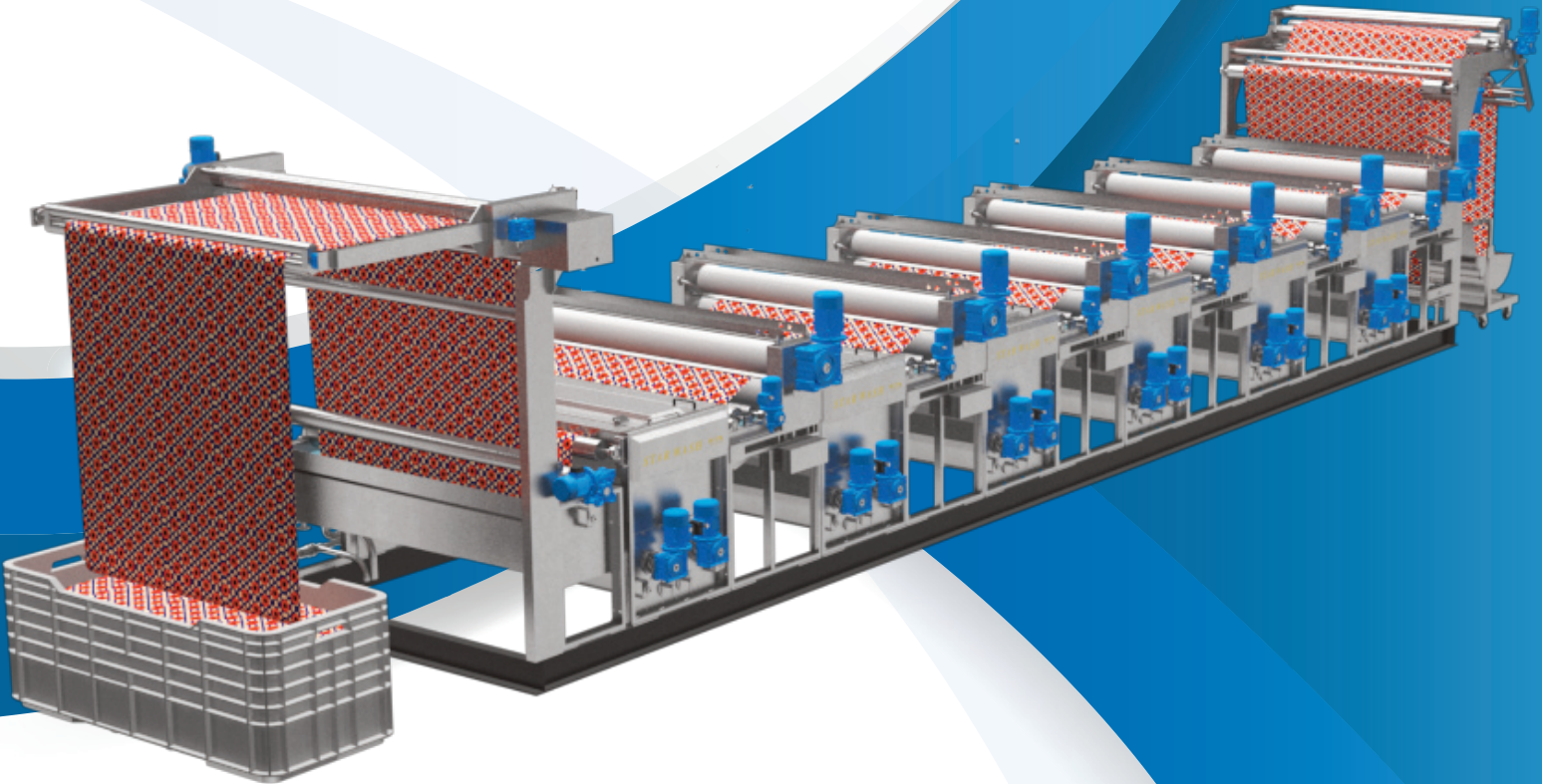


# MCS

DYEING & FINISHING MACHINERY



## STARWASH

OPEN WIDTH WASHING RANGE



# OUR HISTORY

DYEING & FINISHING MACHINERY

**MCS**

MCS & TERMO INNOVATION ZONE

**BLUE**  
AREA

COMMISSION ECO-DYEHOUSE

**EUROPIZZI**

AUTOMATION & SOFTWARE

**Termo**  
elettronica



**mcsgroup.it**  
Bergamo - Italy

member of  
**ACIAIT**  
ITALIAN TEXTILE MACHINERY

MCS spa, since 1963, develops, manufactures and installs discontinuous dyeing machines and washing & preparation lines

## 2023 ITMA - Milan

### MCS exhibits:

- Multiwash-M,
- Comby Jigger-C4,
- Chronoflow,
- Softflow-18

## 2019 ITMA - Barcellona

### MCS exhibits:

- Lavaprint Next,
- Dynamica Sprint,
- Mini Jigger 98,

### MCS presents:

- C4 Comby Jigger 143;
- Softflow 18-HT.

## 2017

### MCS presents:

- Mini Jigger 98.

## 2015 ITMA - Milan

### MCS exhibits:

- Multiwash,
- Dynamica Sprint,
- Starwash FS,
- Termpowder XP,
- Texmanager XP,
- Termochem XP.

## 2014 ITMA - Shanghai

### MCS exhibits:

- Starwash Fast Scouring.

## 2013

MCS celebrate their 50 th anniversary

## 2011 ITMA - Barcellona

### MCS exhibits:

- Dynamica,
- Star Wash,
- Comby Jigger,
- Supervisor Texmanager.

## 2009

### MCS presents:

- Italice.

## 2008

MCS Re-design of all high and low temperature Jigger models.

## 2007 ITMA - Munich

### MCS exhibits:

- Universal Dyeing,
- First Vento,
- Tumbler Mistral,
- VDA.

## 2005 IKME - Milan

### MCS exhibits:

- Universal Dyeng, VDA.

## 2003 ITMA - Birmingham

### MCS exhibits:

- Multiflow Superior,
- Ecoturbo Beam Dyeing Machine.

## 2000

MCS acquires 100% of Termoelettronica ownership.

## 1999 ITMA - Paris

### MCS exhibits:

- Multiflow,
- Softflow 100 Evolution,
- Comby jigger electronic.

## 1995 ITMA - Milan

### MCS exhibits:

- Softflow,
- Long Horn,
- Pumex

## 1991 ITMA - Hannover

### MCS exhibits:

- Tornado Tumbler,
- Maxi & Mid jiggers,
- Lavaprint.

## 1987 ITMA - Paris

### MCS exhibits: Pandora.

## 1983 ITMA - Milan

### MCS exhibits:

- Tubular mercerizer MT26,
- Softflow-82 LT/HT,
- Flow/jet OF83,
- Comby Jigger HT,
- WR rope washing machine.

## 1980

Europea activity begins, group dyeing and resining company.

## 1979 ITMA - Hannover

### MCS exhibits:

- Jet HT,
- Overflow MO/80 LT,
- MRS65.

## 1974

MCS begins the design and development of the open width lines.

## 1971 ITMA - Paris

### MCS exhibits:

MCS exhibits the first low temperature jet model.

## 1968

Europizzi begins its activity

## 1967

MCS manufactures the first low temperature rope dyeing machine.

## 1964

MCS begins its activity.

## 1963

Gino Chiappini, Angelo Cagnazzo, founding MCS. Gino Chiappini is the Chairman of the Board.



Starwash è l'innovativo box di lavaggio in largo MCS. Modulare e compatto permette di processare, tessuti sia a maglia che a trama-catena, grazie al sistema brevettato: OVERFLOW & BUBBLE SYSTEM

Il trasporto del tessuto avviene attraverso due grandi tamburi motorizzati interni di grosse dimensioni, tre cilindri di rinvio sui quali sono montate delle celle di carico ed un foulard di spremitura.

Il ricircolo interno del bagno forzato permettono un grande impatto lavante ed una delicatezza sulle fibre più sensibili. È un lavaggio ideale per fibre sia sintetiche che naturali, sia per lavaggi dopo stampa tradizionale che ink-jet, per lavaggi e fissazione della lana, oppure per lavaggi dopo candeggio e/o mercerizzo.

Es un lavado ideal tanto para fibras sintéticas como naturales, tanto para lavado después de la impresión tradicional y digital, para lavado y fijación de lana, como para lavado después del blanqueo y/o mercerizado.

**Starwash is the innovative MCS wide washing box.**

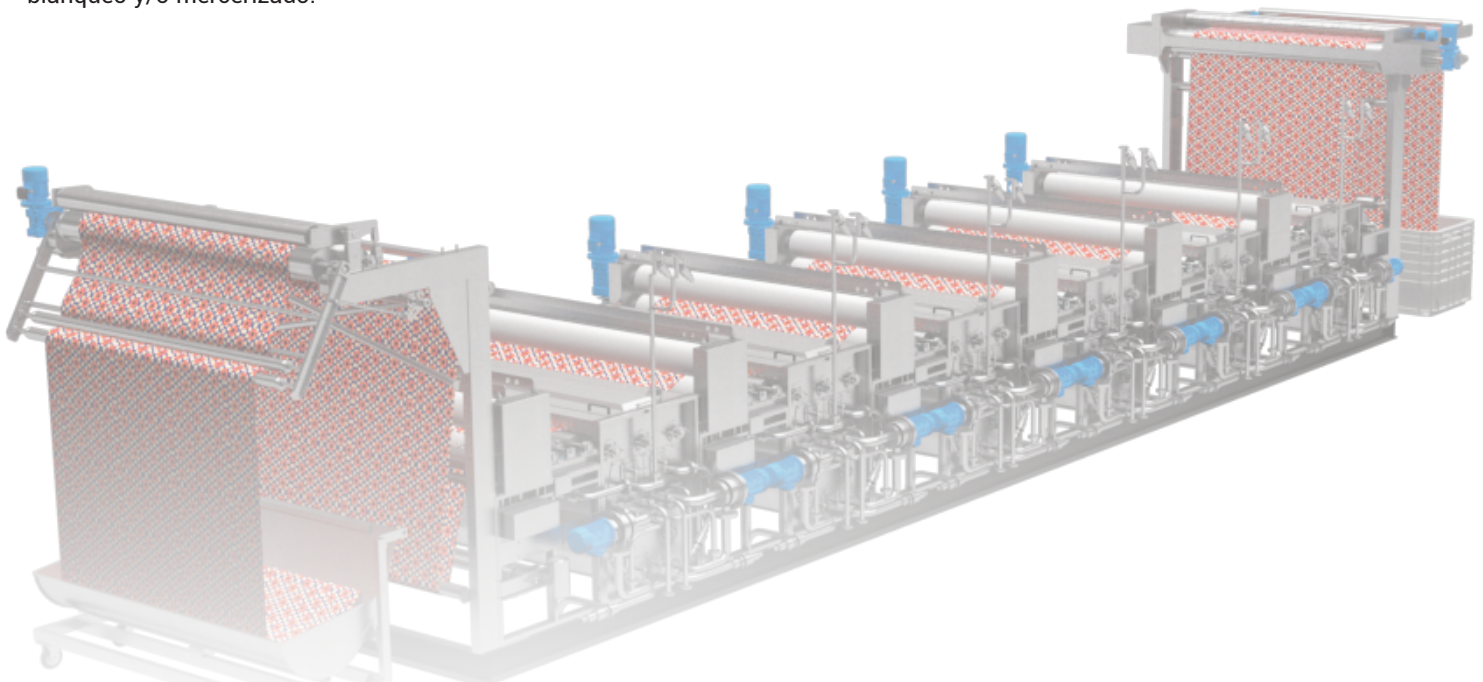
Modular and compact, it allows to process fabrics, both mesh and chain-weave, thanks to the patented system: OVERFLOW & BUBBLE SYSTEM

The fabric is transported through two large internal motorized drums of large dimensions, three return cylinders on which are mounted load cells and a squeezing scarf.

The internal recirculation of the forced bath allows a great washing impact and a delicacy on the most sensitive fibers. It is an ideal wash for both synthetic and natural fibres, both for washing after traditional printing and ink-jet, for washing and fixing of wool, or for washing after bleaching and/or mercerizing.

**Starwash is entirely engineered and built in MCS.**

Each new model is tested and exhibited, in INNOVATIVE BLUE AREA integrated in the MCS Group dyeing plant.



### HISTORIA DE LAS LÍNEAS EN CONTINUO MCS

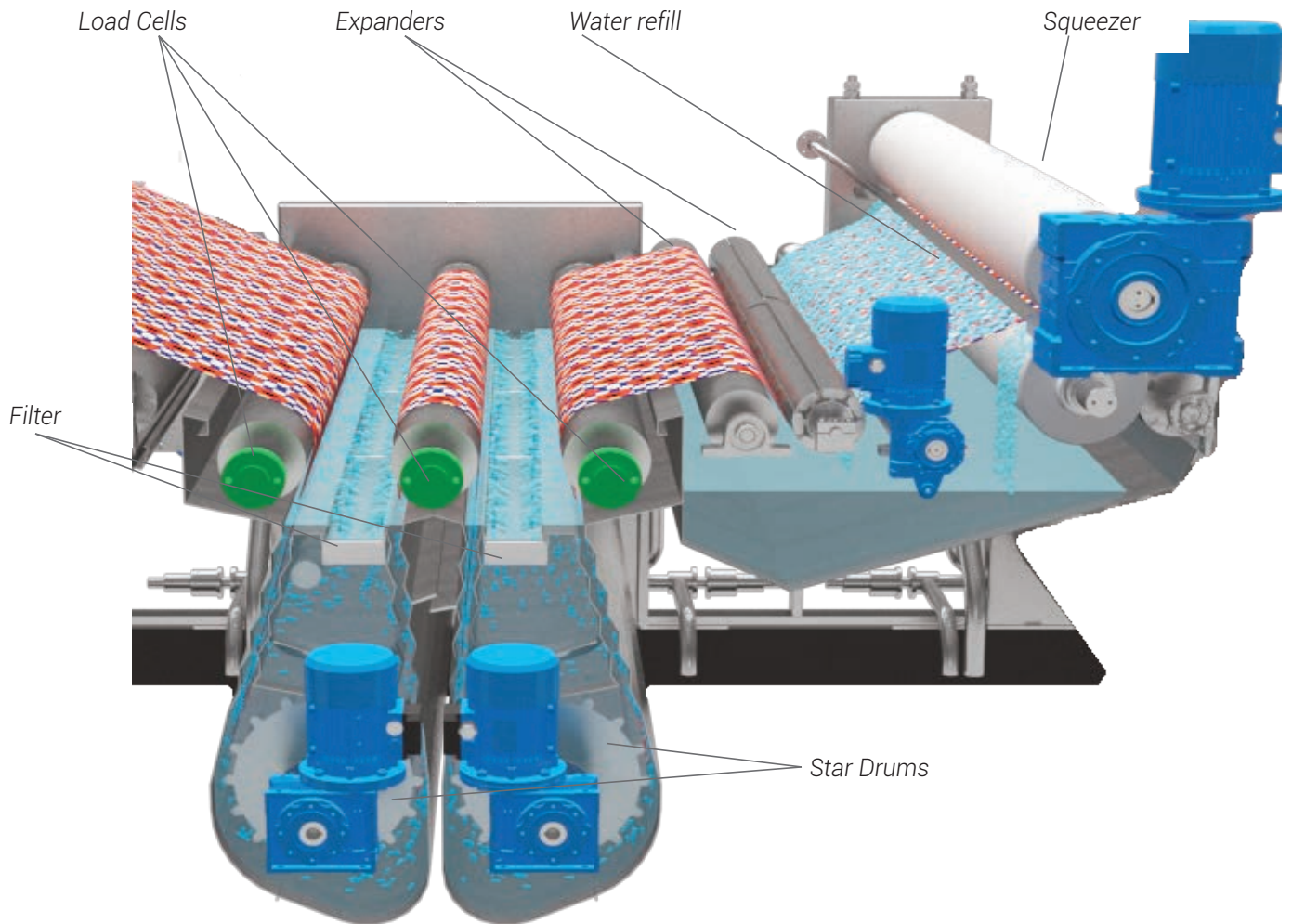
- 1974 MCS inicia el diseño y desarrollo de las líneas de lavado
- 1983 ITMA - Milano: expone la primera gama para el lavado de cuerda WR
- 1991 ITMA - Hannover: MCS expone la primera gama de lavados combinados LAVAPRINT
- 2011 ITMA - Barcellona: MCS expone la gama de lavado de tambor STARWASH
- 2015 ITMA - Milano: MCS expone la primera gama de lavados de cuerda compactos MULTIWASH
- 2019 ITMA - Barcellona: MCS presenta STARWASH-EVO
- 2023 ITMA - Milano: MCS expone la primera gama de lavados de cuerda y modulares y reconvertibles MULTIWASH-M

### HISTORY OF CONTINUOUS LINES MCS

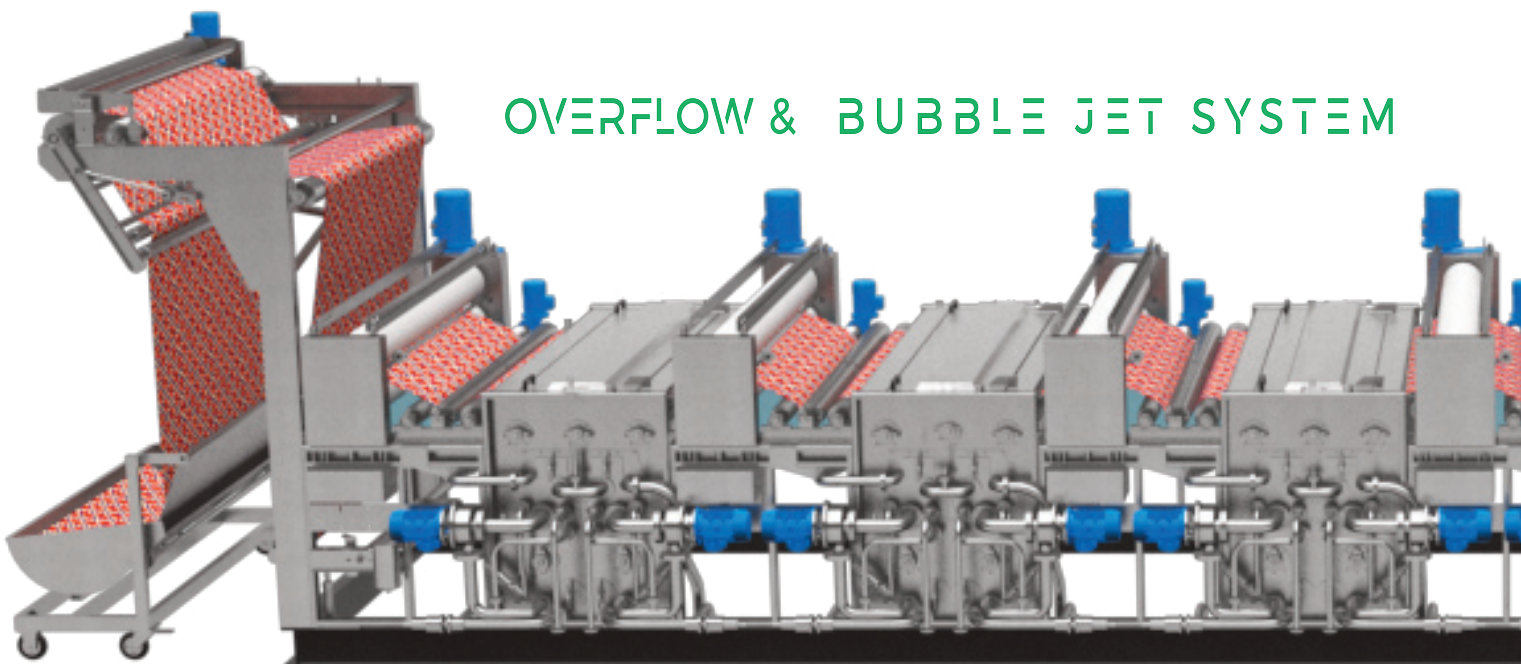
- 1974: MCS begins the design and development of the open-width lines.
- 1983 ITMA - Milan: MCS exhibits the first rope washing range WR
- 1991 ITMA - Hannover: MCS exhibits the first combined washing range LAVAPRINT
- 2011 ITMA - Barcelona: MCS exhibits the drum washing range STARWASH
- 2015 ITMA - Milan: MCS exhibits the first compact washing range MULTIWASH
- 2019 ITMA - Barcelona: MCS exhibits the STARWASH-EVO
- 2023 ITMA - Milan: MCS exhibits the first modular washing range MULTIWASH-M

# STARWASH

OPEN WIDTH WASHING RANGE



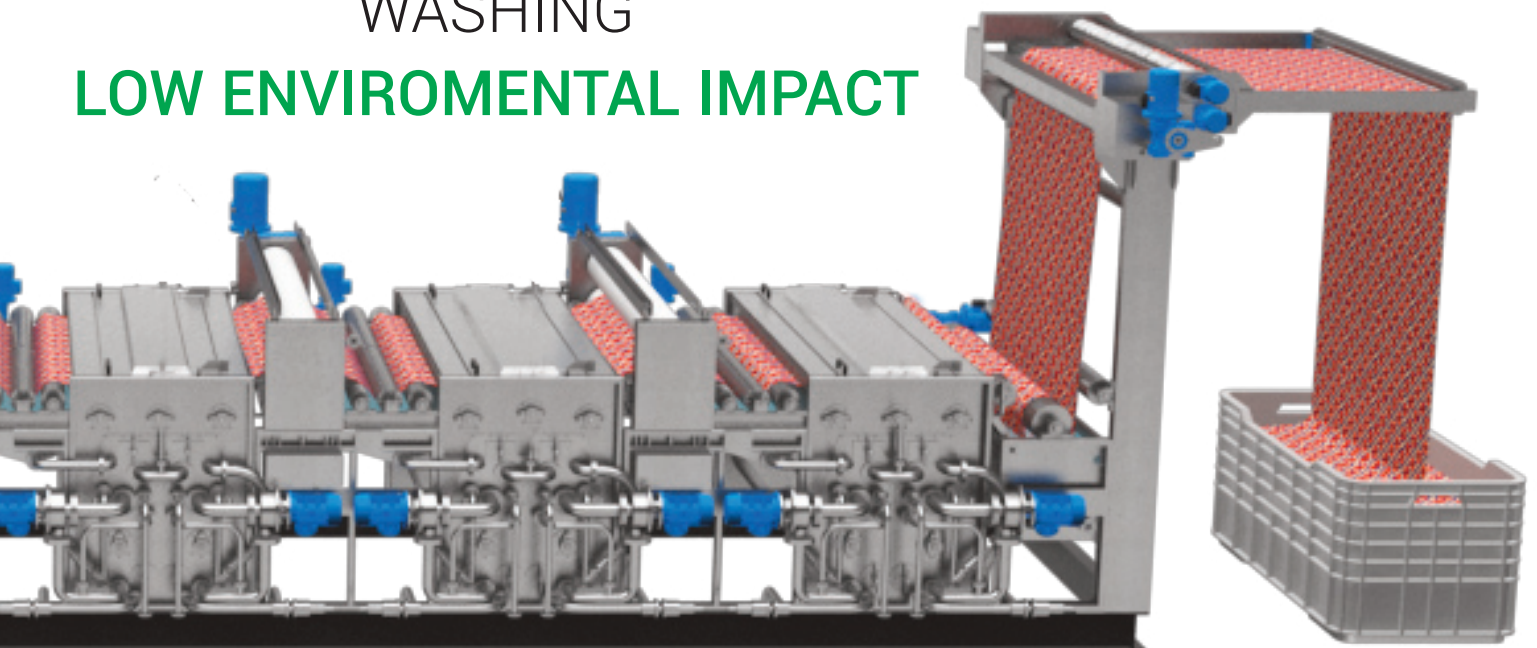
## OVERFLOW & BUBBLE JET SYSTEM



- Circulación del baño en contracorriente forzada
  - Tambores de lavado con gran eficiencia en forma de estrella
  - Volumen de baño para relleno de solamente 350 l
  - Consumos específicos a partir de 10 l/kg dependiendo del color y tipo de elaboración efectuada
  - Número elevado de recirculaciones y reintegraciones de agua limpia (hasta 3 veces por minuto)
  - Cámara del tambor con baño a presión para una penetración perfecta en la fibra
  - Perfil moldeado para un aumento del efecto de lavado
  - Motorización controlada por inversor
  - Control optimizado del tiro gracias a celdas de carga montadas en cada reenvío
  - Sistema de filtrado con recaída por demasiado lleno optimizado y controlado por sonda con lectura continua
  - Gran compactabilidad y modularidad
  - Dimensiones máximas reducidas
  - Gestión completa de la línea con PLC
  - Consumos específicos reducidos
- *Liquor flow in forced counterflow*
  - *High efficiency washing "star" drums*
  - *Minimum liquor volume to fill the trough (only 350 l)*
  - *Specific consumption from 10 l/kg depending the color and type of textile processing*
  - *Best washing effect thanks to various recirculation devices and clean-water inlets (up to 3 times per minute)*
  - *Pressurised chamber containing the drum, for a perfect penetration into the fibre*
  - *Shaped profile of the pressurised chamber for an more efficient washing effect*
  - *Motors controlled by inverters*
  - *Optimised control of fabric draw, thanks to load-cells installed on each fabric transmission*
  - *Optimised filtering system after overflow, controlled by continuous reading probe*
  - *Thanks to compact and modular structure (components)*
  - *Reduced dimensions*
  - *Full management of the line via PLC*
  - *Reduced specific consumptions*

## WATER AND OXYGEN HIGH PERFORMING WASHING

**LOW ENVIROMENTAL IMPACT**



# MODELS DATA

STARWASH se puede configurar para cualquier tipo de procesos y producciones requeridas.

STARWASH can be configured for any type of processing and requirements.

El número de cajas y su ancho, puede variar dependiendo del tipo de tejido procesado y la producción requerida.

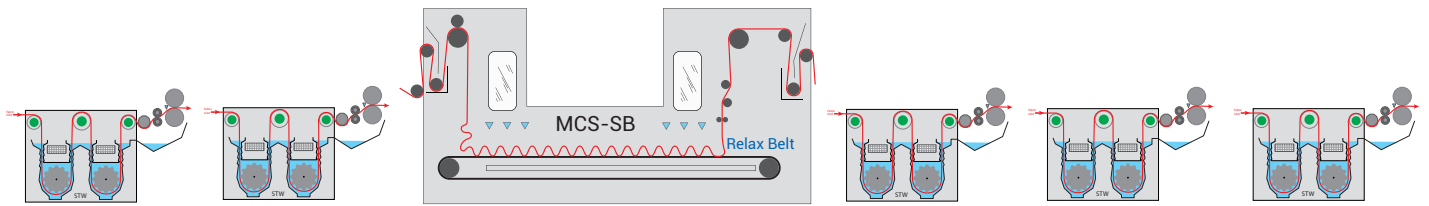
The number of troughs and their height may vary depending on the type of fabric processed and the production required.

Los esquemas más comunes son los siguientes:

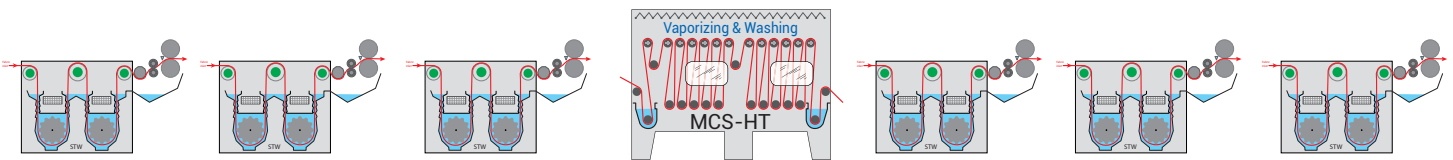
The most common ones are indicated in the schemes below:



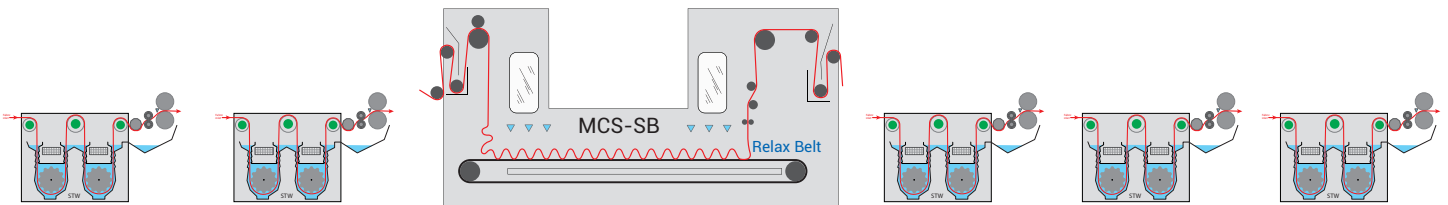
FAST SCOURING LINE



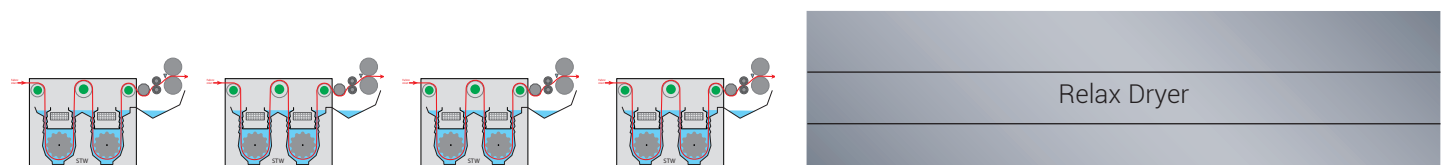
RELAX SCOURING LINE



WASHING AND WOOL CRABBING



WASHING LINE WITH RELAX BELT



WASHING LINE WITH DRYER

# AUTOMATION

## ALL WASHING LINES ARE AUTOMATED WITH TERMOELETTRONICA SOFTWARE AND CONTROLLERS

### CTRL-WASH

Panel PC Windows 10 IOT de última generación con pantalla táctil capacitiva y nuevo software de control TECOP con interfaz gráfica completamente rediseñada con sinóptico dinámico en gráficos vectoriales.

*CTRL-WASH next gen windows 10 IOT with capacitive touch screen and new automation software TECOP bringing a completely new graphical interface, dynamic synoptic and vectorial graphics.*



### TABLET-10



Tablet 10" Rugged IP67 Windows 10 IOT, sin instalar software adicional, permite la conexión al sistema para monitoreo/uso del sistema vía Wifi, simplifica enormemente todas las interacciones con la máquina (inicio/parada).

*Tablet 10" Rugged IP67 Windows 10 IOT, without any further software it allows to access to the entire system for monitoring and handling machine through wifi connection.*

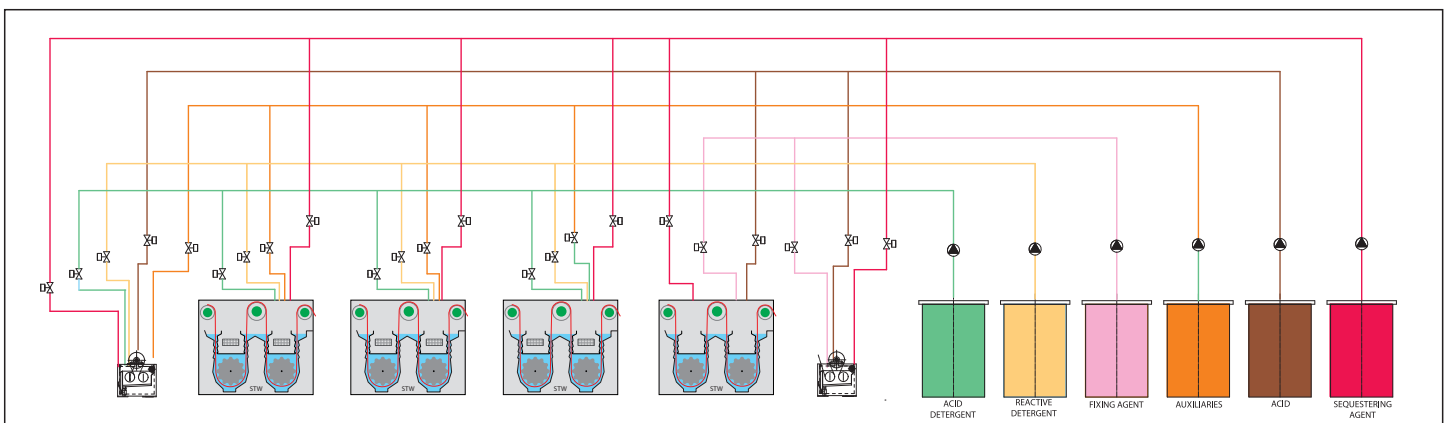
### CONT-DOSING Dosing of pure products and water control in a washing line

El sistema CONT-DOSING es un sistema gestionado por un PC en comunicación con un PLC; puede controlar hasta 8 bombas dosificadoras y controlar hasta 8 entradas de agua.

Las bombas dosificadoras utilizadas son con pistón neumático de doble efecto. La frecuencia de control de las bombas está calculada para evitar variaciones bruscas en la concentración del baño.

*The CONT-DOSING system is a system managed by a PC communicating with a PLC which can control up to 8 dosing pumps and 8 water inlets.*

*Installed dosing pumps are with pneumatic piston at double effect. Pump control frequency values are calculated so as to avoid sudden changes in the concentration of the bath.*



### TEX-LINE 4.0 Software integrated for washing lines

- Gestión de parametrización de línea
- Gestión de horarios
- Control en tiempo real de los datos de la máquina
- Base de datos de artículos

- Parametrization Handling
- Batches Handling
- Real time machines supervising
- Fabrics database

# FEEL THE POWER OF WATER

DYEING & FINISHING MACHINERY



Bergamo | Italy | [mcstextile.it](http://mcstextile.it)

