



IKEA FACTS

TEXTILE DYEING

To reduce the impact our business has on the environment, IKEA constantly strives to minimise the amount of water and chemicals used. Together with our biggest textile supplier, we have introduced a new fiber dyeing technique that reduces water consumption by 80% and dyestuff consumption by more than 20%.

- The size of the IKEA business means that we use a lot of resources to make products for our customers. We are committed to reducing water and chemical consumption in our textile supply chain, thereby reducing the impact on the environment.
- One water-saving initiative originates from our Chinese textile supplier Hilong. Together with IKEA, they have introduced a new production technique to dye synthetic fibers, called dope dyeing.
- Dope dyeing is a production technique to colour synthetic fibers such as acrylic, nylon and polyester. In dope dyeing, pigments are added to the liquid polymer solution before synthetic fibers are extruded.
- In dope dyeing, the colour pigments become part of the fiber, improving the colour-fastness and leading to less colour deviation compared to fibers coloured with traditional dyeing methods.
- Traditional fiber dyeing requires a two-step process. In the first step, fibers are produced without colouring. In the second step, colour is applied to the surface of the fiber. With dope dyeing, one step is eliminated. This reduces water consumption by 80%, dyestuff consumption by more than 20%, the use of other chemical agents like alkaline by 80% and electricity usage by 7% compared to traditional dyeing.
- All in all, this has led to a total annual saving of 300 000 tons of water in the synthetic fiber production of Hilong. It has also led to annual savings of 2.26 Million Euros.

- One of the challenges before Hilong was able to use dope dyed polyester was the relatively high cost of developing new colours. This was solved through mixing colours in new ways, and through expanding the variety of products by using different weaving and spinning techniques – rather than different colours.
- Another challenge concerned the spinning quality and efficiency. This was solved by upgrading the spinning machine and adjusting the spinning parameters.
- The drawback of using dope dyeing as opposed to traditional dyeing is that it is not possible to make printed patterns with this technique. Furthermore, it is only suitable for colouring large batches of yarn, since the equipment has to be cleaned thoroughly before each new colour production. The cleaning process is quite costly.
- The first dope dyed products were launched in the end of 2014, when EKTORP SVANBY grey covers (traditionally coloured) were changed to EKTORP NORDVALLA grey covers (a dope dye fabric).
- Currently, nearly 50% of the polyester used in the IKEA supply chain is dope dyed and the number is constantly increasing. Due to sustainability reasons, IKEA wishes to expand dope dyeing to more materials including recycled polyester, viscose and textured filaments.
- Some dope dyed IKEA products today include EKTORP, BEDDINGE, NORSBORG, KIVIK, KLIPPAN, PÖANG, HIMMENE, STRANDBERG and VALLENTUNA sofa covers, SKUBB, most of the DRÖNA boxes and BREIM wardrobe.
- Hilong was the first IKEA supplier to produce dope dyed synthetic textiles. Today, the practice has been adopted by several IKEA suppliers.
- Hilong has been an IKEA supplier since 1997 and has several textile factories. Hilong Dongtai, the stitching factory, was established in 2014. It is located in Dongtai, around 200 km north of Shanghai, and has almost 600 employees.
- SHA Different, located in Shanghai, is a sub-supplier to Hilong, producing dope dyed polyester staple. They have around 260 employees.
- The five main key products produced by Hilong for IKEA are HENRIKSDAL chair covers and EKTORP, KIVIK, SÖDERHAMN and NORSBORG sofa covers. Currently, they produce around 4 million IKEA products every year.