



### **Printing with white/colour ink on a dark shirt.**

You need to pre treat dark shirts before you can print on them. You must never pre treat in the same room as the printer. The fine spray in the surrounding air will cause the print head to clog. When using white ink set your heat press from 160c to 165c, this temperature will be fine for curing pre treatment and ink on dark shirts.

These instructions assume you are using a professional heat press with a black Teflon coating, you cannot use a heat press with a Teflon sheet attached to the heat platen.

First press the t-shirt for 10 seconds to remove excess moisture and flatten any creases out.



Spray the shirt with the pre treatment, you will need to experiment to get this correct and it will take you a few shirts before you do this correctly. If using a Wagner spray gun you will get better results if you use more air than liquid making several light passes rather than a heavy wet pass drenching the fabric quickly.



Once you have sprayed the shirt with a sufficient amount place it on the heat press. Put a piece of non silicone parchment paper on the shirt, press for 10 seconds (no more no less) under very light pressure, remove the paper and press for a further 20 seconds on high pressure.



Dab any overspray with a damp cloth and wipe the sides of the heat press under the shirt to remove any drops of water before they get onto the shirt. Your heat press must have a clean high quality Teflon coating, if the coating is worn or damaged this will contaminate the dry pre treatment. This will not become visibly apparent until curing the shirt.



**Now print the shirt.**

The optimum settings for printing a dark shirt are 1440 x 1440 hs for the under base and 1440 x 720 hs for the colour layer. You will need to experiment with settings in order to find your preferred density.

**Before you start to cure the shirt you must ensure the back of the shirt is either in contact with a plain white t shirt positioned on the base of the heat press or insert a piece of silicone paper or thick porous card into the shirt. On some fabrics depending on quality the moisture from the printed image may stain the back of the shirt if you do not follow this process.**

Place the printed shirt on the heat press and do a hover dry for 30 seconds, this process can normally be missed out if the humidity between 30 to 50%. Now put a piece of silicone curing paper onto the shirt and press on light pressure or just the weight of the heat platen for 150 to 180 seconds depending on the density of ink.

If your shirt is still steaming heavily hover dry for a further minute with no paper on the shirt.

This sounds very straight forward but it will take you some time to master this process.

Any contamination in the pre treatment process will cause symptoms like, flecks of white showing through the colour layer, orange peel effect, streaks in solid print areas, dull images with poor reds and insufficient white coverage and in severe cases cracking when stretched or washed.

Lastly the profile used determines how much ink the print head delivers to the shirt, if you do not have a profile prepared for the specific ink set you will need to obtain one suited to your preferred Rip. You will be able to perform a simple adjustment to your normal profile to gain the desired results when switching to Resolute Ink.

If you require any help with printing techniques for any Direct to Garment machine please contact Resolute DTG Ltd for free technical support. 0114 2583944