

What can I do to get my blankets to last longer on press?

The main reasons for having to replace a printing blanket are usually:-

- Smash damage
- Paper Edge Marking
- Chemical Attack
- Ink piling – also another major reason but it is greatly influenced by paper, fount chemistry and ink/water balance so it is not referred to in this section

The question is what can we do to minimise the potential risk from each of these damaging incidents?

Smash damage and paper edge marking

While not exclusively one and the same problem they are both substrate related. One is the sudden introduction of a thicker sheet mostly caused by a double sheet or a folded edge. The other is where a long run on a certain sheet size leaves a depressed area in the blanket often made worse if the paper leaves dust lines around the outside edge. This area is then visible when moving to a larger sheet size. The methods of minimising the risks for each are the same:-

- **Use a torque wrench to mount the blanket** – by using this method of mounting you ensure that the blanket is not over-tightened as this helps to protect the compressible layer. If the blanket is over-stretched it reduces the “bouncebackability” of the compressible layer and limits the amount of deflection that is available.
- **Always run with the least printing pressure required** – Using a micrometer to gauge the substrate is always recommended as papers of the same grammage can have quite different thicknesses. Also this measurement should be used as a starting point and further reductions in printing pressure should be carried out to find the lowest pressure point that gives a constant good quality print. By doing this we are applying the lowest possible pressure to the blanket which ensures that the rebound characteristics are not impaired.

Chemical attack

Chemical attack of the blanket surface can occur from 2 main sources:-

- Printing Inks
- Press chemicals e.g. blanket/roller wash, speciality washes

Printing inks

This usually occurs where UV printing inks are used. It can be a compatibility issue with certain ink types used with EPDM or Dual Purpose printing blankets. The problem is usually detected by either embossing or shrinkage of the surface of the blanket and if the blanket is not changed it can appear as a latent image on the next job. Kinyo Technical Services are able to carry out tests using your UV ink range to recommend the most compatible blanket for use.

Press chemicals

This is where an incompatible press wash can cause the blanket surface to swell or shrink. It is not easy to detect as the whole surface of the blanket is washed so localised swelling/shrinkage is not visible. Again, Kinyo Technical Services are able to test your press washes and advise of any potential issues.

Where there are no incompatibility issues there are some simple points to remember when it comes to washing a blanket:-

- Only wash the blanket when it is necessary
- Only use the absolute minimum of solvent or solvent/water to remove any ink and lint debris. This is mostly governed by the programs on automatic blanket wash systems but it is still applicable if the blankets are washed by hand with specialised cleaners. Even though the reverse fabric layers of a blanket are chemically treated to resist moisture absorption there is a risk that any excess solvent could be absorbed by the cotton carcass.
- It is always best practice to start washing a blanket 180° from the cylinder gap so that any excess solvent does not get into the gap.
- Always dry off the blanket surface after washing. Most modern solvents are AIII classified which means that won't readily evaporate at room temperature and they will sit on the surface of the blanket and penetrate in to the rubber.

If you require more technical information to help you make the correct blanket choice please contact us.