esse® Papers Production Considerations

STORAGE / HANDLING

Papers need to acclimate to pressroom conditions at least 24 hours before opening. Pressroom humidity should be in a range of 45%-55% at $70^{\circ}-75^{\circ}$ F. Once open, rewrap unused product.

TEXTURE

The natural characteristic of ESSE® Texture is watermarked into the paper. During this process, the dandy roll action displaces fibers in both machine and cross directions. Therefore, ESSE Texture requires design and production considerations when folding and scoring to minimize the cracking or lifting of the fibers. Please note that as the basis weight increases, so will the cracking or the lifting of the fibers.

PREPRESS

When printing on ESSE Pearlized total area coverage should be kept under the 260% range. If heavy black or blue areas are desired, undercolor removal is recommended to alleviate long drying times.

INK / PRINTING

The cylinder pressure should be increased to ensure smooth ink coverage when printing on ESSE Texture. Printing on ESSE Pearlized requires fully oxidizing inks and a drying agent is recommended. Use a 20/30 micron spray powder for two sided printing and 40/50 micron spray powder for single sided printing. Small lifts (not to exceed 4" in height and may require less pile height depending on ink coverage), and additional drying time are necessary prior to other converting steps. Maintain a fountain solution pH balance between 4 and 6 and run water at absolute minimal levels, even to the point of ink scumming. For lower print coverage we recommend ink consumption strips on press. It is normal for a minimal amount of surface coating particles to transfer to the printing blankets, however they should not impede with print production and are cleaned effectively with typical blanket washing devices. The use of infrared heating on press may retard ink drying, however, UV printing presents no issues.

VARNISH

Low solvent (0-5%) varnish can be used as a surface protector. However, it will not enhance the appearance of ESSE Pearlized, and in some cases it may alter the appearance. Pretesting is recommended.

AQUEOUS COATING

Aqueous coating is not recommended on ESSE Smooth or Texture. Although compatible with ESSE Pearlized, aqueous coating may alter the effect of the pearlized appearance. Pretesting is recommended.

EMBOSSING

Text and Cover weights, in all finishes emboss and deboss beautifully. The die's impression will smooth a textured finish, resulting in a dramatic contrast between the two.

ENGRAVING

Engraving inks need no special treatment. Best results come with a female plate of .064 gauge copper and handcut male counter plate of 24-ply counter board applied with 2,000–4,000 pounds of pressure. Pressure range is dependent upon complexity of copy. Precision when cutting a counter requires less pressure and enhances the image.

FOIL STAMPING

When utilizing ESSE Pearlized, foils compatible with non-porous substrates are recommended. Pretest to determine the proper foil, heat conditions, and pressure required for the best results.

THERMOGRAPHY

No special considerations are needed.

DIGITAL PRINTING

Our Universal Digital Finish is compatible with all digital presses. For more information on digital printing and presses, visit neenahpaper.com/digital

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FOLDING / SCORING

Avoid printing on the fold of the texture finish, particularly heavy ink coverage, on the felt (top) side of the sheet as this will visually highlight the cracking. If ink coverage on the fold is necessary, printing on the wire (bottom) side of the sheet is recommended. The texture is not as pronounced on this side and therefore cracking will be eliminated. ESSE Smooth and Pearlized Smooth, fold with no cracking when properly channel scored.

TRIMMING / DIE-CUTTING

A sharp blade will ensure a clean cut through the stock; a dull blade could tear the stock.

BINDING

Binding should be parallel to the grain direction to prevent moisture buckling and minimize wear on the crease.

SHADING

Some variation in shade from run to run with Pearlized Opal, Pearlized Silver and Pearlized Cocoa is normal.

View additional printing information at www.neenahpaper.com/printingtips