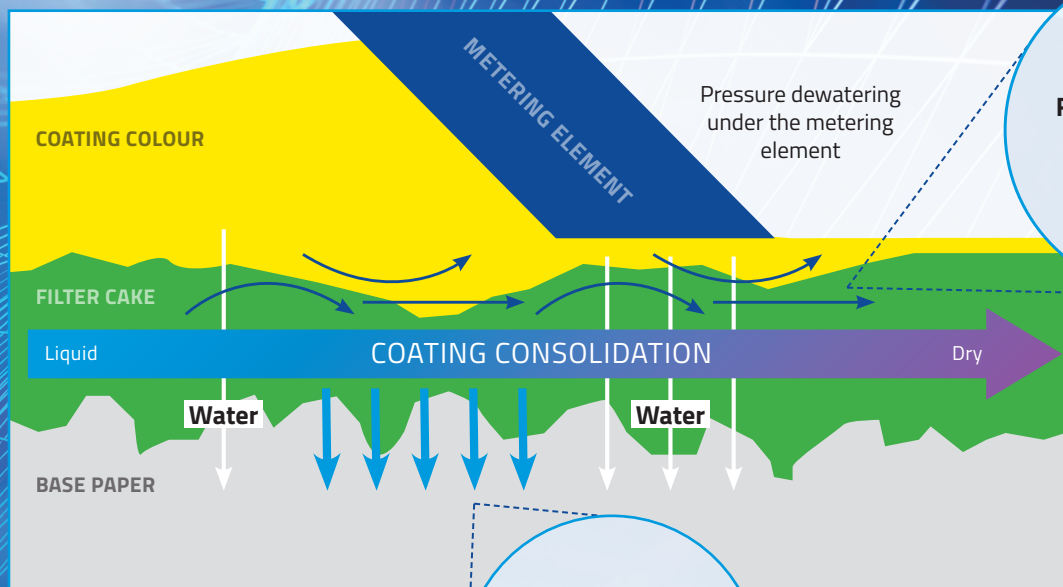


Manage coating colour rheology

to improve coater runnability and end product quality



COATING COLOUR FLOW PROPERTIES

influenced by
ACA viscosity
(high shear viscosity)

COATING COLOUR PENETRATION

influenced by coating
colour water retention

Coating consolidation is a process during which the liquid coating colour on the base paper transforms into an immobilized (dry) coating layer. The runnability of a coating colour is obviously determined by the properties of the liquid colour, whereas the final quality of the coated paper is dependent on the dry coating structure. Transformation from wet to dry is a combined process of penetration into the base paper and evaporation during the drying process. To simulate these conditions and manage the rheology of the coating colour, it is necessary to measure the rheology of the coating colour.

The most relevant measurements for rheology management are the **high shear viscosity** (ACA Viscosity @ 500 000 1/s) and the **water retention** (g/m²).

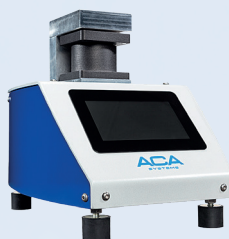
ACA Systems has developed a modern and easy-to-use instrumentation for both measurements. The methods are according to TAPPI Standards. With the data achieved our customers have been able to develop new coating recipes for water based barrier coatings or control the quality of existing recipes and gain significant cost savings.



ACA AX-100™

Analyzer for coating color shear viscosity

A modern analyzer for coating color shear viscosity up to 1 million 1/s. Flexible data handling and a modern design with clever sample holder attachment and release makes the measurement procedure fast and easy.



ACA Flow WR™

Analyzer for coating color water retention

The device is equipped with integrated touch screen, adjustable measurement pressure and time. It measures the water retention according to TAPPI T-701 and is very effective tool for coating color quality control and development.

TECHNICAL SPECIFICATIONS AND MORE INFO WWW.ACA.FI