
Tips for processing solvent-based screen printing adhesives

When processing by screen-printing, the print result can be improved by the correct adjustment of the printing unit. Blistering can thus be mostly avoided. In general, printing should be carried out with a medium squeegee speed during the flood and printing strokes. In any case, the stencil mesh should be stretched more than 20 N / cm. Printing squeegees with Shore A - hardness of approx. 75 or so-called triplex squeegee blades with Shore A - hardness 65/90/65 and slightly rounded edges, are recommended. The angle of attack should be approx. 75° and snap-off should be 3-4 mm.

During short printing breaks, the stencil should only remain in the press when there is no adhesive in the open screen areas. After 3-4 waste run-offs, the job can then be resumed. In the event of longer printing breaks (>30 min.), any thickened adhesive on the stencil must first be scraped off, and the open mesh areas thoroughly cleaned with solvents.

The adhesive should be used in undiluted form. A maximum thinning of 10% is possible, using a suitable solvent from the KIWOSOLV range. Please also note the information in the relevant technical information sheets

The movement of the printing squeegee causes some of the solvent content in the adhesive to evaporate. We therefore recommend adding small amounts of adhesive regularly on the stencil, rather than a lot all at once.

Drying should take place by storing at room temperature in a rack or, for industrial production, in a drying conveyor. The drying time depends on the amount of adhesive applied, the type of substrate, drying temperature and air circulation. Drying too quickly at an elevated temperature should be avoided.

Good adhesive values are only achieved with a completely dried adhesive film. Before further processing is carried out, the coated adhesive must be thoroughly dry. When covering with silicone paper, we recommend bubble-free lamination of the covering material.

Mould release agents, for example, remain on pressure-cast parts, and are not conducive for good adhesive wetting. It is therefore advisable to clean such parts beforehand.

With some printing inks, when overprinting with adhesive, surface defects known as "fish eyes" can occur. Depending on the type of adhesive, this effect can be overcome with an additive from the KIWOMIX range.

Good adhesive values are only achieved if the adhesive has a sufficient coating thickness. Wherever screen-printing adhesives are used as a substitute for double-sided adhesive tape, the use of a 21-140 mesh is recommended, as this will give you an adhesive coating thickness of approx. 45 µm when dry.

Further details on the adhesives used can be found in the relevant technical information. For more information please feel free to contact our applications technology centre: info@kiwo.de.