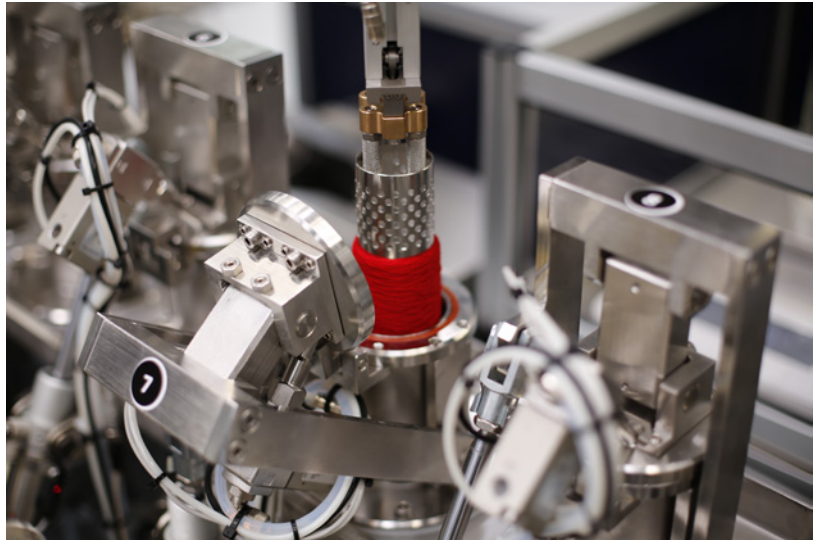


Dos&Dye laboratory automation

The Dos&Dye is the completely laboratory automatic system that reduces the dyeing trials to obtain the exact recipe thanks to the complete reproduction of dyeing cycle exactly as in the bulk machines. The 'right first time' result grants the exact recipe coming from the laboratory in order to drastically reduce the corrections after dyeing and re-dyeing in bulk machines with a huge saving of time dedicated to a production batch and increase of the whole productivity of the dye house.

The system consists of an automatic dispensing machine (Dosorama W, WS or WSL machines), working with one or more robotised dyeing machines (Shakerama 4R/20, Turbodye 8R/20, Dyrama 8R/100, Dyrama 8R/200, or Dyrama 6R/500) able to work autonomously 24 hours a day, 7 days a week.

Dosorama W is the first multi-pipette machine for the solutions dispensing with volumetric system that totally prevents the problems of contamination. This dispensing machine is available in several models from 40 up to 500 bottles. Developed maintaining the patented multi-pipette dispensing system, Dosorama WS is equipped with an automatic solution maker that, by means of a robot, automatically restores the expired or finished solutions replacing them with the new ones. This dispensing machine can handle from 24 up to a maximum of 252 solutions and liquid chemicals.



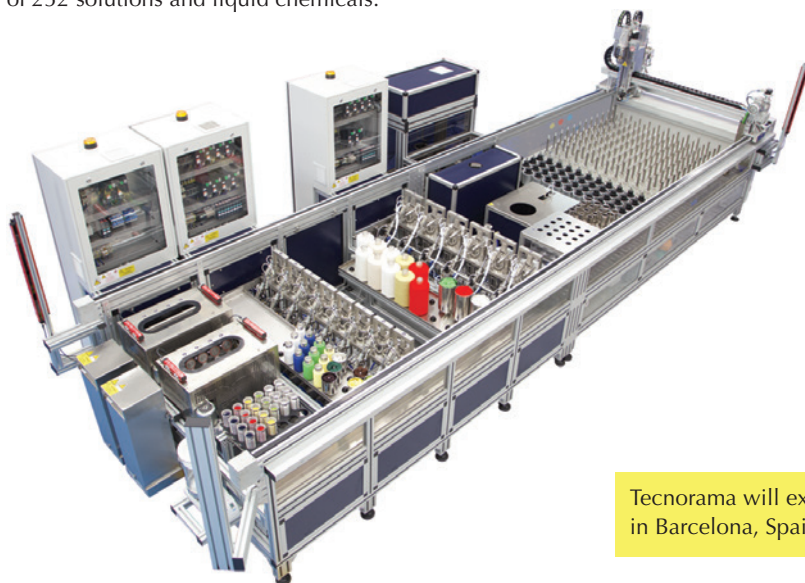
To get the utmost accuracy, Tecnorama developed the Dosorama WSL that joins bigger dispensing canisters to the standard equipments of Dosorama WS.

Several exhaust dyeing machines are available, according to the capacity and the bath circulation method:

- ▶ Shakerama 4R/20: from 10 up to 20 grams, with the sample "alternate shaking" in the dye-ing bath
- ▶ Turbodye 8R/20: from 5 up to 20 grams, with magnetic turbine, external/internal;
- ▶ Dyrama 8R/100: 50 to 100 grams, with reversible circulation pump, external/internal and internal/external



- ▶ Dyrama 8R/200: 100 to 200 grams, with reversible circulation pump, external/internal and internal/external
- ▶ Dyrama 6R/500: from 250 to 500 grams, with reversible circulation pump, external/internal and internal/external



Conceived and patented by Tecnorama, Dos&Dye is completely manufactured in Italy. It is built to work with all the dyestuffs and chemicals used in the textile dyeing industry. All the parts in contact with dyestuffs, chemicals and dyeing batches are made of stainless steel 316.

Thanks to the optimisation of production processes and to the overcoming of those limits inherent manual management of the laboratory, the Dos&Dye system reduces water and energy consumption for an environmental-friendly approach and for a considerable saving of time and money.

Tecnorama will exhibit in hall 2 booth B210 at ITMA 2019 in Barcelona, Spain from June 20-26.