



TEXTILE  
TECH  
NOLOGY





The accurate monitoring of the dyeing process, the precision of the preparations, the repeatability of the recipes and the perfect traceability of the operations carried out are fundamental elements of an efficient working process, constant monitoring, and cost reduction. The need for a healthy and hygienic working environment, where contaminations and product handling are minimized, are also essential elements for a modern process.

FABRICS

YARNS

GARMENTS

FIBRES

TOP

FINISHING

CONTINUOUS

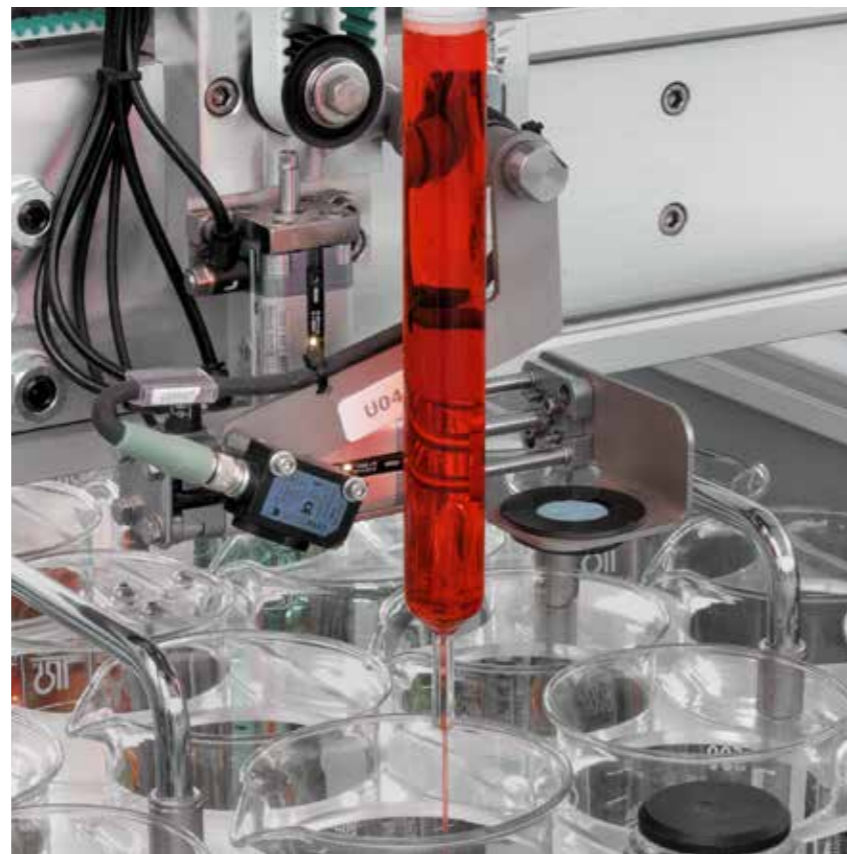
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## TEXTILE TECH NOLOGY

### LAWER'S MISSION

Lawer supplies systems that allow to completely automate the preparation process of dyestuffs and chemical products, starting from laboratory processing, up to the whole dyeing and finishing process.



### ADVANTAGES AND BENEFITS

#### accuracy

recipe integrity  
accuracy in every batch  
zero batch rejection

#### repeatability

less errors, less cost, higher  
quality of the finished product

#### traceability

100% traceability of each product

#### safety

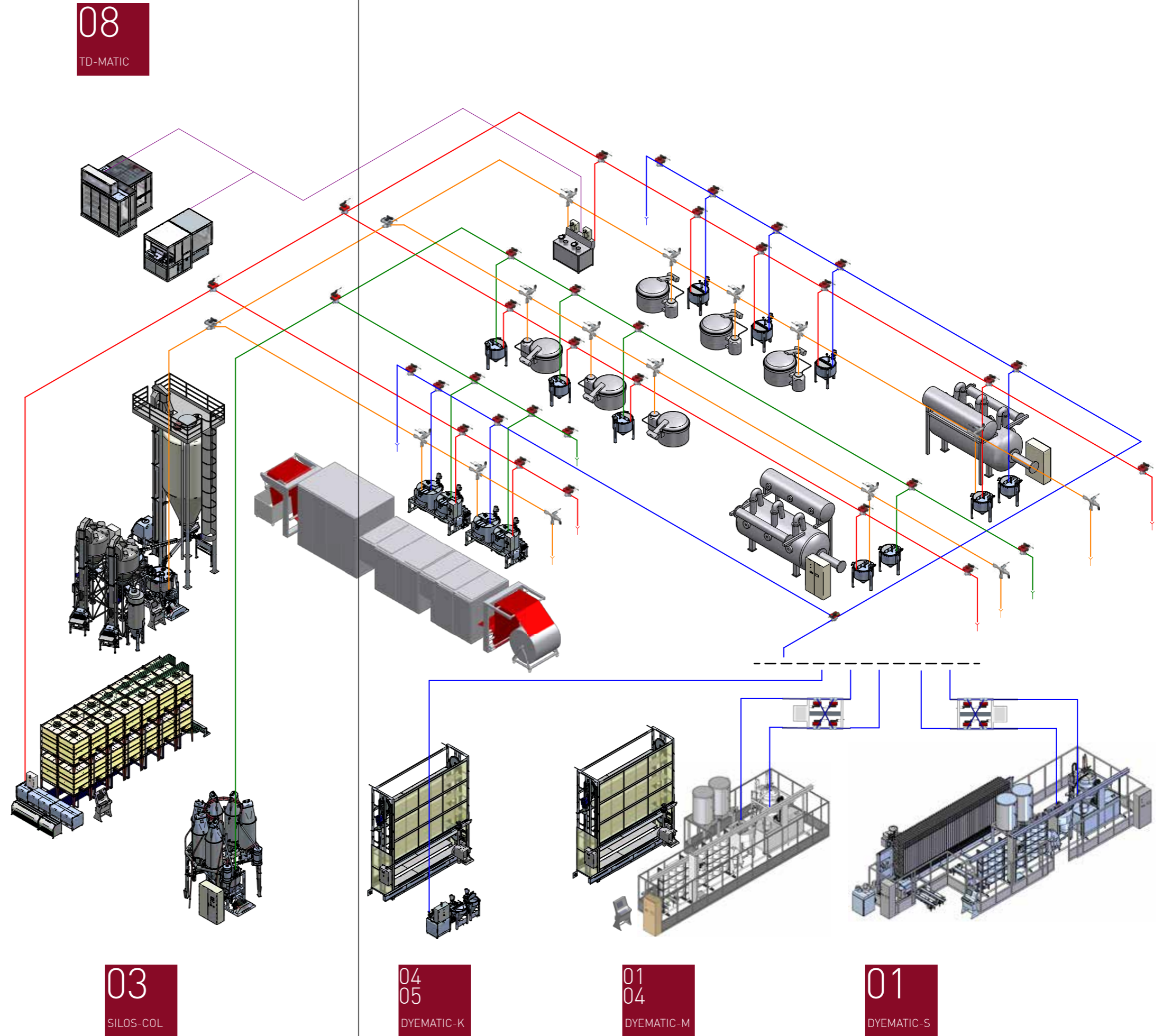
safe and hygienic working conditions  
dust free environment

#### monetary savings

labor cost reduction  
material savings



# GENERAL PRODUCTION



# DYEMATIC

## STORAGE

- / Independent PRFV storage silos 150 l
- / Stainless-steel silos 300 l

## WEIGHING

- / Weighing trolley with self-levelling scale support platform (Lauer patented)
- / Electronic scale 0.01 g resolution

## BUCKET STORAGE-HANDLING

- / Multi-level bucket storage
- / Stainless-steel buckets for recipe weighing and dissolving
- / Three axes (X-Y-Z) robotic device for bucket handling
- / Bucket rinsing and drying station

## DBS DISSOLVING STATION

- / Dissolving directly into the bucket

## DTS DISSOLVING STATION

- / Dissolving tank 450 l
- / 2 automatic arms for bucket loading-unloading

## MONO-PIPE DISPENSING LINE (LAUER TECHNOLOGY)

- / Direct dispensing to the dyeing machines with three-way valves
- / Lobe pump (Lauer patented) in stainless-steel
- / Stainless-steel AISI 316 l pipe
- / Stainless-steel AISI 316 l joints for the pipe connection
- / Automatic pipe rinsing



## DYEMATIC

modular system ensures a high level of automation, flexibility, and maximum efficiency in the weighing, handling, dissolving, and dispensing of powder dyes.

# SUPERCOLOR

## STORAGE

- / Independent PRFV storage silos 150 l
- / Stainless-steel silos 300 l
- / Anti-clogging device and dry air blowing system

## REFILL

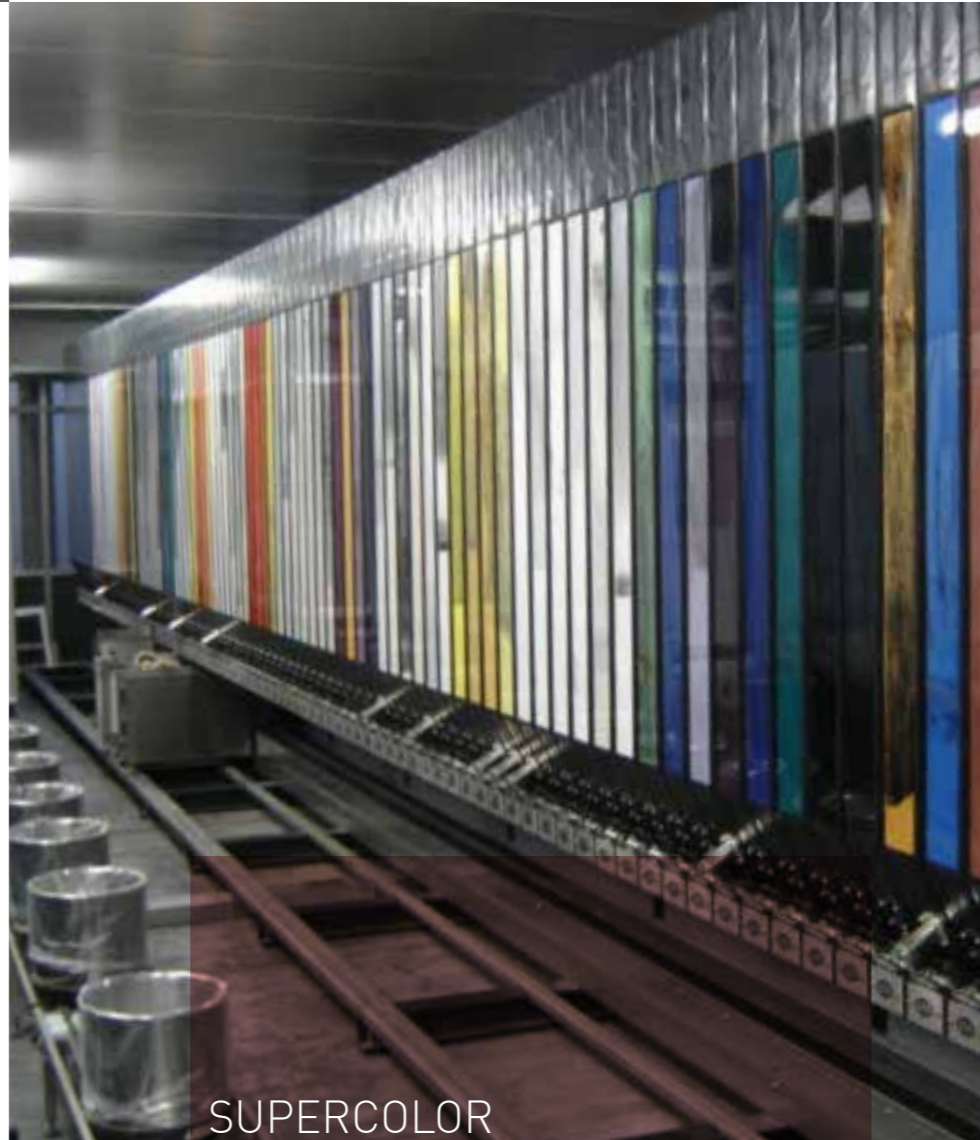
- / Vacuum pump for the product refill
- / Independent suction hoses
- / Bar-code cross check system
- / Auto-cleaning filter on each silo

## DOSING

- / Screw-vibration dosing system
- / Controlled flow by brushless motor
- / Drive motor on the weighing trolley

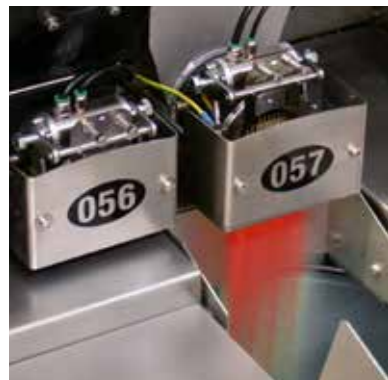
## WEIGHING TROLLEY

- / Weighing trolley with self-levelling scale support platform (Lawer patented)
- / Electronic scale 0.01 g resolution
- / Dust exhaust filter system



SUPERCOLOR

is a fully automatic weighing system, allowing safe and clean recipes preparation with total control of the results.



# SILOS-COL



SILOS-COL

the system allows the storage and weighing of bulk dyestuff and their dissolving with automatic dispensing into the dyeing machines.

## STORAGE-DOSING

- / Stainless-steel AISI 304 capacity 900 l
- / Dispensing screw in stainless-steel
- / A.C. motor for the dispensing speed control

## REFILL

- / Vacuum loading with maximum 2 load turbines for the simultaneous loading of two silos

## DISSOLVING TANKS

- / Stainless-steel tanks (450-1.000 l capacity) on 3 load cells
- / Safety cover
- / "HQ" internal mirror finish
- / Automatic tank rinsing
- / Recirculation-distribution centrifugal pump

## MONO-PIPE DISPENSING LINE (LAWER TECHNOLOGY)

- / Direct dispensing to the dye machines with three-way valves
- / Stainless-steel AISI 316 l pipes
- / Stainless-steel AISI 316 l joints for the pipe connection
- / Automatic pipe rinsing



# DOS CONTROL BA - MR



## DOS CONTROL

- / Selection of the recipe
- / List of products and weighing tolerance
- / Product control with bar-code reader
- / Product weighing to the pre-set tolerance
- / Validations and release of the identification label

## BA - DOWNDRAUGHT EXTRACTION TABLE

- / Working table
- / Powder suction system
- / Centrifugal extractor (floor or wall installation) (1000 m<sup>3</sup>/h 1,1 KW)

## MR ROTARY STORE

- / Configuration from 6 to 12 shelves
- / Shelf selection touch screen
- / Weighing trolley with dust extraction system
- / Double chamber filter system
- / Auto-search system for the automatic location of the powder (optional)



CHECK WEIGHT SYSTEM

facilitates recipe management, assisting the operator during the weighing process to control with precision every component of the recipe, to guarantee the traceability of the operation with subsequent recipe and inventory control.

# STK



STK

the system provides a simple, accurate, and completely safe powder dissolving operation. It ensures the strict control of the dye solution preparation of the dyeing results and the optimum hygiene in the workplace.

## DISSOLVING TANKS

- / Stainless-steel AISI 316 tanks
- / Safety automatic cover
- / "HQ" internal mirror finish
- / Automatic tank rinsing
- / Bar-code reader for the control and traceability of the recipe

## MONO-PIPE DISPENSING LINE (LAWER TECHNOLOGY)

- / Direct dispensing to the dye machines with three-way valves
- / Lobe pump (Lawer technology) in stainless-steel
- / Stainless-steel AISI 316 l pipe
- / Stainless-steel AISI 316 l joints for the pipe connection
- / Automatic pipe rinsing

## CONFIGURATION

- / 5-35-70-140-400-1000 l capacity tanks
- / 1-2 or 3 tanks in the same group
- / Possibility to cross more groups



## DOS-CHEM

**DISPENSING STATION**

- / Stainless-steel AISI 304 station with protection panels
- / Modular valve manifold for liquid dispensing
- / Three-way dosing valves in stainless-steel
- / Valve check-control device
- / High resolution magnetic-inductive flowmeter
- / Stainless-steel lobe pump with high pressure and delivery rate (Lauer technology)
- / Minimum-maximum levels control and refilling stations

**MONO-PIPE DISPENSING LINE (LAUER TECHNOLOGY)**

- / Direct dispensing to the dye machines with three-way valves
- / Stainless-steel AISI 316 l pipe
- / Stainless-steel AISI 316 l joints for the pipe connection
- / Automatic pipe rinsing



DOS-CHEM

the system provides a fast, accurate, and completely safe dispensing operation for liquid chemicals and auxiliary products.



# SILOS-DOS

## STORAGE

- / Stainless-steel, PE, and PRFV silos
- / Hydrosulphite drum or tote-bin
- / Dispensing screw in stainless-steel
- / A.C. motor for the dispensing speed control

## REFILL

- / Bags or big bags bucket elevator refilling system
- / Bags or big bags rotary valve refilling system
- / Truck refilling connection

## DISSOLVING TANKS

- / Stainless-steel tanks (450-1.000 l capacity) on 3 load cells
- / Safety cover
- / "HQ" internal mirror finish
- / Automatic tank rinsing
- / Recirculation-distribution pump

## MONO-PIPE DISPENSING LINE (LAWER TECHNOLOGY)

- / Direct dispensing to the dye machines with three-way valves
- / Stainless-steel AISI 316 l pipe
- / Stainless-steel AISI 316 l joints for the pipe connection
- / Automatic pipe rinsing



## SILOS-DOS

the system allows the storage and weighing of bulk powder chemicals and their dissolving in saturated or oversaturated solutions with automatic dispensing into the dyeing machines without alteration of the correct liquor ratio.



# TD-MATIC

## STORAGE

/ Multi-level rack for 82 mini-silos  
/ Mini-silos 2,7 l capacity with stainless steel dosing screw  
/ Three axes (X-Y-Z) robotic arm for mini-silos handling

## BEAKER PARKING

/ Multi-level parking rack for 36 beakers  
/ Stainless steel beakers for recipe weighing-dissolving  
/ Three axes (X-Y-Z) robotic arm for beakers handling

## WEIGHING AND DISSOLVING STATIONS

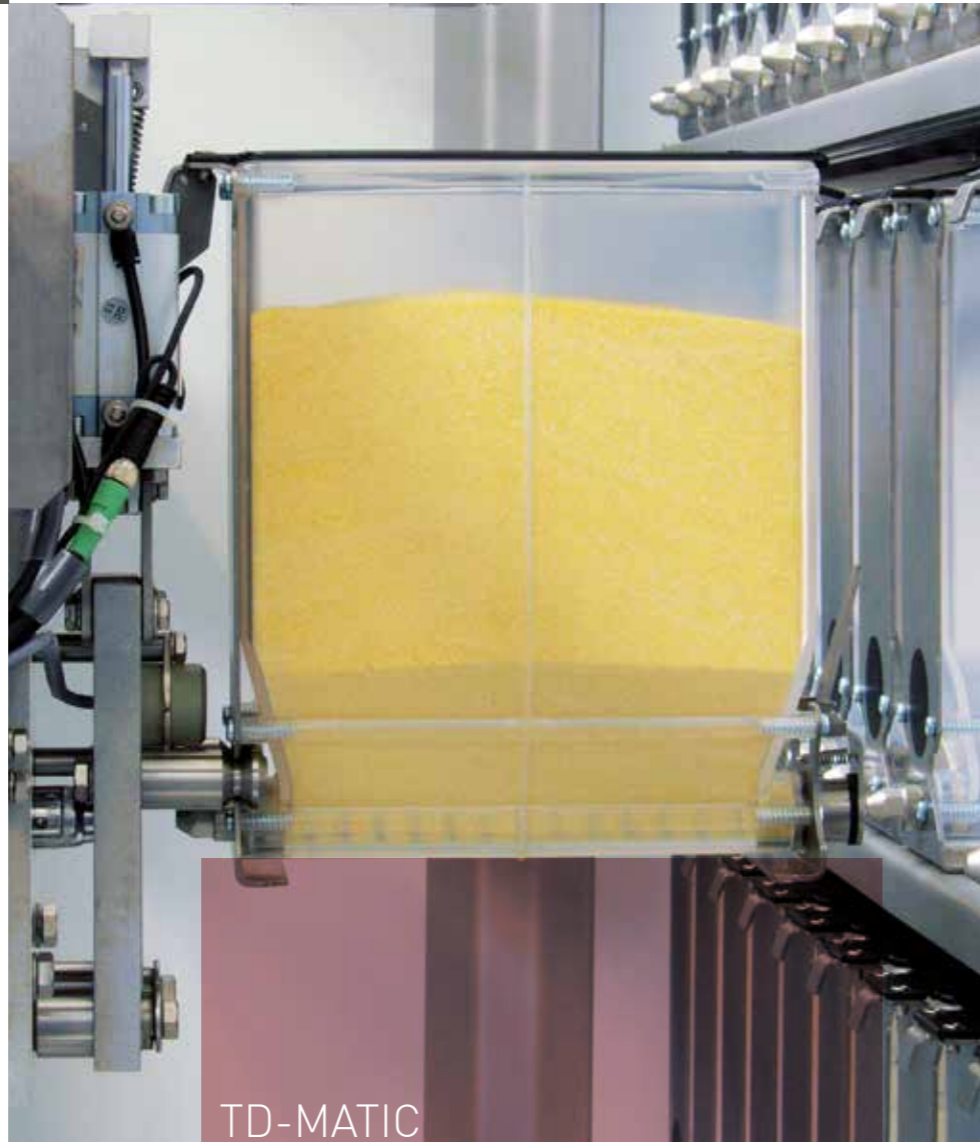
/ Weighing station with electronic scale res. 0.001 g  
/ Dissolving station (max 3 units)  
/ Dispensing line (optional)

## STANDARD SOLUTION PREPARATION

/ Electronic scale res. 0.01 g for solution preparation  
/ Dispensing line to laboratory system mod. TD-LAB

## BEAKERS RINSING-DRYING STATION

/ Automatic beaker rinsing station  
/ Automatic beaker drying station

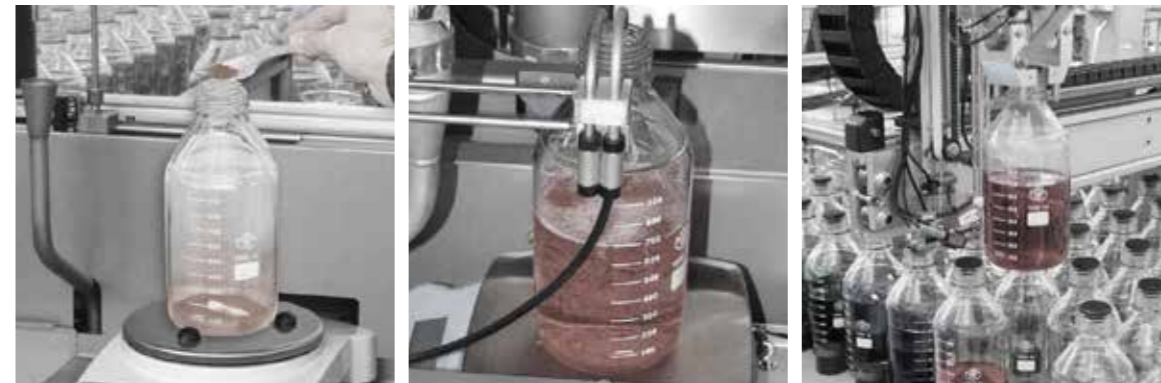


TD-MATIC

the automatic powder dyestuff weighing and dissolving system automatically weighs and dissolves small quantities of powder dyestuff, preparing liquid solutions to be dispensed into laboratory, sampling, and production dyeing machines.



## TD-LAB

**SOLUTION MAKER**

- / Integrated weighing station and solution maker
- / Two electronic scales 0.01 g resolution
- / Automatic water refill system
- / Electrical water heater

**BOTTLES MANAGEMENT**

- / Automatic bottles handling
- / Automatic bottles capping-uncapping
- / Empty-expired solutions control
- / Bottles loading-unloading
- / Automatic bottles and cap rinsing - drying station

**DISPENSING IN BEAKERS**

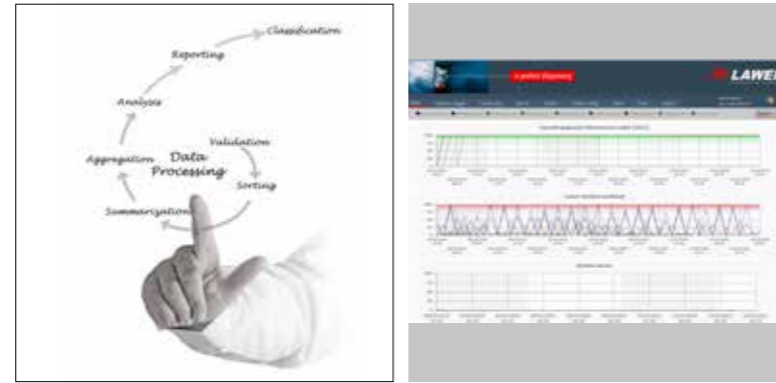
- / Glass mono pipette 55 ml
- / 4 stainless- steel trays (6 beakers per tray)
- / Adaptors for special beakers
- / 24 glass beakers
- / Automatic pipette rinsing-drying

**DISPENSING PIPELINE INTO SAMPLE DYEING MACHINE (OPTIONAL)**

## TD-LAB

the system allows preparation, dispensing, and distribution of the dye solutions and chemicals used in laboratory and/or sample dyeing machines.

## LEIMS.i



## REPORT

/ General efficiency index (OEE) devices: for each station production efficiency is indicated for the last four working shifts.

/ Workload of the Lawer stations: for each station the work activity percentage refers to the previous 24 hours. The value 100% indicates station over-load, in the last 24 hours it has worked non-stop.

/ Dispensed products: in the graphic representations the displays show the total number of dispensing (powders + liquids) calls carried out by the LEIMS.i stations.

/ Executed transfers: in the graphic representation the display shows the total number of transfers to the machine (solutions and / or chemicals and auxiliaries) that have been executed by the LEIMS.i stations.

/ System alarms: the diagram displays the alarms or faults occurred in the last 24 hours.

## INTERFACES

/ The LEIMS.i system is predisposed to be interfaced with management and production control systems, by using various communications protocols.

## DDA (DISPENSING DATA AGGREGATION)

/ The system registers every operator intervention to the machines and interfaces to provide detailed web-accessible reporting.



LEIMS.i

is a software package that manages a whole Lawer plant. This tool allows connecting management and program systems, to import production orders and assign them to the machines of the plant.

## LAWER'S WORLD

- Lawer Italy
- Lawer USA
- Lawer Turkey
- Lawer China



## After-Sale Assistance

Short time in the projecting, manufacture and installation of the systems. A prompt after-sales service, able to respond to every request and solve problems with qualified technicians, 4 Service Centers, a Web on-line remote assistance. Support services program designed to optimize the interventions and reduce costs.

Textile Technology  
Environmental Friendly

Lawer is one of the first companies in Italy to have joined "Sustainable Technologies", a project promoted by ACIMIT (Association of Italian Machinery Manufacturers). The associated companies to ACIMIT have to supply equipment and technologies that target to the centre of the manufacturer cycle the reduction of power, water and chemical materials for a more responsible production process and careful to consumption. The energy/environmental performances are guaranteed by a 'green plate' fitted on the systems.

Lawer's engagement throughout "Sustainable Technologies" do not stop here. The company is equipped with photovoltaic panels to self-produce and use renewable energy and go on in the research of productive solutions addressed to environmental respect.



Lawer provides products, solutions and services to the industry, to increase the reliability, safety and efficiency of dosing and dispensing operations for powders and liquids.

Our core market position, that of a leading global product and solution provider, together with our aim to set strong standards in all areas of our business, are both reflected in our company motto: "The True Accuracy".

We have more than 50 years of experience in supporting the industry to ensure the highest quality of the products. Our ability to do this is based on the "Italian Quality" of our products and services, combined with our continuous investment in developing leading technology. As a result, more than 2.500 Customers put their trust in our company, having allowed us to supply them with thousands of systems and solutions during our long history.

Via our world-wide presence, we stand beside our Customers around the globe and through the whole life cycle of our products, from the assistance with selecting the right equipment, design-in support, installation and after-sale service.

In more than 16.000 m2, 150 employees design, test and produce excellent systems, which are sold worldwide with the collaboration of over 50 sales agencies, installed and assisted as well as from our Italian centre, also from our after-sales offices located in China, Turkey and USA.

Lawer  
Since 1970  
the Italian Quality  
for the  
True Accuracy



## PRODUCT PORTFOLIO

Automatic powder dosing systems with:

- / Single scale technology
- / Double scale technology
- / Multi scale technology

Automatic liquid dispensing systems

- / Volumetric and gravimetric

Laboratory dosing and dispensing systems

## APPLICATIONS



Textile

Paint

Food

Color Master Batch

Technical rubber

Tires

Cosmetic



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