GANS INK & SUPPLY CO.

Fade Resistant Process

Of the 4 colors used in process printing, the most commonly used yellow and magenta pigments are degraded by exposure to light, causing prints to become faded with time. This is not normally a problem based on the fact that most printed materials are either of a limited life expectancy or will not face prolonged exposure to light during normal usage. However, for applications where prolonged exposure to light is anticipated, it is strongly recommended that fade resistant yellow and magenta process inks are used to extend the life of the printed piece. For *maximum* fade resistance, Gans recommends running the FR yellow in the first down unit.

TECHNICAL PERFORMANCE DATA

Fade Resistant Item Numbers

Black- **A112531** Cyan- **A112532**
Mag- **A114775S** Yelo- **A114776**
First Down Fade Resist Yelo- **A116383**

Ink Tack Readings

Black-***13.5*** Cyan-***13*** Mag-***12*** Yelo-***10.5***
First Down Fade Resist Yellow-***14.5***

The above tack readings are taken at 1200 RPM, 1 minute, 90° F, Thwing Albert 101 Inkometer.

Set Speed

Gans ***Fade Resistant*** process series rated ***350*** out of 400 on Gans' internal scale for set speed on a #1 gloss coated sheet. Turn times with this series will not be as fast as our quickest setting process inks, unless aqueous coating is used in-line.

Scuff-Resistance

This series rated a ***29*** out of 40 on Gans' internal scale for scuff resistance. This test is performed on a #1 gloss coated sheet 24 hours after printing. This ***Fade Resistant*** process series will resist scuffing *well* on gloss coated papers. Post-processing on matte or dull stocks should be considered, due to the fragile nature of those paper surfaces. Fade Resistant process inks can be made with rub-resistant formulations, on request.

Solid Overprint Trapping

At the above solid ink densities on a #1 gloss sheet, Gans ***Fade Resistant*** process series wet-trapped in-line as follows:

Red- ***80%*** Green-***90%*** Blue- ***69%***

Solid Ink Densities After 24 hrs

Black-***1.80*** Cyan-***1.40*** Mag-***1.47*** Yelo-***.97***

The above measurement device settings are: Illuminant D_{50}, 2° observer angle, Status ***T***, without polarization or UV filters. Paper white has been zeroed out. Print testing on a #1 gloss sheet, without aqueous coating, has shown density dryback of (in density points):

Black-***19*** Cyan-***5*** Magenta-***4*** Yellow-***2***

Dot Gain (TVI) @ 50%, AM 175 Line

At the above ink densities on a #1 gloss sheet, with no AQ, Gans ***Fade Resistant*** process printed with the following TVI's:

Black-***22%*** Cyan-***20%*** Mag-***22%*** Yelo-***20%***

Stay Open (Skin Time)

Gans ***Fade Resistant*** process will not begin to develop a skin in the can or the fountain for at least ***10 days***. Extreme ambient temperatures will affect this stay-open period.

Ink Glossiness

At a 60° angle Gans ***Fade Resistant*** process showed a gloss reading of ***67.4 units*** over 340% ink coverage on a #1 gloss coated sheet, without aqueous coating.

Post Processing

This process series is considered finishing friendly and can be UV coated or foil embossed ***after 48 hours.*** These inks are considered laser imprintable on *uncoated paper*, although pre-testing is always required for guaranteed performance.

The pigments required to improve light stability are less transparent and slightly dirtier than standard magenta and yellow pigments. In most cases the difference is not visually noticeable, however, if desired, the yellow and magenta can be printed first down to minimize any potential color shifts.

LONGEVITY THROUGH INTEGRITY

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