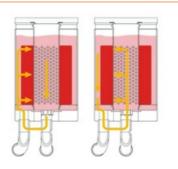


Advantages of having a Dyrama in the Dos&Dye® system







Reversible pump circulation system

External - internal, internal - external circulation

Reversible pump circulation system External — internal — external circulation

Tecnorama is the Italy based producer of the worldwide known Dos&Dye® system for the automatic development of the right recipe for bulk dyeing machines to avoid correction and re-dyeing in production. The Dos&Dye® consists of a Dosorama – an automatic machine for the dispensing of dyestuff solutions and chemicals with volumetric system – working with one or more robotized dyeing machines able to work autonomously 24/7. Dosorama machines and dyeing units are combined according to clients' needs.

With Dyrama, Tecnorama offers dyeing modules integrated into the Dos&Dve® and characterized by the circulation of the bath through a reversible pump (internal/external and external/internal), whose speed is regulated by an inverter. This allows us an excellent reproducibility of the dyeing processes obtained in the bulk machines, especially for the yarn dyeing. Dyrama works with independent autoclaves, managed by individual programs and is available in several versions according to minimum and maximum capacity. The maximum temperature that can be reached is 140°C through electric resistance; the cooling is indirect by water-forced circulation. The minimum liquid ratio is 1:6, according to the weight, type of fibre and shape of the material. Dyrama is certified by the Acimit green label that reports the emission consumption of CO2, demonstrating the commitment of the Company to environmental

Together with a Dos&Dye® system including Dyrama

6R/500, able to dye samples from 250 up to 500 grams, a DWS dissolving unit is also supplied, it allows us to dissolve and transfer recipes of powder dyestuff to the single dyeing kiers. The powder dyestuffs are dispensed, with a gravimetric system controlled by a scale, directly in the DWS that, using a minimum amount of water, dissolves and transfers them to the dyeing kier managing the washing of the line in a completely automatic way without the intervention of any operator.

 $\label{eq:dissolving} \mbox{Dos\&Dye} \mbox{\@sc B} \mbox{ system with DWS dissolving unit offers unique advantages:}$

- Possibility to dye all the recipes up to a concentration of 8% for each dye
- Recipes dispensing starting directly from solid dyestuffs (powder form)
- Possibility to dye 6 different recipes at the same time (both by type of material and color shade) in the 6 independent autoclaves
- Recipes dissolving and transferring to the individual dyeing kiers using a small quantity of water, in order to maintain a low liquid ratio of 1:6, according to the load weight, type of fiber and shape of the material
- Possibility of dissolving and transferring the recipes also to the existing machines external to the Dos&Dye® system
- Robotic system for loading/unloading material holders and handling from the parking position to the dyeing kiers and vice versa
- Complete dyeing cycle, including alkali dispensing, soaping, washing, etc.

More info and videos of working machines on www.tecnorama.it ■■