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 40-55% at 70-75°F. Once open, rewrap unused product.

**PREPRESS**
As a general rule, imagery should be adjusted in prepress to compensate for the additional 5-15% tone value increase that will occur. The precise amount of undercolor removal is image-specific. Total area coverage should not exceed 320%. When printing on CLASSIC® Linen Pearl Papers, the total 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. The pearl surface is designed to show through the ink and some decrease in image contrast is to be expected.

**INK / PRINTING**
Inks with more tack will provide a firmer dot. A textured sheet is more absorbent than a smooth sheet, so more ink and additional cylinder pressure may be necessary to ensure smooth ink coverage. The use of opaque light inks on dark stocks may require an in-line double pass. Metallic inks work well and deliver successful results. Anticipate a dry-back of 5 to 7 density points. Printing on CLASSIC Linen Pearl Papers requires fully oxidizing inks and a drying agent is recommended. Run water at a minimum, with a pH of 5-6. Use a 20/30 micron spray powder for two sided printing and 40/50 micron spray powder for single sided printing. This prevents set-off and allows oxygen to enter the stack. Drying times may be slightly longer. 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. It is normal for a minimal amount of surface coating particles to transfer to the printing blankets. However, they should not impede the print production and are cleaned effectively with typical blanket washing devices. The unique pearlized surface in CLASSIC Linen Pearl Papers will be visible through the printed image. Visible pearlized particles, may contrast with heavy dark solid areas. Pretesting is recommended to achieve desired results.

**VARNISH**
Low solvent (0-5%) varnish can be used as a surface protector; it will not alter nor enhance the appearance of CLASSIC Linen Papers. For CLASSIC Linen Pearl Papers, a varnish in some cases may alter the visual effect. Pretesting is recommended to achieve desired results. Your ink supplier is the best resource.

**AQUEOUS COATING**
Aqueous coating can be used as a surface protector; it will not alter nor enhance the appearance of CLASSIC Linen Papers. Most printers will only use aqueous coating on heavier weight stocks and only with a special formulation for uncoated papers to avoid possible paper curl. Aqueous coating may alter the visual effect for CLASSIC Linen Pearl Papers. Pretesting is necessary. Your ink supplier is the best resource.

**EMBOSSING**
Writing, Text and Cover weights emboss and deboss beautifully. The die’s impression will smooth the linen 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.
### Production Considerations (Continued)

**FOIL STAMPING**

We recommend the use of wax-free litho inks when combining offset lithography and foil stamping to ensure the best results and the maximum adhesion of foil to ink. For best results, stamp directly onto the paper. When utilizing CLASSIC® Linen Pearl Papers, 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.

**NON-IMPACT PRINTING**

CLASSIC Linen Writing and Text are guaranteed for laser and ink jet printing.

CLASSIC Linen Pearl Papers are suitable for laser and monochrome ink jet printing. Consideration should be given to equipment paper weight restrictions and pretesting for optimal print results is recommended.

**DIGITAL PRINTING**

Our Universal Digital Finish is compatible with all digital presses. For more information on digital printing and presses visit: [neenahpaper.com/digital](http://neenahpaper.com/digital)

**FOLDING / SCORING**

A letterpress channel score parallel to the grain direction is recommended to ensure a smooth crease. Always pretest, especially with heavier weight covers and double thick covers.

**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. For CLASSIC Linen Pearl Papers, hot melt or acrylic type glues are recommended.

**SHADE**

Some variation in the shade from run to run with Gold Pearl is normal.