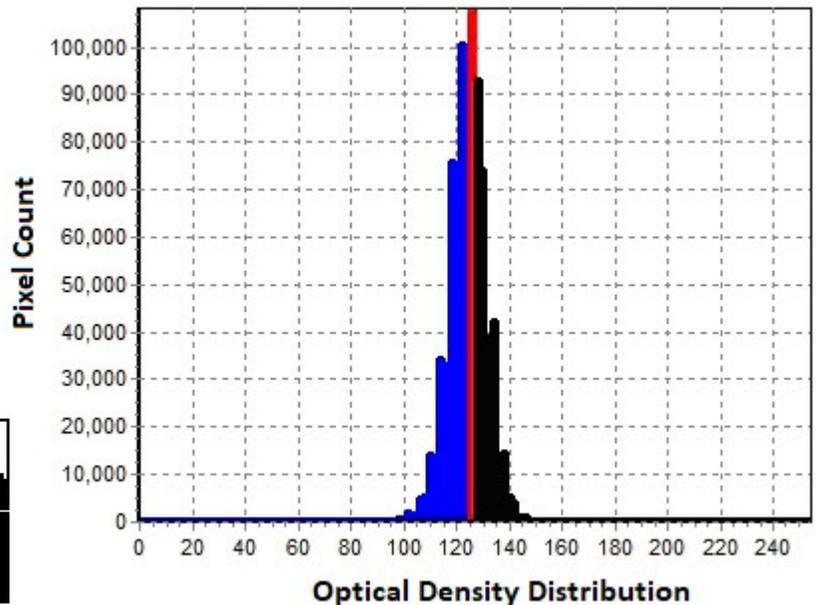


- **Both Transmission Analysis and Surface Analysis are available.** Compare your structural formation as well as compare the felt side against the wire side.

Optional surface roughness is available



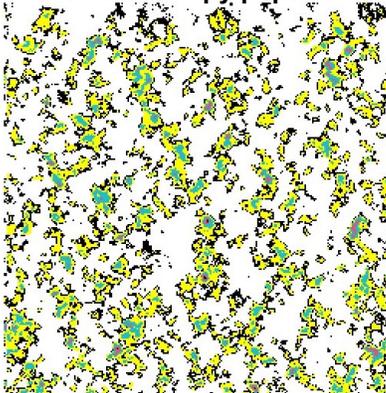
Reliable Formation Measurements



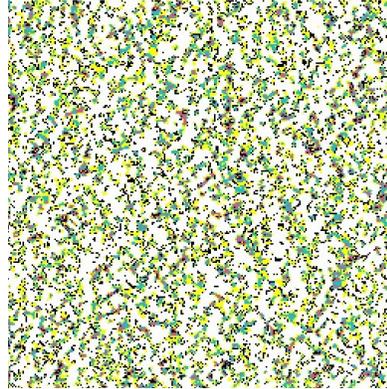
Analyze all types of paper and other materials

M/K's precise focused beam analysis can analyze tissue grades to dense liner board grades. The MK 3D Formation Analyzer scans each "pixel" of your sheet independently with a channeled beam of light. This precise method of transmitted light reveals finite defects as well as large flocs. With our latest optical sensor and more powerful lamp, our device can now penetrate colored papers, linerboard, carton, and other dense materials. Specialty papers and bond paper are ideal, and samples with holes such as fiberglass are easily analyzed with the M/K 1200.

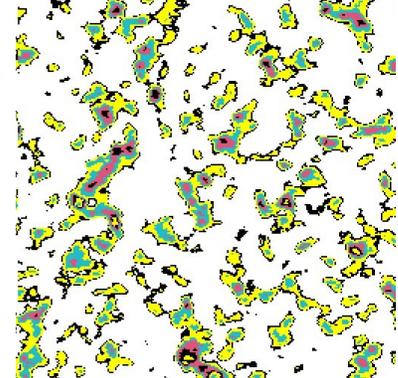
Flocs in copy paper



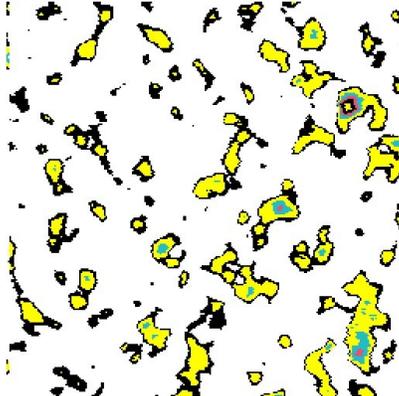
Flocs found in Tissue



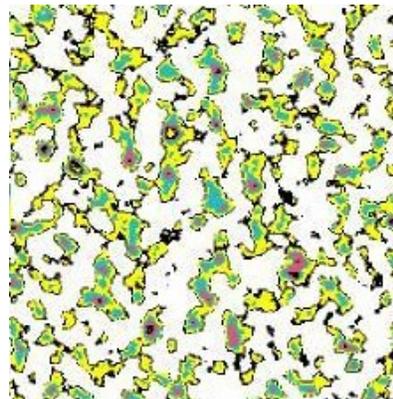
Flocs in brown paper bags



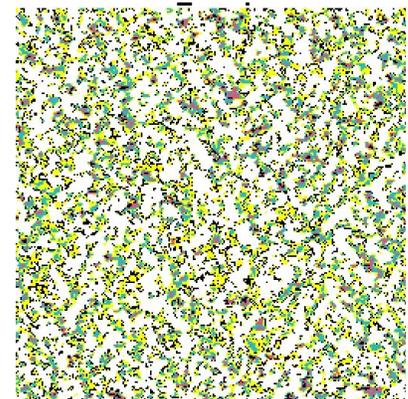
Flocs in Abaca based paper



Flocs found in Paper Towel

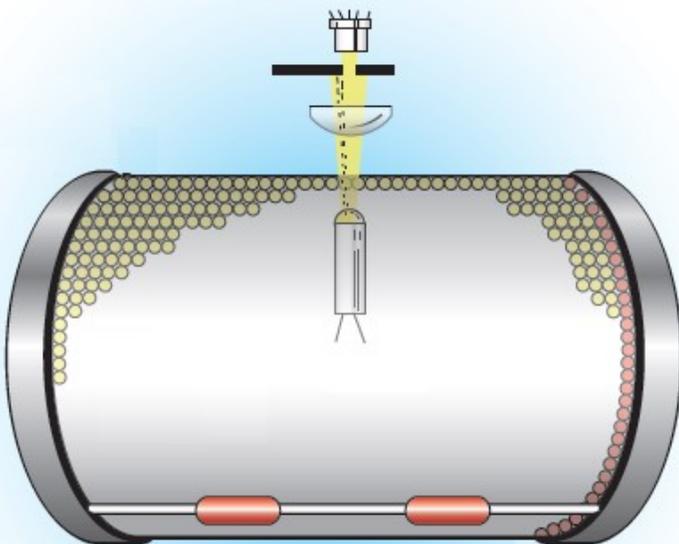


Flocs found in Toilet Paper

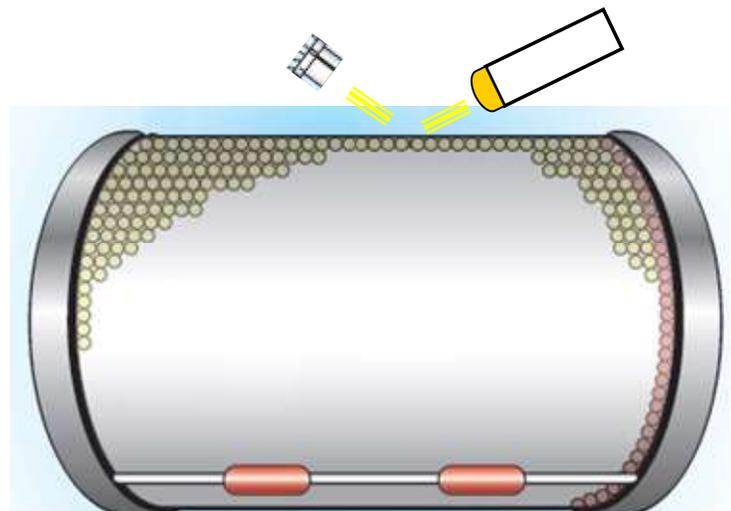


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Transmission Analysis



Surface Reflection Analysis

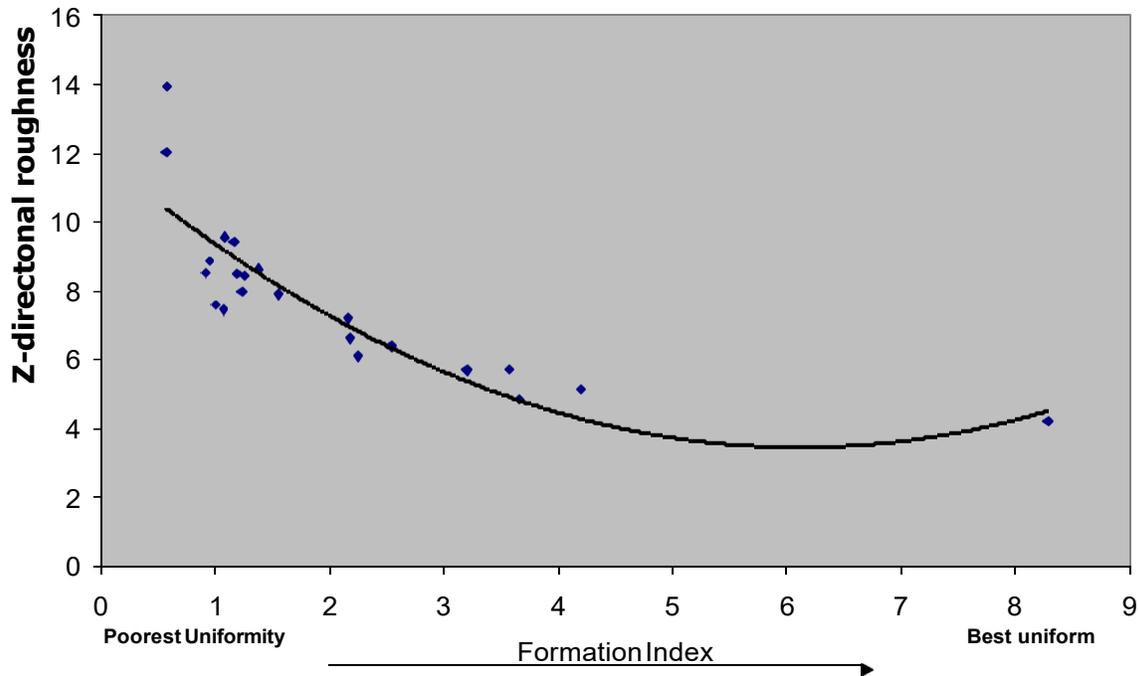


Z-Directional analysis using the M/K Formation Tester

Now you can understand the three dimensional effects of flocs

The M/K 3D formation analyzer is designed to reveal the internal density variations found in the internal structure of paper and other substrates. The internal density variations, or "Z- directional variations", are revealed in the MK Internal roughness index. Often the Z-directional data correspond with the overall strength and other physical properties. The MK device also provides a formation index value, floc size data, and low density pockets in the structure. This allows the user to understand why some papers are stronger, have better print properties, and have better physical properties than other papers.

Z-directional Roughness Index vs. Formation



M/K Systems Software: Measuring the Formation Index, Floc sizes, Low Density pockets, and optical basis weight.

Tel +1 978 774 1880 / email info@mksystems.com MK_3D

Searching Version 1.7.0.33N Test Type: Formation and Floc - Transmissive October 29, 2017 18:57:40 [About](#)

FILENAME PREFIX
313BM

APERTURE SIZE
RED (D)

RANGE (1 - 3)

FIELDS TO RESET AFTER SENDING
 CLEAR APERTURE RESET RANGE
 CLEAR MIN/MAX INDEX RANGE

MINIMUM FLOC SIZE mm sq

MINIMUM LDA SIZE mm sq

NOTES TO SEND TO RESULTS FOLDER

BATCH MODE HOLE COUNT

AUTO PRINT

M/K Index: 2.7

Optical Basis Wt.: 65

Calculated Basis Weight: 25 gsm

M/K INDEX RANGE (OPTIONAL) MIN MAX

OBW 69 PEAK HEIGHT 8620 NUMBER OF BINS 31.6 DEV=400

Count

Optical Distribution

Z-directional internal roughness index: 1763

Floc Area: 39.7%

Floc Count: 201

Floc Size: 20.64

Floc Distrib.: 6.23

LDAArea: 36.8%

LDA Count: 228

LDA Size: 16.8

LDA Distrib.: 7.01

Sheet Profile: 28

FLOC Image

Low Density Image