

The logo for Xingraphics, featuring a red square icon to the left of the word "xingraphics" in a lowercase, sans-serif font. The background of the entire page is a space-themed image showing the Earth's horizon from space, with a bright sun or star in the upper left quadrant creating a lens flare effect.

xingraphics™

PRODUCT REFERENCE MANUAL

Fit Melior & *FitXTRA* Melior

● For Use By Authorized Xingraphics Dealers Only

Version 3.0

Issued by Xingraphics Technical Support Team

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THERMAL CTP TECHNOLOGY

This Product Reference Manual has been designed by the Xingraphics Technical Support Team to assist our valued customers worldwide with optimizing their production efficiencies and therefore adding maximum value to Xingraphics technology. This will ensure greater performance and increased productivity.

For any additional technical contact information or specific advice, please email or contact Xingraphics or the relevant regional technical product manager.

Xingraphics does not accept any liability for incorrect use including not following recommended storage and handling requirements.

Xingraphics **FIT Melior** and **FIT Xtra Melior** Product Reference Manual has been designed for internal and external partners use in order to provide an easy to use reference document enabling all our customers with a quick and efficient method of diagnosis and self-assistance. This document serves as a general product guide as well as an easy to follow trouble shooting reference for common problems found in today's working environment.

This document is applicable only for the two types of Xingraphics printing plates, manufactured in Chengdu, China, and each product can be identified from their unique product code as highlighted below:



Positive Thermal CTP Plate

Product Code-F

Positive Thermal CTP Plate

Product Code-X

*Kindly contact with Xingraphics Local Distributors for more details.

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Product Specifications

	FIT Melior	FIT Xtra Melior
Spectral sensitively	830nm	830nm
Type	Positive Thermal CTP Plate	Positive Thermal CTP Plate
Exposure energy	120 mj/cm ²	100-120 mj/cm ²
Resolution	1~99%@450lpi	1~99% @450lpi
UV ink compatibility	Applicable when post-baked	Applicable when post-baked
Maximum coil width	1480mm	1480 mm
Shelf life:	18 months	18 months



Handling and Loading

Handling

Note when loading full packets of plates into the platesetter cassette two people may be needed to avoid damage or kinks.



Unopened plates should be carried vertically to avoid being bent or damaged. See fig i.e.

Opening of the Plate Package

When handling the plates they must be carried carefully to avoid bending or kinking which may affect the imaging.

The top plate within the package will be face down to protect the coating whilst the packaging is being removed – this plate needs to be turned over before loading into the cassette.

The FIT Series Plates have strong scratch resistance, however every care should be taken to avoid touching the plate surface directly with your hand prior to imaging.

Xingraphics FIT Series Plates are securely packaged with four white braided belts, inside the box the plates are protected by a wooden frame to protect contents during transportation and storage prior to use.

Place the box on a flat surface, and then open the package as shown below:



fig.1



fig. 2



Single plate should be carried with two hands together with the interleaving.



Single plate carried with any kind of bend may affect the loading, punching and the ability to be imaged successfully.

Loading

Avoid any damage to the plate edges, and excessive bends during the pre-imaging handling process. In the event this occurs then the end user increases the risk of errors by the platesetter during the loading, registration and imaging procedure.



When loading plates, ensure the product is well supported to avoid damage.

Platesetter Reference Setting

Xingraphics FIT Melior & FIT Xtra Melior can be used on all 830nm laser platesetters, the settings shown below are for the FIT plates and are for reference only.

Xingraphics would recommend that the platesetter manufacturer's procedures should always be followed to ensure the optimum required laser and focus settings are being used.

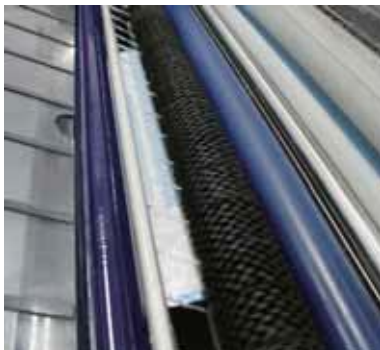
Please contact technical specialist for specific settings that are not listed below.

Brand	Type	FIT Melior		FIT-Xtra Melior	
		Power	Drum speed	Power	Drum speed
Creo	Trendsetter 800 S	9W	158 rpm	8W	158rpm
Creo	Trendsetter VLF	14W	121 rpm	12W	121rpm
Creo	Lotem 800	12W	150 rpm	11W	150rpm
Creo	Magnus 800S	12W	200 rpm	11W	200rpm
Screen	PT-R 8600S	100%	800 rpm	95%	900rpm
Screen	PT 16000- I	100%	120 rpm	100%	150 rpm
Screen	PT-R 16000 II	100%	200 rpm	100%	235rpm
Screen	PT 8800- I	100%	150 rpm	100%	175 rpm
Screen	PT 8800- II	100%	180 rpm	100%	215 rpm
Screen	PT 8800- III	100%	220 rpm	100%	265 rpm
Screen	6600	100%	700 rpm	75%	800 rpm
Screen	4300	100%	800 rpm	90%	1000 rpm
Screen	8200	100%	200 rpm	100%	240 rpm
Heidelberg	Topsetter 102	100%	800 rpm	95%	900rpm
Heidelberg	Suprasetter A52/A74 Gen I			100mW	396 rpm
Heidelberg	Suprasetter A52/A75 Gen II			126 mW	500 rpm
Heidelberg	Suprasetter A105 Gen I			85 mW	300 rpm
Heidelberg	Suprasetter A105 Gen II			142 mW	500 rpm
Heidelberg	Suprasetter S74			85 mW	300 rpm
Heidelberg	Suprasetter H74			85 mW	300 rpm
Heidelberg	Suprasetter E105			85 mW	300 rpm
Heidelberg	Suprasetter S105			85 mW	300 rpm
Heidelberg	Suprasetter H105			85 mW	300 rpm
Heidelberg	Suprasetter 75-21 pph			91 mW	320 rpm
Heidelberg	Suprasetter 75-27 pph			139 mW	490 rpm
Heidelberg	Suprasetter 75-33 pph			142 mW	500 rpm
Heidelberg	Suprasetter 75-38 pph			142 mW	500 rpm
Heidelberg	Suprasetter 105-15 pph			88 mW	310 rpm
Heidelberg	Suprasetter 105-21 pph			139 mW	490 rpm
Heidelberg	Suprasetter 105-27 pph			139 mW	490 rpm
Heidelberg	Suprasetter 105-33 pph			142 mW	500 rpm
Heidelberg	Suprasetter 105-38 pph			142 mW	500 rpm
Heidelberg	Suprasetter 145			152 mW	356 rpm
Heidelberg	Suprasetter 162			152 mW	356 rpm
Heidelberg	Suprasetter 190			152 mW	356 rpm
Agfa	Xcalibur 45 c		400		350
Luscher	Xpose 160	230mW	220rpm	200mW	220rpm

Recommended Processor Model Design Specification

The Xingraphics FIT Melior & FIT Xtra Melior plates are already being successfully processed in most of the leading thermal plate processors used around the world.

Below is a list of the ideal recommended specifications needed to achieve optimum performance with the Xingraphics plate products.



Developer Section

- + Submersion design developer section
- + Developer section chiller or refrigeration unit
- + Accurate developer replenishment system
- + Good developer circulation system
- + Developer filtration
- + Pressure and speed adjustable scrub roller/ rollers
- + Brush or moleton scrub roller
- + Developer temperature control (± 1 degree from the set temperature needed)
- + High or Low temperature warning system
- + Processor standby or off mode replenishment system
- + Replenishment and waste bottle full or low level alarm system
- + Anti-oxidation cover
- + Plate counter
- + Bath life exceeded warning system

Water Wash Section

- + Pressure and speed adjustable scrub roller/ rollers (essential)
- + Supply of fresh water or ability to add a minimum of 500ml for every sqm processed
- + Spray bar system to evenly wash the front and back of plate being processed

Gum/Finisher Section

- + Ability to apply even layer of gum/finisher to the plate
- + Automatic water wash gum section cleaning mode

Dryer

- + Temperature adjustable

Chemistry, Processing and Bath Life

I. Chemistry

Plate	FIT Melior & FIT-Xtra Melior	
Developer	Xingraphics Arto-D	New Release
Replenisher	Xingraphics Arto-R	New Release

II. Processing Condition

All the processor settings applied should be set according to actual conditions and equipment being used, and these settings should be reviewed/checked on a regular basis.

Below are guidelines for setting up a plate processor using Xingraphics thermal plates and chemistry, it may vary in data when different machine being used.

	FIT Melior	FIT-Xtra Melior
Developer	Xingraphics Arto-D	Xingraphics Arto-D
Replenisher	Xingraphics Arto-R	Xingraphics Arto-R
Developer Temperature	25 °C ± 1 °C	25 °C ± 1 °C
Developer Time	23~27 seconds	23~27 seconds
Dynamic Replenishment	50-120 ml/M ²	50-120 ml/M ²
Stand by Replenishment	50-100ml/hr	50-100 ml/hr
Developer Filter Replacement	At Bath Change	At Bath Change

III. Bath Life

When using Xingraphics Arto-D and Arto-R with the recommended replenishment rates the maximum bath life will be 2000 M², or every 4 weeks - whichever is achieved first.



Baking Parameters

FIT Melior & FIT Xtra Melior plates are only suitable for printing with UV inks only if they are correctly baked after the imaging and processing procedure.

A suitable baking gum should be evenly applied prior to the post baking process.

Conveyor Oven

Baking conditions vary greatly and are dependent on the type of oven used. Recommended settings when using a conveyer type are: 2 - 4 minutes@ **270 – 275 °C**. Plate color will change to grey /olive once correctly baked.

Static Oven

The recommended settings for a static or hanging oven is **8-10 minutes@255 ~ 265 °C** if baked correctly the color of the coatings changes to grey/olive. You can check it by measuring the solid density with X-RITE 500 series Spectrodensitometer according to the C-channel, value should be between 0.55~0.60 (Measured without filter lens).

To test if the plate is sufficiently baked apply deletion pen or solution to the image, and if it has no effect on the image the plate is correctly baked for UV printing and/or longer run length. If excessive temperature or time is used when baking the plate, the aluminum substrate will become weak and soft and will lose its tensile strength – Ensure the correct balance of time and heat is being used and adjust the oven settings accordingly

Suggestion

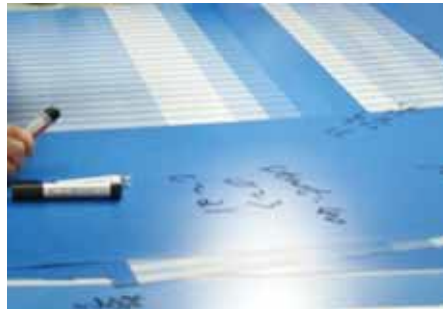
To confirm baking conditions use adhesive heat sensitive /temperature measurement strips and place them across the back of the plate to check that the oven is baking the plate evenly.

Quality Control

※ Note - Do not to use the filter when measuring the density with the X-RITE Spectrodensitometer.

※ Remember to remove the gum before measuring the solid density, and insure measuring the same spot for density loss, i.e. mark the area with a pen or marker.

Plate Processing Coating Measurement Control



After-imaging and processing you can use a Spectrodensitometer to measure the image and non-image/background area density of the plate, to ensure that:

Density Loss Solid Area: usually between 5-10% for Fit Melior and Fit Xtra Melior,

50% tint (Un-calibrated): 47.5-51% (depending on the platesetter model and exposure setting)

The calculation formula for the Density loss is as follows:
Density lose = $1 - (D \text{ after} / D \text{ before} * 100\%)$

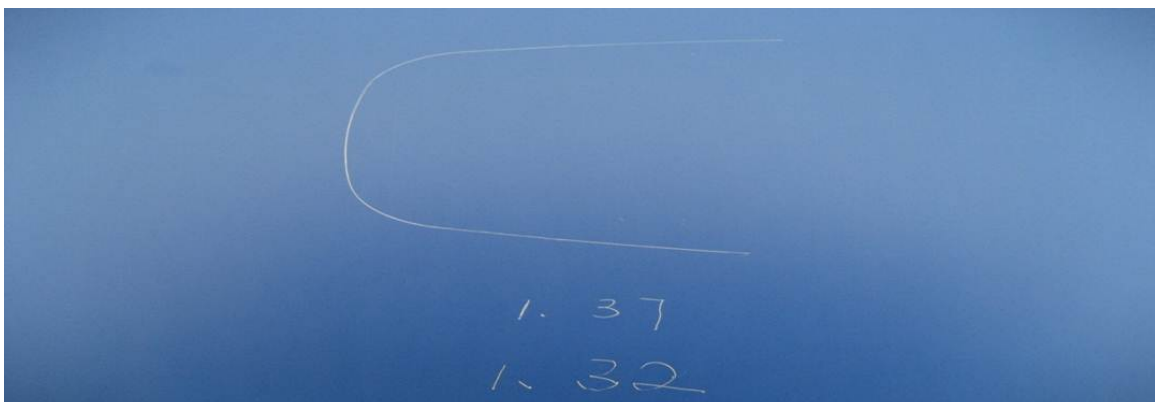
The non-image/background density is below .30.

How to Ensure Proper Development

- Using a Spectral Densitometer, measure the solid density and record this value. DBD (Density before Development)
- Process the plate using proper processing conditions
- Measure the same area solid density and record the value. DAD (density after Development)



- Density Loss can then be calculated. $DAD \div DBD = \% \text{ Loss}$
- $1.32 \div 1.37 = .96$ or 4% Loss
- We want the density loss to be below 10%. Loss above 10% will result in short press life and low chemical resistance.
- Always check non-image area with a minimum 25X Loupe to ensure it is clean. You can also measure the background and want to see a Cyan density of .30 or less.



Recommended quality control and measurement tools

X-Rite: iCplate2X or iCplate2XT

Dot Reader - Used to read dot area,
screen ruling, dot size and screen angle



X-Rite 500 Series

Spectrodensitometer - To measure density
color & spectral data



For more information on the above
equipment go to www.xrite.com

Temperature Probe

Temperature Probe - Used to ensure
the Developer bath set-point on the
processor is correct and accurate



Conductivity Meter

Conductivity Meter- Used to check developer conductivity to determine proper replenishment and activity.



Stop Watch

Stop Watch - Used to measure plate dip to nip time in the processor



Graduated Cylinder

Graduated Cylinder – Used to determine if the correct chemistry replenishment rate is being applied



Label Information

Note: the label is affixed to the side and front of the package for easy product identification.

See examples below.



Side label



Front Label

I. Label

Product Code

022441

Production Tracking No.

Product Specification

400*510*0.15 mm GS

Width*Length*Gauge (unit: mm)

GS = Grain Short / GL = Grain Long

Serial No

Customer Country Code

Production Date

i.e. 08.03.17
Y M D

Year/month of the year/ day of the month

Alloy Type

Coil line No.

JP1050 or JP1052

Interleaving Paper Codes

IH

40g (Single-side rough)

DA

50g (Double-side rough)

II. FIT Melior & FIT Xtra Melior Plate Gauge Range

Nominal Gauge (mm)	Alloy	Actual Gauge
0.15	1050	+/- 0.005
* 0.20	1050	+/- 0.005
0.24	1050	+/- 0.005
* 0.25	1050	+/- 0.005
0.27	1050	+/- 0.005
* 0.29	1050	+/- 0.005
0.30	1050	+/- 0.005
* 0.40	1050	+/-0.005

* Special gauges are available
However, require longer lead times.
Please confirm with Xingraphics
local distributors for more
information.

III. Plates per Pack

Gauge(mm)	Length (mm)	Plate per pack(pcs)
0.15	all	50
0.20	all	50
0.25	all	30
0.27	all	30
0.30	all	30
0.40	1050 < L < 1500	30
	> 1500	30



Storage, Delivery and Working Environment



※ Note: Plate performance may be affected if the temperature deviation is $\pm 5\text{ }^{\circ}\text{C}$ between storage and handling environment.

I. Storage

The shelf life of Xingraphics **FIT Melior** & **FIT Xtra Melior** is 18 months. See the production date on the package labels as described in **Label Information** above.

The recommended storage conditions are $5\sim 30\text{ }^{\circ}\text{C}$, with 40%-60% humidity.

Products stored outside these conditions including unopened packs may be damaged or their production performance altered if they are not kept away from excessive humidity, heat, and direct sunlight.

For better protection, the plates should be stored as follows :



- **Away from high temperature & direct sunlight**
These will affect plate performance.



- **Pallet Height Limit**
Pack height no more than 1.5 meters.



- **Anti-humidity**
High relative humidity will cause electrochemical corrosion on the plates, which may destroy the non-imaging area as well as changing plate characteristics.



- **Anti-acid & alkali**
Prevent the aluminum substrate from coming into contact with corrosive chemicals.

II. Delivery



The pallet is customized to be suitable for sea, air or road container packing. All pallets are strongly built encompassing wood protection and heavy duty plastic straps for extra protection during transportation.

Interleaving paper is standard in all the fit thermal plate products and it is customized for use in all CTP plate handling systems.

Plates are shipped on **pallets** for all sizes to ensure transportation security and minimize the risk of damage in transit.



fig. 2

III. Working Environments

Xingraphics **FIT Melior** & **FIT Xtra Melior** plates can be handled in daylight conditions.

Safety Guide

When handling Xingraphics products, read the **Material Safety Data Sheet (MSDS)** first, for hazard identification and suggested first aid.

You can also contact Xingraphics distributors for MSDS copies, or click on the **"Support"** tab on the Xingraphics web site (www.xingraphics.com) to find or download the relevant information or documents needed.

Troubleshooting

— Imaging

Plates will not punch or load into platesetter

Plates are bent or kinked due to bad or poor handling during cassette loading

Check correct storage, handling and loading procedures.
Check unused plates in the pack or cassette for damage.

The plate detection sensor is dirty or needs adjustment

Clean the sensor according to manufactures instructions. Adjust or calibrate the plate detection sensor.
Contact the platesetter manufacturers engineers and arrange for service.

Plates have unexposed random areas of solid blue after imaging and processing

This is an area of plate that has become out of focus during imaging due to a dent or kink in the plate.

Use correct storage, handling and loading procedures.
Check unused plates in the pack for damage.

Imaging drum surface is dirty

Clean imaging drum according to manufactures instruction.

Plate cannot be detected in the platesetter

Some parameters of the sensor are not correct.

Check if the sensor is dirty and clean it.
Contact platesetter engineer to adjust /calibrate the sensor.

Troubleshooting

— Processing

Stripes or damage to the solid areas on the plate

The pressure of the scrub roller(s) is too high	Reduce brush speed, and or adjust the developer brush roller pressure.
Roller marks	Clean all rollers in developer section and ensure the entry rollers are free from chemical and are dry.

Plates are not fully developing in the processor / Short developer life

Developer temperature too low	<p>Check processor settings are correct and the developer heater is working. Using an external thermometer, check developer temperature.</p> <p>Ensure developer circulation system is working.</p>
Processor throughput speed too fast.	Check processor settings are correct and the plate is getting the required dwell time in the developer section.
Developer brush pressure / speed not set correctly	<p>The developer brush pressure should be set with slight resistance as a piece of plate is passed between the brush and the developer bed.</p> <p>Ensure brush speed setting is correct and or brush motor is working correctly</p>
Replenishment not set to correct settings.	<p>Check replenishment settings are correct and that the developer pump is working and it is replenishing the required amount of chemical.</p> <p>Calibrate the replenisher pump.</p> <p>Check if the developer replenishment bottle is empty.</p>
Developer contamination, water from the rinse section is entering the developer section.	<p>Check nip pressures of rollers and any blockages in the rinse section causing water to overflow back into the developer section.</p> <p>Ensure water is not running back into the developer section whilst the plate is being processed.</p>
Developer processing capacity is exceeded. 2000 M ² or 30 days	Empty developer section, rinse with water, and replace filter and re-fill processor with fresh developer.

Thinner gauge plates are not fully developing in the processor, but thicker gauge plates are processing correctly

Developer brush pressure not set correctly.

The developer brush pressure should be set to the thinnest gauge plate –this is done by using a sample of the plate and adjusting the scrub roller pressure to give a slight resistance as it is passed between the brush and the guide or lower roller.

Plates are over-developed in the processor

Developer temperature too high.

Check processor settings are correct and the developer chiller is working and it is topped up with enough water.

Ensure the developer circulation system is working well and is not blocked –replace filter if blocked

Using an external thermometer to confirm the developer temperature.

Processor throughput speed too slow.

Check processor settings are correct.

Replenishment rates used are not set correctly

Increase the value of replenishment.

Use a **Graduated Cylinder** to confirm the replenishment rate set on the processor is being achieved by the pump.

Filter plugged

Use 100um filter, change the filter once per bath or 2000m².

Wrong type of chemical being used as replenisher

Ensure the correct chemistry is being used

Areas of image removed

Small areas of developer attack

Check for dried developer on in-feed roller's, clean with warm water and dry.

No circulation in processor developer tank.

Check if developer filters and spray bars are blocked.

Replace developer filters and remove any blockage from spray bars.

Ensure filter taps are fully turned into open position.

Rollers are not in correct position or not turning and are scratching the plate surface while processing

Check all rollers are turning correctly and the correct position.

Coating debris in non-image areas

Re-deposition of coating

Clean all rollers including the water rinse brush.

Increase rinse water pressure, increase water brush speed and or water brush pressure.

Drain, clean and replace the water in the wash section.

Carry out recommended processor cleaning regime for developer section.

If water rinse brush is excessively contaminated and re-deposition of coating continues after the above actions have been carried out, it may be necessary to deep clean or replace the water wash section brush.

Plates will not accept ink

Finisher gum incompatibility

P.H of finisher/gum is incorrect – remove and replace with fresh gum solution.

Use compatible finisher/ gum.

Check that the gum pump is not blocked and that an even layer of gum is being applied to the plate surface.

Ensure that an excessive layer of gum is not being applied to the plate surface. Adjust gum roller pressures accordingly.

Ensure the Gum/Finisher is being used as recommended (Ready to use or diluted correctly).

Dryer temperature too high

Keep dryer temperature between 45-50 °C.

Roller surface crystallization

Use softened water.

Troubleshooting

— Press

Scum or catch up during start up or early into the press run

Underexposed plate.	Ensure platesetter laser settings are correct
Plate was processed at excessive speed or a too low developer temperature.	Ensure the plate processor settings are correct.
Plate developer exhausted or contaminated.	Change to fresh developer when the maximum plate throughput has been reached. Ensure rinse water does not feedback into the developer section of the processor.
Insufficient processor brush action.	Check the condition of both the developer and rinse section brushes. Adjust or replace if necessary.
Plate finisher is exhausted or contaminated.	Change and replace the gum/finisher in the processor Check the finisher circular system.
Insufficient desensitization by plate finisher.	Check the condition of the finisher application pump and rollers. Adjust or replace if necessary.
Dampening system contaminated with ink and/or wash up chemicals.	Wash the dampening roller sleeves regularly. With older conventional dampening systems, the roller sleeves require replacing more often than with newer systems. Clean rollers with solvent cleaner and desensitize chrome rollers. Check fountain solution dosage/mixture
Excessive ink being used.	Re-adjust ink/water balance for minimum ink and fountain solution feed.
Insufficient dampening.	Ensure sufficient alcohol or alcohol replacement is being used and it is the correct type for the dampening system used. Ensure the fount solution is correctly mixed according to the manufactures directions.
Excessive roller and/or plate to blanket pressures.	Re-set the rollers to the correct roller stripe width. Correct the plate and/or blanket packing to the minimum needed for good ink transfer.

Scumming after a clean start up and several thousand impressions into a run

Fountain solution is too weak.	Increase the fountain solution concentration, but do not exceed the manufacturers recommended amount.
Fountain solution is too warm.	Check fountain solution chillers are maintaining a correct and constant temperature of the fountain solution during the press run.
Insufficient amount of alcohol in fountain solution, if alcohol is used.	Replenish alcohol to maintain a constant level during a press run. Ensure automatic Alcohol level controllers are functioning correctly.
The non-image area of the plate is worn excessively.	To prevent excessive non-image wear, wash blankets more frequently during the print run. Check plates, blanket and former pressures.
Fountain solution contaminated from ink and / or paper feedback.	Drain fountain solution, clean system and refill with a fresh solution. To minimize excessive contamination, change fountain solution more frequently or use a solution with better buffering.

Tinting

Ink pigments bleed into the fountain solution.	Reduce the amount of alcohol or change to an alcohol replacement, which is more compatible with Fit & Fit -Xtra plates (CtP Thermal plates)
Excessive roller and printing pressures.	Check and adjust roller pressures and plate to blanket pressures to the minimum needed for good ink transfer.
Fountain solution is too acidic, breaking down the ink.	Adjust the pH to a higher value. Consult with the fountain solution manufacturer for a solution more compatible with the water used.

Ink and water balance

Frequent water feed adjustments have to be made to maintain print quality.

Excessive amount of fountain solution is being run.	Reduce water feed. If that results in sensitivity well into the press run, the fountain solution may be too weak. Increase the concentration of fountain solution.
Dampening rollers improperly set.	Re-set the rollers.
Ink rollers improperly set.	Re-set the inking rollers to the press manufacturer's specifications.

Image blinding at start up

Image will not accept ink or is slow to roll up.

Too much finisher on plate.	Wash the plate with water. Check finisher section of processor for correct roller and settings and the gum flow is sufficient – adjust if needed. Replace used gum with fresh solution
Plate cleaners have dried on the plate.	Thoroughly rinse the plate and never allow plate cleaners to dry on the image areas. Sometimes wiping over the plate with the same cleaner used initially and following immediately with a water rinse can revive a plate. Image can be lost at the start of a re-run if an unsuitable plate cleaner has been used to wash the plate at the end of the previous run. Use a more suitable plate cleaner that is specifically manufactured for use on CTP thermal plates.
Glazed rollers or blanket.	Clean and deglaze or replace rollers and blanket.
Ink is too short and / or too high in tack.	Consult the ink manufacturer.
Ink is too water-resistant or taking up too much fountain solution.	Reduce fountain solution feed. If problem persists, consult the ink manufacturer.
Fountain solution contaminated with paper sizing	Drain and replace the fountain solution with a fresh batch. If the problem persists, if possible try a different paper and or consult the paper manufacturer.

Image blinding after several thousand impressions.

Image sharpens, or loss of image in isolated areas.

Ink, fountain solution, paper, plate incompatibility.	Chemicals from inks and paper can react with the fountain solution and the plate surface to form insoluble, water receptive compounds on plate image and non-image areas. Consult the manufacture of the press chemical consumables being used.
Alcohol free concentrates and / or alcohol replacements are mixed incorrectly.	After excess amounts of alcohol replacements are used, the ink will lose tack and also loose its ability to be transferred in the ink train. Consult with the fountain solution manufacturer.

Plate image wear

Abrasive ink and /or paper.	Use a less abrasive ink. Some white inks, or opaque inks mixed with white can be very abrasive. FIT & FIT -Xtra plates must be baked when printing with UV inks. Plates can also be baked for additional run. length for non UV ink print applications –or ideal for abrasive press conditions.
Paper fibers, coating or fillers piling on image areas of blanket.	Change to a paper with better pick resistance, change to an ink with less tack, reduce press speed or wash blanket more frequently during the run.
Plate and / or blanket packed too high.	Reduce packing to a minimum pressure needed for sufficient ink transfer. Refer to press manufacturer specifications.
Rollers set too tightly to the plate (Wear is more pronounced on the lead edge of the plate).	Re-set rollers to manufacturer's specifications.
Insufficient bearer pressure (Wear is evenly spaced streaks parallel with the plate cylinder).	Increase bearer pressure so that the cylinders are not riding on the gears. Refer to press manufacturer specifications.
Press chemicals cause blanket or rollers to swell.	Use chemicals which are compatible with the blanket or rollers/press manufactures specification. Consult blanket and roller manufacturers for recommendations.
Press chemicals are not compatible with the plate coating.	Test the chemicals by placing on a solid area of a processed plate for approximately 5 minutes. Wash off with water and check for damage to the coating.
Plate cleaners are not compatible with the plate coating.	Test cleaners as above.
Fountain solution is too acidic or alkaline.	Check pH of the fountain solution. If the pH is 3.5 or lower and mixed to the minimum manufactured recommended concentration, it may not be suitable with the water used. Consult with the fountain solution manufacturer for alternatives.
Ink starvation (Image wear takes place in an area where there is an ink ghost)	The thinner ink film causes plate wear in the ghost areas before the rest of the image area. Run more ink if possible or use ink with less pigment loading. An oscillating ink roller may reduce ghosting, but if pigment content of the ink is too high, the entire plate may wear early.

<p>Sharpening of image, particularly highlight dots during the press run</p>	<p>Check press chemicals, fount concentration and temperature.</p> <p>Check alcohol percentage. Alcohol at concentrations above 10% can induce image break-down during the press run.</p> <p>Check ink quality and oleophilic feeding properties, try other inks.</p>
<p>Short run length (baked plates)</p>	<p>Check all press roller and blanket pressures/parameters are correctly being used.</p> <p>Check that the plate is fully baked by doing the deletion gel test.- Place a deletion cross on a solid area of baked plate for 5 minutes. Wash off with water and check for any attack to the coating. If no attack, the plate is fully baked.</p> <p>Check that the baking parameters are correct and the oven is maintaining the correct temperature across the whole plate.</p> <p>This is measured by using adhesive heat sensitive strips which are put across the back of the plate prior to it being baked in the oven- adjust oven according to results.</p>

Non-image wear

<p>Paper fibres, fillers or coating pile in non-image areas of the blanket.</p>	<p>Reduce water feed if possible. Change to a blanket with less tack</p> <p>Change to a more moisture resistant paper. Wash blanket more frequently.</p> <p>Consult paper manufacturer.</p>
<p>Ink takes up fountain solution too fast. (Metal polish following an image area).</p>	<p>Try a different type of fountain solution. If the problem persists, consult the ink manufacturer.</p>
<p>An abrasive ink (usually the black) prints back onto the blanket of the next printing unit, polishing non-image area. Polished areas show the images of prior plate.</p>	<p>Use a more absorbent paper, a faster setting ink, a shorter ink or reduce ink feed to the prior unit if possible.</p> <p>Wash blanket more frequently.</p>
<p>Polishing of non-image area</p>	<p>Check plates, blankets and forme roller pressure settings.</p>

Plate cracking

Plate not tight on the press cylinder.	Check for fit after mounting the plate- Ensure plate clamps are clean and working correctly. Ensure the correct size plate is being supplied
Plate packing short or not aligned correctly.	Check the packing for proper length. Make sure the packing cannot move during the run. Carefully align the packing sheets during initial mounting.
Plate bender not square.	Check bender alignment. Measure the plate for squareness.
Incorrect plate thickness.	Check thickness of plate for correct mil spec.
Cylinder gap dirty.	Clean the cylinder gap.
Cylinder edge has burr or build up of dried ink.	Clean and de-burr the cylinder edge.
Lead and / or tail edge of plate improperly bent.	Check plate bends for proper fit in the cylinder gaps.
Excessive ink and / or dampening roller pressure causes lead edge of plate to flex.	Re-set rollers for minimum recommended plate contact.

Plate scratching

Improper plate handling.	Handle plates with care, all CTP plates are not as robust as conventional plates. If needed re insert interleaving after processing to protect plates during handling prior to printing process.
Roller contamination with hard particles. (Continuous scratches around the entire plate in the direction of the cylinder rotation)	Locate and eliminate the source of the contamination, remove the particles if possible or scrub the rollers. Replace the rollers if the problem persists.

Gouges in plate

Blanket is contaminated with hard particles.	Locate and eliminate the source of the contamination, replace the blanket and clean the inking system.
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Appendix: RMA / DMAR

Return Material Authorization (RMA) Process

This RMA is required to be completed by an authorized partner if and when a defected product is identified.

Xingraphics will act immediately to replace the products identified and take appropriate measures to ensure this issue is resolved permanently.

Below is a brief description of Xingraphics RMA system:

Purpose:

- To identify the source of the problem
- To provide a documented process of actions required.
- Expedite replacement of material.
- To authorize credit for products that are confirmed as being faulty.

Procedure:

- Customer completes Defective Material Advice Report (DMAR) and submits to Xingraphics.
- Xingraphics acknowledge receipt of DMAR from customer within 2 working days.
- Technical Department provide feedback to specific DMAR within 2 weeks by completing a Return Material Authority Report (RMAR) based on customer feedback and independent investigation.
- Provide feedback on conclusion of technical team finding within 2 working days of receiving RMAR to partner/customer.
- If product is confirmed faulty, a RMA form needs to be completed and authorized.
- Confirmation to customer on specific action including replacement or credit for affected products to be made within 2 working days of RMA being authorized.

Attachments:

- Defective Material Advice Report (DMAM)
- Return Material Authority Report (RMAR)
- Return Material Authorization (RMA)

QA/QC-IBD-B
(Technical Department to complete)

RETURN MATERIAL AUTHORITY REPORT(RMAR)

CUSTOMER: RMAR NO.

REGION / COUNTRY: DATE:

No.	Defective Material Summary (Affix Material Label if Available)
1	
2	

※ Note: Send all forms to info@xinggraphic.com for support, or fax to the following number: +86 28 85925225.

DEFECTIVE MATERIAL ADVICE REPORT (DMAR)

DATE: DMAR NO.:

CUSTOMER DETAILS:

Name Country/Region
 Representative Technical Contact
 Tel. No. Tel. No.
 E-mail Fax No.

PRODUCT INFORMATION:

No	Barcode	Description	Gauge	Length	Width	Qty.
1						
2						

- If you have opened the package/box, please continue;
- If you haven't opened the package/box, please skip to REPORTED FAULT.

Plate Information

Label information (on the package/box)	
Label information (on the back of the plate)	

- If you have started the imaging procedure, please continue;
- If you haven't started the imaging procedure, please skip to REPORTED FAULT.

Imaging Parameters

Platesetter	
Power (Laser Intensity)	
Drum speed	
Others (if applicable)	

* Please provide the error message on the platesetter if any.

- If you have started the developing procedure, please continue;
- If you haven't started the developing procedure, please skip to REPORTED FAULT.

Developing Parameters

Processor (Make and Model)	
Developer Type	
Replenisher Type	
Temperature (Degrees C or F)	
Developing time (Dip to Nip)	
Conductivity	
Dev-Brush speed (RPM)	
Replenisher Rate (ML/M2)	
Water hardness	
Density(not-developed)	
Density(post developed)	

- If you have started printing with the plate, please continue;
- If you haven't started the printing with the plate, please skip to REPORTED FAULT.

Press Information

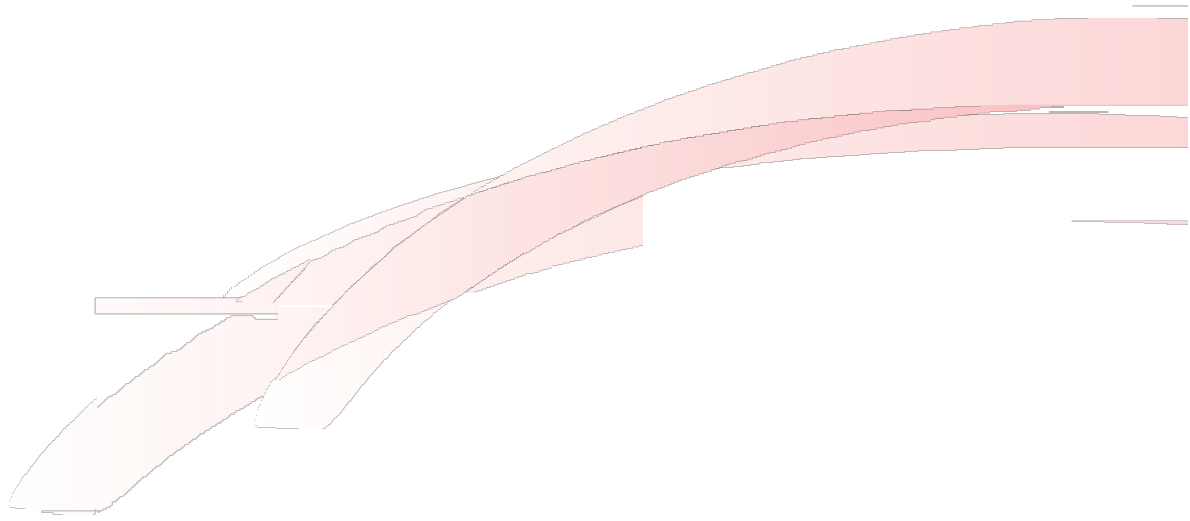
Press(offset/web) (make/model)	
Paper Stock	
Ink (Conventional/UV)(Manufacturer/series)	
Fountain (Manufacturer/Series)	
Concentration (%)(Mix ratio)	
Alcohol/ Ethanol or Isopropyl Alcohol (%)	
Temperature (Fountain and Ink Rollers)	
Others (if applicable)	

REPORTED FAULT:

No.	Summary of Faulty Product(s) (provide details where applicable)
1	
2	

* It is very important that you include all the problem data. Please forward supporting info including digital photos, location of defects and specific setting used whilst observing these conditions.

<h3>SAMPLES RETURNED</h3>	<input type="checkbox"/> YES <input type="checkbox"/> NO
RMA NO.	(If applicable) <hr/>
<p>※ Note: Send all forms to info@xingraphic.com for support, or fax to the following number: +86 28 85925225.</p>	



**Simply an
Alternative Solution**

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