

06 /04

AT LAST! – HIGH GLOSS STAMPABLE/RECOATABLE UV COATINGS

High gloss has always been elusive with (UV) **ultraviolet** curing coatings/varnishes that have been formulated to accept hot stamping foils. Recoatability, gluability, flexibility, imprintability, embossability and other key properties such as autographability and adhesion to plastics, have also been sought.



Photo courtesy ITW

Now, Cork has successfully formulated these **stampable/recoatable** properties (plus the others) while **providing new high levels +90% @ 60° of cured UV coating gloss.**

NEW CORK HIGH GLOSS SERIES STAMPABLE/RECOATABLE UV COATINGS

Corkure- 2002HG – 170-220cps – low odor, excellent flow, roller coater & blanket coater

Corkure- 2011HG – 160-220cps – fast cure response, silkscreen

Corkure- 2037HG-2 – 125-170cps – write-on/wipe – off

Corkure- 2038HG-1 – 80-140cps – autographable, plastic adhesion

Corkure- 2038HG-5 – 55-80cps – autographable, plastic adhesion

Corkure- 2038HG-7 – 200-250cps – autographable, plastic adhesion

Corkure- 2038HG-8 – 55-80cps – autographable, plastic adhesion, brighter

Corkure- 2046HG – 90-120cps – low odor, pre-metalizing primer

Corkure- 2046HG-1 – 90-120cps – pre-metalizing primer & laser jet printable

Corkure- 2046HG-3 – 300-370cps –fast cure response

Corkure- 2055HG – 1100-1700cps – plastic adhesion, litho ink train & letterpress

Corkure- 2055HG-1 – 1800-3000cps – plastic adhesion, litho ink train & letterpress

Corkure- 2055HG-2 – 1000-1800cps – litho ink train & letterpress

Request Cork Technical Data Sheets or UV stampable/recoatable book for more info.

Remember that only specific UV coating formulations can be used when planning to hot foil stamp and/or when seeking to recoat.

Specific UV cured coating properties are required in order for a UV coating to accept the heat activated coating on the back side of a hot stamping foil so that acceptable adhesion, transfer and appearance result.

The technical challenges of the hot stamping process are such that in depth product support and tight cooperation between suppliers and users is required for application success. Many factors impact the graphic results. These include the:

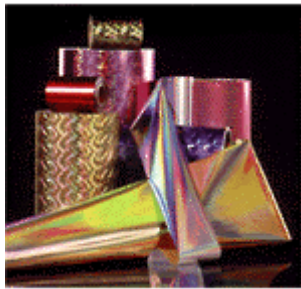
- Base material or substrate surface
- Stamping foil & heat seal coating
- Embossing quality
- Printing process
- Colors used

The selection of the stamping foil sealant formulation depends upon:

- Print process/ink (conventional or UV)
- Type of stamping machine
- Surface to be stamped

- Engraving

It is **critical** that all of the elements that make up the process be considered and tested, prior to starting production. The foil chosen is dependent on the application and substrate. The foil and substrate need to be compatible. Often, a coating is the substrate surface to be adhered to. It is **always** advisable to have the hot stamping foil supplier **test** job components in his lab to obtain his concurrence that all of the elements of the job will work together in the production environment and produce the desired job results.



Stamping foils are built-up as follows:

STAMPING FOIL CONSTRUCTION

- **Carrier (Clear Polyester Film (PET))** - A thermally, dimensionally stable plastic film onto which decorative transfer layers are laid down.
- **Release Coat** – A thin application of a synthetic or natural wax used to cleanly heat release the decorative layers from the carrier.
- **Color coat** – A pigmented or dye colored polymeric coating applied to the release coated side of the carrier.
- **Pattern** – A surface effect created by gravure printing a special effect appearance over metallized and/or colored coats.
- **Metalizing*** - The layer that provides stamping foil its' brilliant shiny metal appearance produced by aluminum vacuum metalizing.
- **Adhesive Coat** – A heat activated coating that is applied last in the fabrication process. It protects the aluminum surface and in the hot stamping process, softens under heat and pressure.

*In a non-metallic construction, such as a pearlescent, the metalizing step is eliminated.

Reviewing, let's examine the hot stamping process. Hot foil stamping is a process of decorating wherein a thin metallized foil is transferred from a film carrier to a material (substrate) to be decorated.

In hot stamping process a heated engraved die is stamped against the face of the backside heat seal coated film carrier, which is in



Photo Courtesy Universal Engraving contact with the substrate to be decorated.

The heat seal coating softens, and under the stamping pressure, transfers the metallized foil, separating it selectively from the film carrier, wherever the engraved raised surface of the heated die is making contact, pressing against the substrate.



Photo courtesy Malahide Design & Mfg , Inc.

UV overcoating of stamped foils is also popular and favored in some decorating applications.

LOOK TO CORK!..... for the highest gloss stampable/recoatable & overprint UV coatings & varnishes to achieve the ultimate quality in hot foil stamping.

LOOK TO CORK!..... for all of your specialty coating, varnish and adhesive needs, for both aqueous & UV/EB coatings, varnishes and adhesives.

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