

Liquid Coating @ WDC

FORMULATION

POLYMER VARNISH

Paint formulation for solvent and water-based systems

- High speed Cowles blade dispersers
- Paint shakers and roller mixers
- Delta sand mill
- Viscometers (Brookfield and cone/plate)
- Dispersion filtration apparatus and syringe filtration pumps

FLUIDS COATING

In fuction of the final application target, commercial as well as experimental grades are evaluated from the raw material step.

APPLICATION

Panel Coating for internal evaluation or prototype generation

- Manual draw-down
- Binks wet spray booth
- Ovens for panel baking and vacuum drying

Production of paper treated with fluorochemicals.

- Lab size press machine (Mathis HF-350)
- Wet-End (British Hand Sheet Mold)
- Particle Charge Detector
- Spray booth and guns
- Brush & Automatic Drawdown application

TESTING

Coated Panel Testing

- Sand abrasion tester
- Gardner drop impact tester
- Taber 5130 Abraser
- DJH Designs MEK rub tester
- MacBeth Color-Eye 7000 Spectrophotometer
- Other AAMA 2605 Physical Tests (t-bend, cross-hatch impact, pencil hardness, dry /wet adhesion, resistance to boiling water, muriatic acid, mortar, window cleaner, detergent)
- QUV accelerated weathering testers
- Atlas BCX cyclic corrosion testing system

Fluid characteristics

- viscosity (Brookfield Viscometer)
- density
- pH
- boiling point range

Paper treated with fluorochemicals

- Oil, grease & water permeation resistance
 - Cobb Test
 - New Fatty Acid Test
 - KIT test
 - Turpentine Test
 - Hercules Sizing
- Surface energy of treated materials (Dynamic Contact Angle)
- Fluid compatibility with customer materials
- Fluorine analysis (Solvera expertise)
- Gurley Porosity
- TAPPI and ASTM test methods and Simulation customer methods