



DANITECH

T H E R E I S N O B E T T E R W A Y T O D Y E



FROM LABORATORY TO PRODUCTION  
PERFECT REPRODUCIBILITY  
SINGLE RECIPE



DANITECH

Danitech came from the desire of a team of technicians with a specialization in study, design and construction of textile finishing machines, gained in leading companies of the textile machinery sector, to offer a high technology product line to the world textile market, which provide the textile finishing companies with the possibility to face the challenges of an increasingly competitive market with the necessary and essential attention to the environmental impact. Danitech products designing and construction is entirely made in Italy at our factory in Senago (Milan), Viale Europa 4B/C.



# The Danitech project

## from laboratory *to production*

The Danitech project offers the first real integrated solution for laboratory, sampling and production with the aim of obtaining the complete perfect inter-machines reproducibility, the use of a single recipe and single process with the consequent result of the “right first time”.

### LABORATORY



#### STUART

Laboratory machine with nominal loading capacity from 5 to 10 kilos.

Final liquor ratio  
(cotton knit basis): 1:4 – 1:5

### SAMPLING



#### DANISAMPLE

Sampling machine with 25, 50 and 100 kilos nominal loading capacity

Final liquor ratio  
(cotton knit basis): 1:4 – 1:5

### PRODUCTION



#### DANIFLOW

Production machine  
(available in woven, knitted or terry towelling version).

Final liquor ratio  
(on cotton knit basis): 1:3,8

## Stuart

Discontinuous high temperature/pressure rope dyeing machines with nominal loading capacity from 5 to 10 kilos load. It's the first and unique laboratory machine available on the market with consistent final liquor ratio 1:4 - 1:5 regardless of the fabric load (from

5 to 10 kilos). Stuart faithfully reproduces the sampling and production machines working conditions, allowing the use of the same liquor ratios and the same working cycles used in the sampling machines and in the production machines later.



Stuart

The machine is equipped with the same functions and technical devices as the sampling and production machines with the huge advantage of:

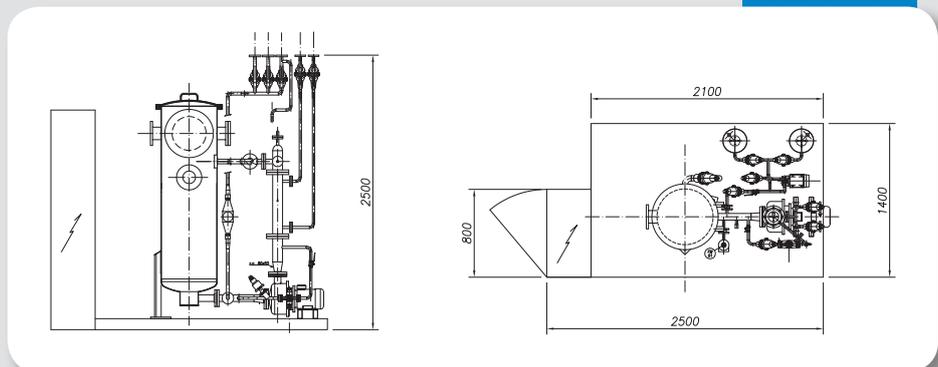
- realizing/studying new formulations and new production cycles directly in the laboratory
- reproduce already existing production formulas and optimized them in order to reduce manufacturing times and energy consumption
- allowing the use of the formula/cycle prepared in the laboratory for the mass production.

### Stuart – machine configuration and optionals

#### Optionals

- PH reading and control system
- Reading system and automatic conductivity control
- Kit of filters and steam trap

#### Dimensions



# Sampling

# Danisample

## Danisample

High temperature/pressure sampling machine for knitted, woven and terry towels fabrics.

The peculiarity of the Danisample model is the extreme versatility of use and its great recipes reproducibility with the production machines, feature in all Danitech product line. Danisample is available in different configurations and different loading capacities from 25 kilos, 50 kilos and 100 kilos.



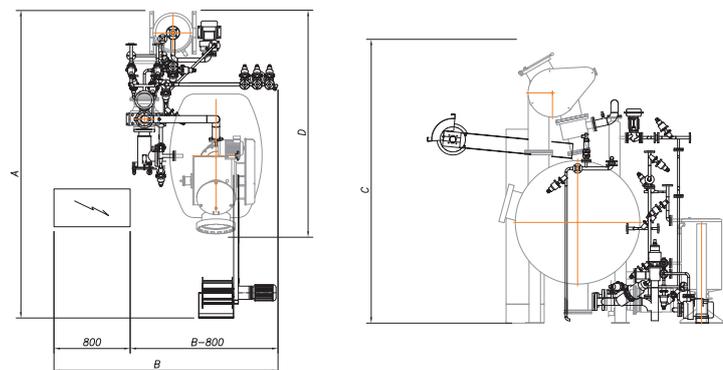
Danisample

## Danisample – machine configuration and options

Optional:

- Additional chemicals and dyestuff tank
- IWS - Intelligent washing System
- ECS 2 - Extended coupling system (combination of 2 machines)
- ECS 3 - Extended coupling system (combination of 3 machines)
- PH reading and controlling system
- Reading system and automatic conductivity control
- Kit of filters and steam trap
- Special brine filling valve

### Dimensions



	A	B	C	D
DS HT25	3250	2350	3000	2400
DS HT50	3350	2350	3150	2500
DS HT100	3500	2550	3350	2900



# Production

# Daniflow

## Daniflow

Daniflow is an high temperature/pressure rope dyeing machine. Its main features are the operational simplicity, the high level of automation, the monitoring of all the process phases and the extreme versatility/flexibility.

Daniflow ensures the lowest energy consumption with the consequent reduction of the environmental impact. The liquor uniformity contained into the dyeing machine is the primary aim

of any exhaust dyeing machine and in that Daniflow encloses high level technical solutions which provide the best dyeing results while ensuring a lower energy consumption and unrivaled performances compared with any other machine available on the market.

Daniflow is available with different load capacities and in special versions for knit, woven and Terry towels.



Daniflow

## PERFORMANCES

100% cotton bases

**Process description:** Bleaching/Reactive Dyeing/ Washing/Soaping

Loading and unloading times included

	<b>Water:</b> Lts/kg fabric	<b>Steam:</b> Kg steam/Kg fabric	<b>Power:</b> Kwh/kg fabric	<b>Process Time</b>
Light Shade	20/22	1,6	0,116	3 h 40 min
Medium Shade	25/26	1,8	0,127	4 h
Dark Shade	28/32	2,1	0,143	4 h 30 min
Special Shade	35/36	2,5	0,151	4 h 45 min

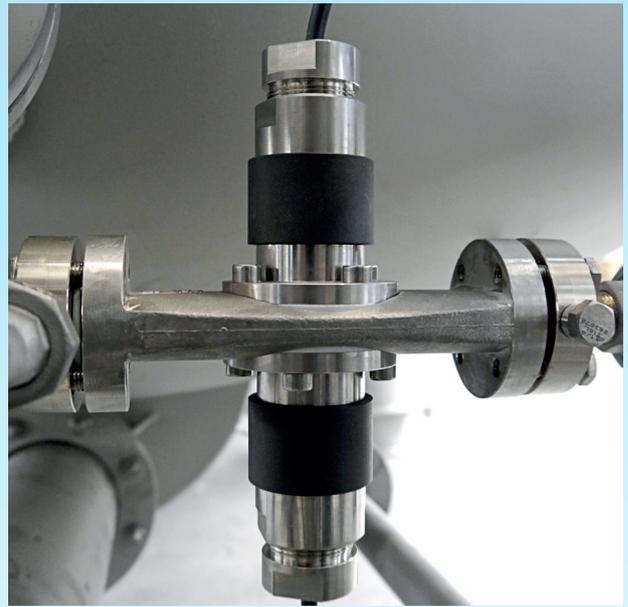


## Daniflow technical features

### IWS – INTELLIGENT WASHING SYSTEM

IWS is a liquor analysis sensor inside the machine that allows to know the condition of the liquor at any time thanks to the innovative hydraulic solutions of the Daniflow and, by an accurate control of the liquor level, the Daniflow works at extremely low water levels.

Thanks to the IWS system the Daniflow assures an automatic process management by the control system, optimizing all the washing, soaping and rinsing stages in accordance with the quantity of fabric, the recipe, the dyestuff trichromies and the standard of fabric fastness required by the customer.

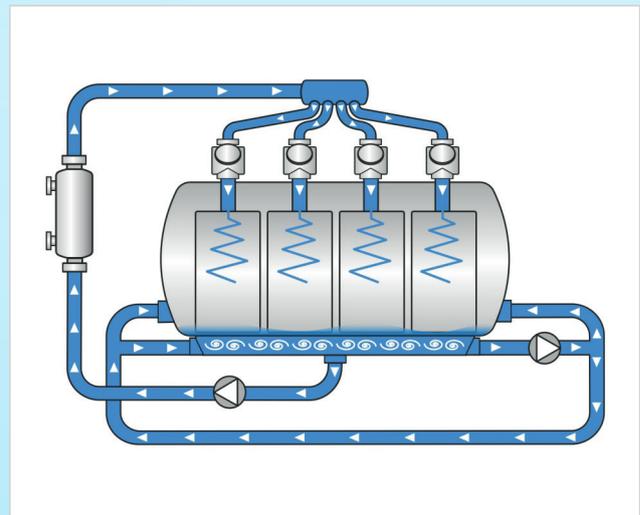


### LIQUOR MIXING SYSTEM

The mixing of bath is one of the main aspects in order to obtain a fast and uniform dyeing, particularly related to the dyestuff and chemical products dosing.

Daniflow has a mixing system that, with the help of an auxiliary circulation pump, intervenes in all the points of the machine.

Pumps aspiration and an appropriate piping are spread over all the lower part of the machine so as to avoid dangerous liquor localizations.



technical features



## Daniflow technical features

### INTERNAL REEL WITH DOUBLE SUPPORT

The double support Daniflow's internal reel ensures greater mechanical stability and, as a consequence, a longer durability of its components, such as mechanical seals and bearings. A rubber profiles quick change system, the automatic lubrication system and a cleaning system complete the turret.



### MAIN CIRCULATION PUMP

The in-line pump with its transmission elastic joint offers a better mechanical stability and a longer bearings durability and mechanical seal. Moreover, thanks to the elastic joint, the pump maintenance today is extremely easier.



### PCS - PROCESS CONTROL SYSTEM

The PCS system allows the user to minimize the parameters setting operations.

Thanks to a particular software developed in Danitech, all the machine parameters, like pump speed, liquor ratio, fabrics absorption, fabric lap time, variable nozzle position, etc. are automatically managed by the PCS system, ensuring in that way a perfect reproducibility of the process and making the machine User-friendly.



### ECS - EXTENDED COUPLING SYSTEM

Innovative coupling system which offers, a part from the classic coupling system between machines with the same nominal load capacity, the possibility of coupling also machines with different load capacity. The ecs ECS system considerably increases the machine production versatility and, as a result, optimizes the energetic consumption.



technical features

# Daniflow technical features

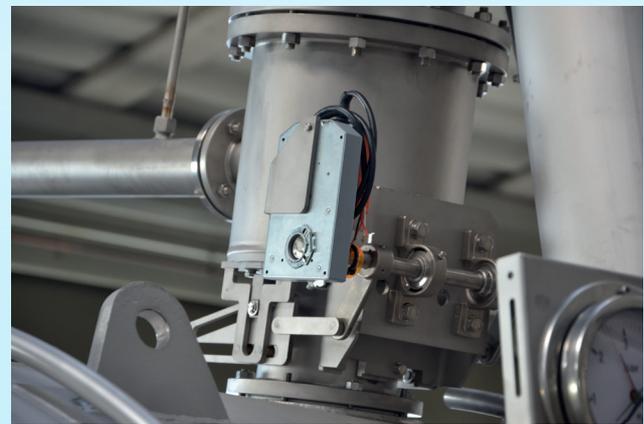
## BATH DISTRIBUTION SYSTEM (PATENT PENDING)

The new bath distribution system (patent pending) ensures the same flow delivery to each machine nozzle. Inside the collector there is a special diffuser which provides with a perfect flows division proportionally to the nozzle number.



## IVN – VARIABLE NOZZLE

The variable nozzle offers the possibility of working without problems a wide range of fabrics, along with the internal PLAITERS SYSTEM and the special structure of the internal basket which make Daniflow an extremely flexible and easy-to-use machine.



## CHEMICALS AND DYESTUFF SIDE TANK

Daniflow is provided together with a standard configuration with two independent chemicals tank comprehensive of:

- Dosing pump
- Sensor level (pressostat)
- Filters
- Rapid powder dissolver system
- Recirculation system
- Linear and progressive dosing system
- Indirect heating coil
- Programmable temperature



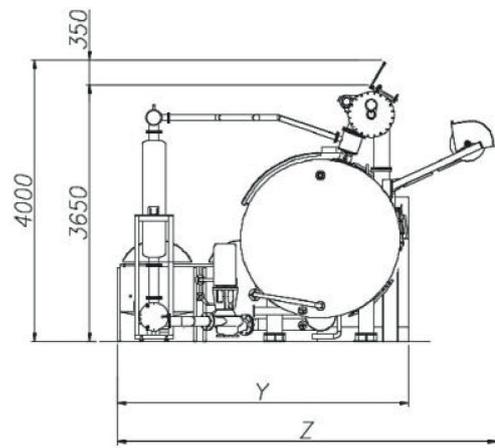
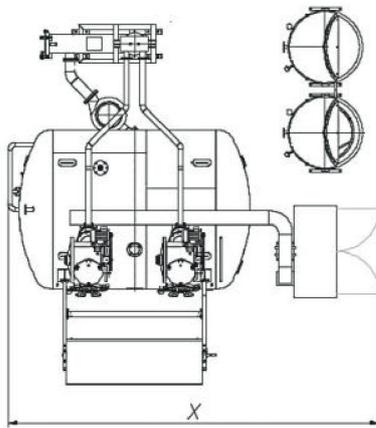
technical features

# Optionals

The Daniflow machine can be equipped with the following optional devices on demand:

- Additional chemicals and dyestuff tank
- FAP - Self cleaning filter
- IWS - Intelligent washing System
- ECS 2 - Extended coupling system (2 machines coupling system)
- ECS 3 - Extended coupling system (3 machines coupling system)
- Ph reading and controlling system
- Automatic conductivity reading and controlling system
- Reading system and automatic conductivity control
- Condensate drains kit and filters
- Special brine filling valve
- BPT - Bath Preparation Tank
- Condensate drains kit and filters for BPT

# Dimensions



OVERALL DIMENSION	TYPE					
	DF HT1 200kg	DF HT2 400kg	DF HT3 600kg	DF HT4 800kg	DF HT5 1000kg	DF HT6 1200kg
<b>X</b>	4000	5000	6000	7000	8000	9000
<b>Y</b>	4100	4200	4300	4300	4500	4500
<b>Z</b>	5250	5350	5450	5450	5650	5650

OVERALL DIMENSION	TYPE					
	DF HT1 250kg	DF HT2 500kg	DF HT3 750kg	DF HT4 1000kg	DF HT5 1250kg	DF HT6 1500kg
<b>X</b>	4000	5250	6500	7750	9000	10250
<b>Y</b>	4100	4200	4300	4300	4500	4500
<b>Z</b>	5250	5350	5450	5450	5650	5650

OVERALL DIMENSION	TYPE					
	DF HT1 300kg	DF HT2 600kg	DF HT3 900kg	DF HT4 1200kg	DF HT5 1500kg	DF HT6 1800kg
<b>X</b>	4000	5300	6650	8200	9600	11100
<b>Y</b>	4100	4200	4300	4300	4500	4600
<b>Z</b>	5250	5350	5450	5450	5650	5750

OVERALL DIMENSION	TYPE				
	DF HT1 400kg	DF HT2 800kg	DF HT3 1200kg	DF HT4 1600kg	DF HT5 2400kg
<b>X</b>	4250	6200	7750	9800	13950
<b>Y</b>	4100	4200	4300	4700	4700
<b>Z</b>	5250	5350	5450	5850	5850

# Complementary products

## DOUBLE AND TRIPLE ROPE SEPARATOR

Today, double and triple rope processes are an absolute prerogative for the best performance maintenance of the dyeing machines. Danitech offers two different technical solutions for the ropes separation and for their preparation to the finishings:

- 1 - Separation rings for double rope installed in proximity of the unloading reel
- 2 - ROPE SEPARATOR: complementary machine for the separation of the double or triple rope processed batches



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