Smoothness/Porosity Oken

Valmet Paper Lab

The Smoothness/Porosity-Oken measurement principle was developed in Japan.

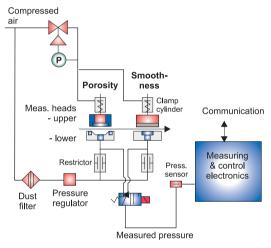
Smoothness-Oken and Porosity-Oken measurements are combined in one powerful module. The module clamps the sample between two measuring heads and measures pressure drop over a certain restrictor. The pressure drop is dependent on the smoothness and air permeability (porosity) of the paper. Paper smoothness is measured from both sides of the sample. The result is reported as mm H₂O, as Bekk seconds and Gurley units (sec/100 ml).

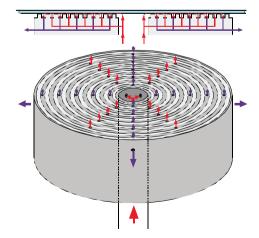
Measurement according to standard: JAPAN TAPPI NO.5-2.

Benefits for the papermaker Wide measuring ranges for smoothness & porosity Two key measurements combined into one module 10 measuring rings gives good accuracy Advanced measuring method for smooth and dense papers

Technical data	
Size (cells)	3
Weight	upper module 7 kg (15.4 lbs)
	lower module 5 kg (11 lbs)
Measuring range,	0-500 mm H ₂ O
equals to:	
~ 10-8000 s Smoothness-Bekk	
~ 50–30 000 s/100 ml Porosity-Gurley	
~ 5-6000 s/10 ml Porosity -Gurley	
Calculated properties:	
- smoothness-Oken, mm H ₂ O, TS / BS	
- porosity-Oken, mm H ₂ O	
- smoothness-Bekk, s, TS / BS	
- porosity-Gurley, s/100ml	









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