

# Tecnorama: Develops and produces machinery for automatic dispensing of liquid and solid dyestuffs

Tecnorama develops and produces machinery and chemicals for laboratory and bulk production - automatic dissolving system with automatic delivery to the different users - full automation of laboratory and small production lots by the combination between automatic dispensing machines with special robotized dyeing machines able to dye yarn, flock, fabric, knitwear textile material. The company is firmly committed to offer innovative solutions to the market, to increase quality and process productivity at lower cost.

## Dosorama W

Dosorama W is volumetric dispensing system ideal for new millennium laboratory automation. With the introduction of the original stainless steel "multi-pipette" solution conceived by Tecnorama, all residual limits present in the classic single pipette volumetric system have been eliminated. Any additional cleaning of the pipettes are not necessary because each solution has its own pipette. For this reason a considerable increase of productivity can be done: 40% or more in front of the single pipette system.



Dosorama w

Another major technical benefit of this system is the total elimination of the eventual residual contamination of the different solutions each other.

It is possible to use specific pipettes to solve special requirements and different features of individual products like viscosity, quantity, accuracy, speed, and so on. An electronic scale can control the real quantities dispensed, in this way all dispensing performances can be recorded. This scale is important to do automatic self-calibration of each pipette to have always the system under control (check-up). The system is completed by the availability of one semi-automatic solution maker that can be used in combination with DOSORAMA W.

## Dos&Dye SPECTRODYE

The DOS&DYE® SPECTRODYE has been developed by TECNORAMA to help dye-house technicians to study and find the best dye combinations possible concerning quality, productivity and cost for each dye formula to be used in bulk production. With this system it is possible to study the technical features of each individual dyestuff and its behavior during the whole dyeing process.



Dos&Dye SPECTRODYE

In this way the color variations during the dyeing program are monitored and recorded step by step. The exhaustion of each single dyestuff is controlled during the variation of the pH, temperature, salinity, etc. in the dye-bath and are matched by a new and original optical device in combination with a spectrophotometer and controlled by an advanced management software. The main features of this system are given as under:

- ❖ Dispensing machine model DOSORAMA WP.
- ❖ Automatic dyeing machine with a robot for loading/unloading the samples from the dyeing machine to the parking station and vice-versa model DYRAMA SP 100.
- ❖ Special optical reading device connected to spectro-photometer.

The DOS&DYE® SPECTRODYE can work alone for a long time, 24 hours a day, seven days a week without any manual intervention: all data are recorded and can be studied and evaluated every time.

## Dosorama LS

Dosorama LS is a new automatic dispensing machine for micro-dispensing of dyestuff in powder or granulated form. This system can dispense with the accu-



Dosorama LS

racy of  $\pm 0.002$  g. and can be used when it small dispensing with high accuracy is required.

Silos containing dyestuffs are refilled pneumatically, this prevents any contact between the operator and the dyes during the refilling phase. An electronic scale controls the right weight during the dispensing and all the work cycle is controlled by computer. In combination with the Dosorama LS it is possible to use a special dissolving system that automatically dissolves and transfers the solutions directly to the dyeing machines.

## Dos&Dye 2000/6000

The DOS&DYE® 2000/6000 consists of two main machines and some accessories:

1. Machine for the automatic dispensing of both solid and liquid dyes and chemicals. Dissolving station and automatic transfer system, model DOSORAMA WSD.
2. One or more automatic and robotized dyeing machines for sampling model DYRAMA 4/R-2000/6000.

This system can dye yarn in packages of different sizes from 1 to 6 kg standard sizes, bigger sizes are also available on demand. Each DYRAMA 4/R-2000/6000 has a parking station with 36 positions. A robot can load/unload the yarn packages from the dyeing unit to the parking station and vice-versa.

Furthermore, each DYRAMA 4/R-2000/6000 has 4 individual autoclave dyeing units each of these can dye from 1 to 4 yarns packages.

The integration of the automatic dispensing machine model DOSORAMA WSD with one or more dyeing machines model DYRAMA 4/R-2000/6000 creates a fully automatic system that can work for many hours alone and without any manual intervention. Since it is fully automatic, the DOS&DYE® 2000/6000 can operate 24 hours a day and 7 days a week, including holidays, overcoming any productivity and economical problem.

Just in time - this is another big advantage by using the DOS&DYE® philosophy in the field of small batch, sampling and re-assortments. ♦