

Conqueror Concept / Effects Iridescent

Common Attributes	Units	Test Method	100gsm	120gsm	160gsm	250gsm	350gsm
Wood Pulp & Bleach Type			ECF Cotton Linters, ECF Virgin Woodfree				
Printing Process Suitability			Litho, Letterpress, Silk Screen, Dry Offset (Toray)				
Mono laser Guaranteed			✓			Not guaranteed for office print technologies	
Colour Laser Guaranteed			✓				
Mono Ink Jet Guaranteed			✓				
Colour Ink Jet Guaranteed			✓				
Recommended p.H. of Fount Solution			5.5 ± 0.5				
Surface p.H.		TAPPI 5290M	≈ 7.5				
None Aging Credentials		ISO 9706	Yes				
Environmental Label		ISO 14001	Yes				
Quality Management		ISO 9001 : 2000	Yes				
Moisture Content	%	ISO 287	5.5			6.5	
Relative Humidity	%	TAPPI T502	35 - 45			40 - 60	
Caliper	µm	ISO 534	120	140	190	295	415
Whitest Shade Opacity	%	ISO 2471	90	92	93.5		
Bendtsen Roughness	ml/min	ISO 2494	300	300	300	300	250
Stiffness M Direction C Direction	mN	ISO 2493 L+W, <i>TABER</i>					

Stiffness is not part of the specification for this grade

These specifications are the property of Arjo Wiggins Fine Papers Ltd and may be changed without prior notice. They are target values only for use as a guide.



Printing Hints Sheet

CONQUEROR CONCEPT *IRIDESCENT*

A stylish metallic range of papers, text and board weights, available in five subtle iridescent shades and complimenting envelope range. Watermarked and non-watermarked paper versions are available.

PRINTING GUIDELINES

The finish of **Conqueror Concept *Iridescent*** will interact with the printed image and the pearlescent and metallic effects will help to enhance it. The unique surface treatment of the paper shows through the ink and this natural characteristic of the product is what makes it so special and different. Nevertheless, dark areas of print may be compromised when printing.

When printing it is normal for some of the special surface coating to transfer to the blanket. On normal run lengths this should not cause the print quality to deteriorate.

1. SCREEN RULING

For standard process colour printing it is not necessary to exceed 150 lpi however depending upon the image, screen rulings of 200 lpi can be achieved with careful ink control. Some dark four-colour images may benefit from Under Colour Removal techniques and/or the use of 'Stochastic' (FM) screening technologies.

2. PRINTING INKS

Use fully oxidizing inks only, with or without I.R. drying assistance. *Must Avoid the use of press stable / stay fresh ink systems.* UV cured inks can be used. Use laser suitable inks when subsequent laser processing is required.

3. PAPER HANDLING & TIPS TO AVOID SET OFF

Due to the surface characteristic of **Conqueror Concept *Iridescent*** the ink will remain soft on the surface of the prints while drying. This unfortunately increases the chance for set off to occur particularly when printing wet on dry. As the delivery stack grows quickly when printing boards, select a slow press speed and do not allow the delivery stack to become too large, as the prints at the bottom of the stack will still be wet and therefore less resistance to marking as compared to printing paper weights. It may be helpful to turn off the delivery sheet joggers and use a 35 micron 'Anti-set off' spray powder (can use a vanishing grade). Also the sheet gripper release should be adjusted so the board lands gently in the delivery with the minimum of movement. The paper weights can also set off therefore a vanishing grade anti set off powder is recommended for subsequent laser use. It is recommended to protect the paper from environmental changes in humidity and temperature at all times, by the use of pallet covers or stretch wrap.

4. VARNISHING & SEALING

Sealers and varnishes will greatly reduce the iridescent effect of the paper so please use with extreme caution. Areas to be later laser or ink jet printed should be free from varnishes or sealers to get the best printing performance.

Ask for technical assistance if considering these applications.



Printing Hints Sheet

5. FINISHING

EMBOSSING (BLIND)

Embossings may be done with relative ease. For deep or large embossings it is recommended to have the corners of the die rounded off to help prevent creases forming from them. Laser machines do not care for embossed images, however shallow embosses are less likely to cause problems. Embossed papers will be more prone to miss feeds and jams within office printing technologies.

DIE CUTTING

Die cutting can be performed without difficulty. Feeding problems can be experienced with die cut or perforated papers on office printing technologies.

LASER CUTTING

Laser cutting can be performed easily however as with any paper there will be some scorching evident around the cut area. Feeding problems can be experienced with laser cut papers on office printing technologies.

HOT FOIL BLOCKING

Hot Foil Blocking can be performed but a trial is recommended first to test the foil suitability. This is not a recommended print process for subsequent laser printing. If laser printing is essential ensure the foiled image is indented to below the paper surface and always trial the foil and paper combination to assess the compatibility with the laser printer prior to committing to a long print run.

CREASING

The board weights will require pre-creasing by a channel and matrix system before folding to help avoid cracks appearing at the fold. The raised bead formed by the creasing rule should always be on the inside of the fold.

DIE STAMPING

Die stamping may be performed with relative ease. This is not a recommended print technique for subsequent office printing as the relief image may lead to feeding difficulties. A shallow emboss is less likely to cause feeding problems. If the die stamped work is intended for subsequent laser printing ensure the materials used are laser suitable and trial on the intended office machine before committing to a large print run, whenever possible.

THERMOGRAPHY

The surface of **Conqueror Concept Iridescent** may not accept thermography. Please trial this process. Thermography prints are not recommended for laser printing. If subsequent laser printing is essential, ensure to check the suitability of the thermography powder for use with laser printers. Also note thermography can distort paper and so promote feeding problems with office printers.

FILM LAMINATING

Film laminating will destroy the iridescent effect of the paper. Ask for technical assistance if considering this application.

Printing Hints Sheet

DESK TOP PERFORMANCE

Conqueror Concept Iridescent up to and including 160gsm is guaranteed for pre-printing and subsequent use on colour and mono desk-top laser and InkJet machines, subject to manufacturer's guidance on grammage, roughness and use. Please note, where especially sharp image and colour reproduction is required, it is recommended that you use a smooth white **Conqueror** paper, i.e. CX22.

Ensure laser suitable inks and materials are used for pre-printing.

Please note the information and advice contained in this section is the property of Arjo Wiggins Fine Papers Ltd and may be subject to change without prior notice. It is for guidance only so ensure the work processes are discussed with the relevant parties prior to printing.

