

Rubber Vs Polyurethane

“A Clear No-Contest”

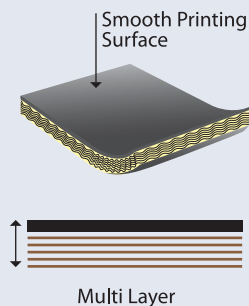
The following are professional inferences of MRT's team of scientists, drawn from years of firsthand observation of the textile printer's field realities. They have been compiled in the general interest of industries that employ Textile Printing Blankets.

Rubber Printing Blankets:

Polyurethane Printing Blankets:

Superior Structure

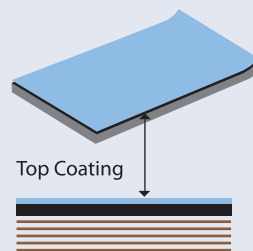
The multi-layered structure of Impressions Rubber Textile Printing Blankets, reinforced with 100% Cellulose, lends them a unique advantage -- natural compressibility. These Blankets retain shape throughout their lifetimes, enabling superlative printing sharpness, colour absorption and design registration.



PU Printing Blankets are made of comparatively rigid Polyurethane, and offer very low compressibility. This hinders printing accuracy and registration.

Steadfast Surface

The Rubber surface of Impressions Blankets offers X% resistance to printing chemicals, and Y% resistance to solvents (such as Acetone, Thinner and Ethyl Acetate).



The surface of PU Blankets offers very poor resistance to chemicals and solvents.

Tough Resistance To Temperature

Impressions Blankets offer total resistance to temperatures up to 100 degree Celsius.



PU Blankets cannot effectively resist temperatures higher than 60 degree Celsius.

Easy Repairs

Impressions Blankets are much easier to repair in case of mechanical damages, because the Rubber Printing Blankets industry is well-established around the world, and technical help is at hand anywhere. The Rubber Solutions required for repair also are easily available worldwide.



PU Blankets are harder to repair. Once damaged, a quality-conscious printer will have to replace them. Even if one chooses to go for repair, the process involves high technical skills. Usually, the technicians will have to be flown in, and even the PU Solutions required for repair, not being easily available, will have to be shipped in.

Ideal Elongation Control

The % elongation for IMPRESSIONS Rubber Blankets at a constant tension of 5 N/mm is 0.5% (only 0.1% higher than the leading PU Blanket – too nominal to affect the life span of the blanket).



The basic structure of PU imparts slightly better elongation properties than rubber. However, the % elongation for PU Blankets at a constant tension of 5 N/mm is 0.4% -- only 0.1% lesser than an IMPRESSIONS Rubber Blanket.

Competent Fitting Tension

The fitting tension for Impressions Rubber Blankets is the same as PU Blankets.

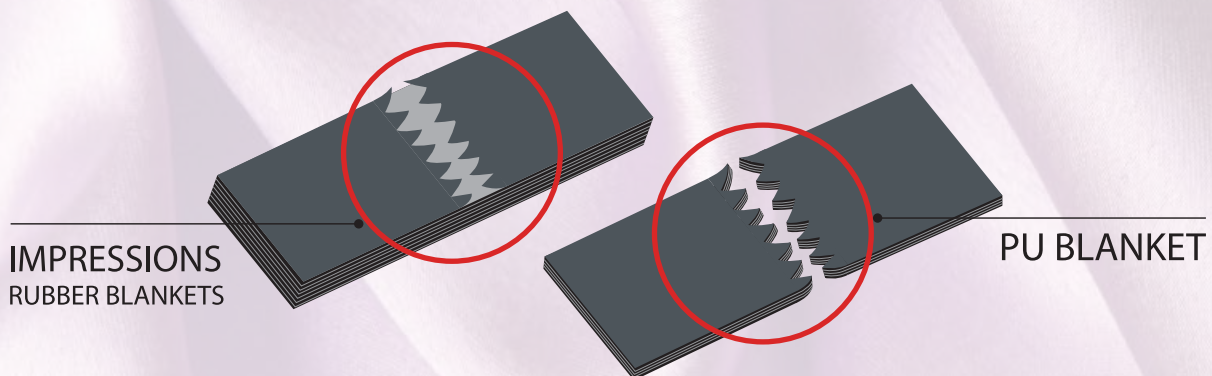


The fitting tension for a PU Blanket is the same as Impressions Rubber Blankets.

Smooth & Strong Joints

Impressions Rubber Printing Blankets are manufactured truly endless, and joined smoothly and evenly on the top surface. The smoothness and strength at the joint is as good as any other part of the blanket, making the blanket a truly endless, composite product. Plus, its multi-layer construction imparts better strength, high dimensional stability and good compressibility to the blanket, enabling more even colour absorption and finer printing registration compared to PU.

PU Blankets are manufactured and supplied in the open-end form, and are later joined on the machines. The customer feels it is more convenient, faster and possibly cheaper. But the negative aspect is: Whether joined in the machine or supplied endless, the Blanket is made endless by splicing the entire structure. This creates the possibility of weaker areas in the Blanket, and as time passes and the Blanket is put through consistent rigour, the joint becomes the weakest part of the Blanket, impairing the printing quality.



Factoid

Rubber Printing Blankets are designed and manufactured exclusively for the Textile Printing Industry. Hence, its every iota is customized for the various needs of the Textile Printing process.

Inference

A high quality Rubber Printing Blanket, such as Impressions, offers more trouble-free operation, better printing performance and longer life span compared to even the world's leading brand of PU Blankets.

Factoid

PU Printing Blankets create more operational stress, and offer lesser printing finesse' and shorter life, compared to Impressions Rubber Printing Blankets.

Inference

PU Blankets, basically, are conveyor / transmission belts, modified to suit Textile Printing. Hence, they have not yet technologically evolved as an ideal platform for the same.

PERCEPTION VS REALITY

A Reality Check

Rubber Textile Printing Blankets:

PU Textile Printing Blankets:

Perception

Rubber Printing Blankets require about 10 to 15 days to be installed.

Reality

A technologically sound and experienced Rubber Printing Blanket manufacturer such as MRT, requires only 1 to 4 days to install a Blanket, anywhere in the world.

Perception

Rubber Printing Blankets represent the older generation of Textile Printing Blanket technology, and hence, might not cope with new millennium demands of the industry

Reality

A Rubber Printing Blanket is like the Rolls Royce – classic, and still the very best.



Perception

PU Blanket is neater in appearance and easier to install. It is a new generation product option, and hence, the better option.

Reality

PU Blankets do not work as good, or as long, as Rubber Blankets, for a variety of technological reasons (see above).



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