## Formation module

## Valmet Paper Lab

Formation describes the uniformity of the paper base. It is determined by measuring and classifying the variations in the intensity of light transmitted through a paper sample.

Formation module clamps the sample in place, illuminates it from below and then captures a  $68 \times 42 \text{ mm}$  image with a resolution of  $1390 \times 960$  pixels. Formation is measured by image analysis.



## Benefits for the papermaker

Fast, accurate, automated determination of microscale basis weight variation

Results correlate with visual determination of formation

De-facto industry standard

Technical data			
Size (cells)	2		
Weight	camera module 4 kg (8.8 lbs)		
	illumination module 3 kg (6.6 lbs)		
Opacity limit			
- non-white products		max. 98	
- white products		max. 99	
Examples of calculated properties:			
- Valmet Formation index, 20–122.4			
- Floc percentage			
- Void percentage			
- Standard deviation of formation index histogram			
- Dirt count, min. size 0.01 mm²			*
- Pin hole count, min. size 0.01 mm <sup>2</sup>			*

<sup>\*</sup> Dirt count and pin holes only available in Valmet Paper Lab

