



Polyart Laser printing tips

Polyart laser has been specially designed for use in dry toner digital colour production presses.

Print tests were carried out on the leading brands of laser presses:

Xerox

Konika Minolta Bizhub

Ricoh

Canon Image press

Oki

Polyart laser sheets were printed in both simplex and duplex mode. Press performance, feeding, toner adhesion and print quality have all been checked and give excellent results.

Prior to full production printing it is advisable to carry out a small test.

Storage and Handling

Polyart Laser sheets should be handled with care once the packs have been opened, although the sheets should be fanned prior to loading into the feeder tray, **try to avoid any excessive force** and only load small quantity of sheets at a time.

Acclimatize the sheets in the pressroom with optimum relative humidity of 50-55% at 21°C.

Press Settings

Ensure correct media settings are applied for substrate thickness/weight. This will allow to obtain the correct toner fusion (heat setting). Excessive heat can cause mottle and too low setting will cause poor toner adhesion.

Once the press is ready to start, initial printed sheets should be run one at a time to check for toner adhesion and general print quality into the bypass tray. Initial press sheets should be printed in simplex mode only.

Ensure toner adhesion is correct prior to commencing full production printing, it may be necessary to adjust toner fusion settings. Some toner rub may be seen immediately after printing.

If during the press set up, a print colour variation is noticed from top side to underside or surface marks (lines), it is almost certainly caused by incorrect press setting. This can be overcome by making sure that the fuser or the transfer current settings are correct for that grade of Polyart Laser.

Static

Static build up may be seen in the printed sheets which is quite normal especially with the duplex mode. Once printed sheets have been restacked any static should have dissipated.

Polyart Laser is suitable for small, medium and big runs. For long runs if you notice static build up you should print only 500 sheet at a time and run a few sheets of paper in between.

Stacking

After printing, allow the sheets to cool for a couple of hours before further processing.

Finishing

Guillotining

Guillotine blades should be kept sharp and clean

Die cutting

Polyart Laser can be die cut and for best results, avoid acute internal angles and retention points should be as small and as few as possible.

Punching

When punching Polyart Laser is carried out, best results will be obtained with rounded holes rather than square shaped as they can initiate tearing.

Drilling

Drilling can also be carried out quite easily, drill must be kept sharp and dwell times should be minimal.

Perforating

Polyart Laser can be perforated but care should be taken to ensure the use of long slits and small ties to minimise any wander, the perforations should bleed off the edge of the sheets.

Folding of Polyart Laser sheets is possible but due to product memory may require pre creasing or perforation for a better folding result. Thicker grade sheets will need to be perforated for better fold.

Film lamination is possible on printed sheets although with the iGen press it is best to leave the sheet for 24 hours before laminating

Packaging

To minimize potential static, the Polyart surface is slightly rough and toner abrasion might occur if the sheets are allowed to shuffle. Therefore once the sheets have been printed and processed, care should be taken during packaging to minimize any post print rubbing.

Offset printing

Printing Polyart Laser sheets by offset before running in dry toner machines is possible, but best results are obtained if the **offset inks are laser suitable or UV**. Spray power from offset printing should be kept to a minimum or use a UV ink system, as spray powder can cause potential problem inside the dry toner press.

Flexo printing is possible on Polyart Laser, for best results print by UV flexo

Recycling

Polyart Laser has a special coating applied designed to optimize print performance on a wide range of digital equipment, and as such cannot be recycled as pure PET.

Polyart Laser should be recycled under category 7, other plastics.

Polyart Laser can be incinerated safely (according to local regulations) and is therefore a potential source of energy

Polyart Laser is an inert material and can be buried in approved landfill facilities

Advice in this document is based on practical field experience and given in good faith but Arjobex, the manufacturer of Polyart synthetic papers, may not be held liable for loss or damage arising from action based on this information.

We recommend to test a few sheets of Polyart laser before starting a run

For more information do not hesitate to contact us www.polyart.com