

### Waterbased Coating – Coat-Weight Recommendations

#### Coat-Weight Testing

- Coat-weight testing is used to measure the actual amount of dry/cured coating-film applied to the substrate by the coating system.
- This testing procedure is a useful process control to determine the actual coating application rate OR 'coat-weight' as it relates to wet coating performance during the printing/coating process and dry/cured coating performance on the coated substrate/final product.
- The coat-weight testing procedure can be found in the INXCAC technical document: 'Coat-Weight Test Procedure - Comparative'.

#### Expression

- Coat-weight testing results can be expressed in two values/methods:
  - Dry Coat-weight: expressed as **dry lb/3000 ft<sup>2</sup>**
  - Wet Coat-weight: expressed as **wet lb/1000 ft<sup>2</sup>** (calculated based on dry coat-weight results and known coating solids percentage)

#### Importance

- An adequate dry/cured coat-weight on the substrate is necessary to ensure proper coating coverage and complete benefits of the coating product formulation inclusive of:
  - Gloss
  - COF/AOS
  - Rub/Abrasion Protection
  - Block Resistance
  - Functional Properties - related to the specified coating formulation/attributes

#### Recommendations

A general recommended coat-weight is listed for use with the below waterbased coating products/types to ensure that the formulated characteristics are achieved:

##### General Purpose, Work/Turn

- 1.2 dry lb/3000 ft<sup>2</sup>

##### Softfeel

- 1.5 dry lb/3000 ft<sup>2</sup>

##### Heat-seal/Blister-pack

- 1.5 - 2.5 dry lb/3000 ft<sup>2</sup> - recommend seal testing to determine adequate results

- Waterbased coating products that are determined to be 'functional' or 'specialty' in nature may require a coat-weight result that is outside of the above listed parameters to ensure successful results.
- In most cases, the recommended coat-weight for these products can be found on the product specific Technical Data Sheet (TDS).
- If there are questions regarding the coat-weight recommendation for a specific waterbased coating product, please contact your INXCAC Technical Sales Representative.