

Total Solution: the printing flow

Fabric pre-treatment with PREGEN®

The fabrics meant for printing, both traditional and digital, must be carefully prepared, i.e. they must be clean of any impurity that might compromise printing. They have to be hydrophilic, flat, straightened and stabilized in dimensions.

In addition to all these requirements, in order to be ready for digital printing, the fabric must be addicativated with all those products that:

Allow the fixation of the dye contained in the ink to the textile substrate

Optimize the intensity and brilliance of the prints

Control the spreading of the ink on the fabric, so improving the printing definition

Support the ink absorption on the fabric, so making drying easier

Support the penetration of the dye contained in the ink



In general, fabric preparation is essential for all the digital printing processes, except for pigment printing.

It is optional for digital printing with pigment inks but it's useful in order to obtain deep and brilliant shades.

It may be applied using various application systems, such as padding, all over printing or spraying, but thanks to its ease of use and the possibility to have a perfect dimensional control of the fabric, the most used method is by padding.

After the application of the PREGEN® preparation for digital printing, the fabric must be dried.

In case of preparation meant for printing on silk, wool, polyamide or other cellulosic fibers, the drying temperature should not exceed 105°C and drying shall be made in such a way to have a residual humidity on the material of approx. 50% of the nominal rate of recovery.

Residual humidity values lower than that mean waste of energy and may lead to a thermal degradation of some preparation components, with consequent loss of colour yield.

In the case of polyester fibers, there is no temperature restriction, but a too quick drying could negatively affect the printing definition.

In the following page a table lists the main types of PREGEN® according to their characteristics.

PREGEN®	FIBER / INK	COLOR YIELD	PENETRATION	DEFINITION	NOTES
A 1005	Silk, polyamide with GENESTA® AC	☹☹☹	☹	☹☹☹☹	
A 800 S	Silk, polyamide with GENESTA® AC	☹☹☹	☹☹	☹☹☹	Suitable for fabrics that absorb a lot of ink
AT-6	Silk, polyamide with GENESTA® AC	☹☹☹	☹☹	☹☹☹☹	
TR/C	Polyamide with GENESTA® AC	☹☹	☹☹☹	☹☹☹	Mainly suitable for elastic jersey
A WOOL	Wool with GENESTA® AC	☹☹☹☹ on chlorinated wool	☹☹	☹☹☹☹	
RCA	Cellulose, silk with GENESTA® RE-N	☹☹☹☹	☹	☹☹☹☹	Alkali must be added (Carbonate or Bicarbonate)
RCA-B	Cotton, silk with GENESTA® RE-N	☹☹☹☹	☹	☹☹☹☹	Ready-to-use version containing bicarbonate
RCA-TB	Viscose with GENESTA® RE-N	☹☹☹☹	☹	☹☹☹☹	Ready-to-use version containing bicarbonate
R16	Cellulose, silk with GENESTA® RE-N	☹☹☹☹	☹	☹☹☹☹	
RBA	Cellulose with GENESTA® RE-N	☹☹☹☹	☹	☹☹☹☹	
DS 6040	Polyester with GENESTA® DS	☹☹☹	☹☹☹	☹☹☹	
DT20	Polyester with GENESTA® DS	☹☹☹	☹☹☹	☹☹☹	
DDS	Polyester with ULTRACHROME® DS	☹☹☹	☹☹☹	☹☹☹	Direct printing procedure with sublimatic inks
PG	All with GENESTA® PG	☹☹☹☹	☹	☹☹☹☹	
PCC	All with GENESTA® PG	☹☹☹☹	☹	☹☹☹☹	
TH	Polyester with GENESTA® DS	☹☹☹☹	☹	☹☹☹	Concentrated product to be diluted with water
TH	Cellulose and silk with GENESTA® RE-N	☹☹☹☹	☹	☹☹☹	Base to be mixed with alkali, urea and OXIDOL PA
RTW	Wool with GENESTA® RE-N	☹☹☹☹ on chlorinated wool	☹☹	☹☹☹	

KEY ☹ Acceptable ☹☹ Fair ☹☹☹ Good ☹☹☹☹ Very good