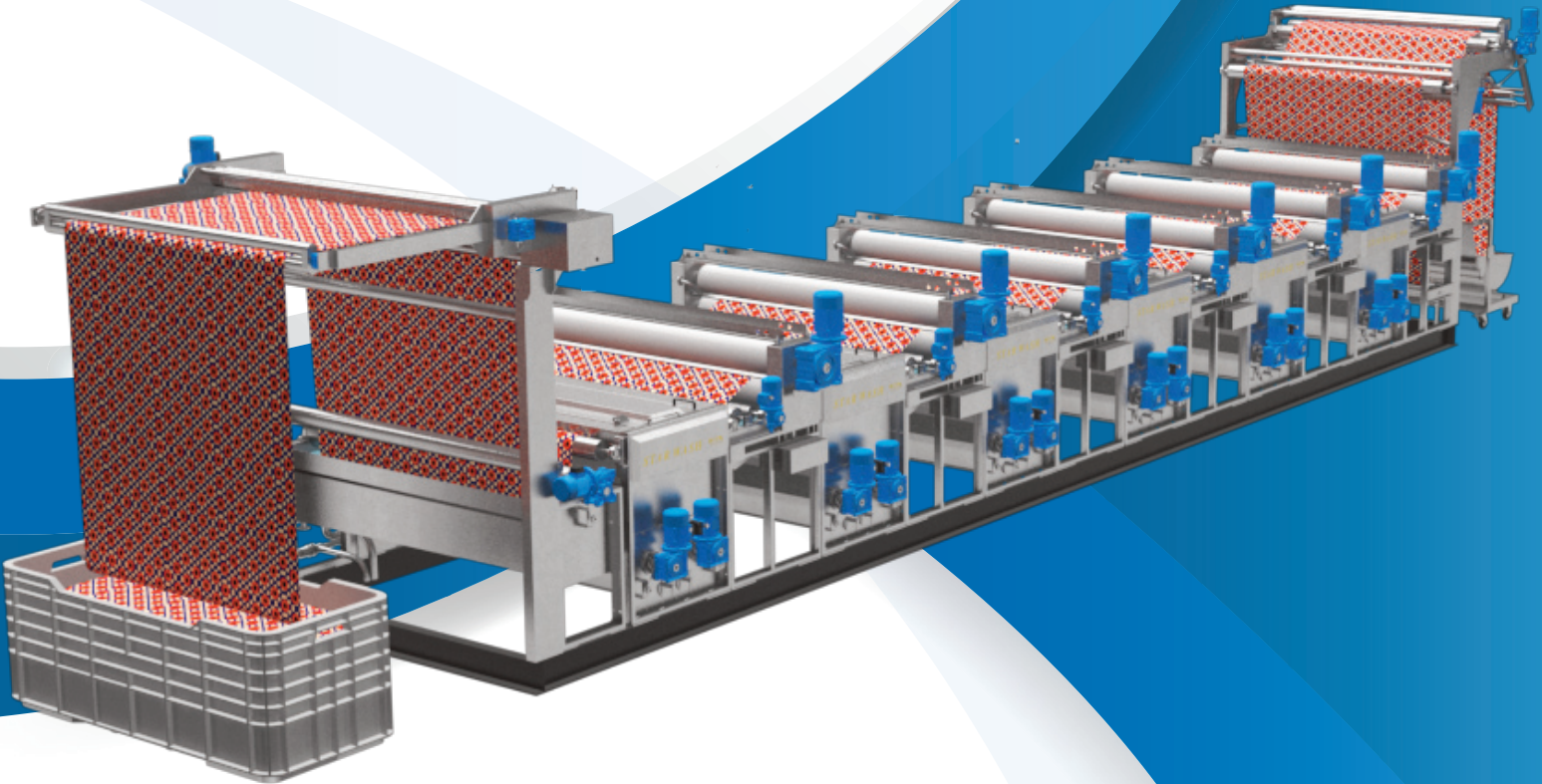


# MCS

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.

Starwash interamente ingegnerizzata e costruita in MCS.

Ogni nuovo modello viene testato ed esposto, in INNOVATIVE BLUE AREA integrato nella tintoria del gruppo MCS.

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

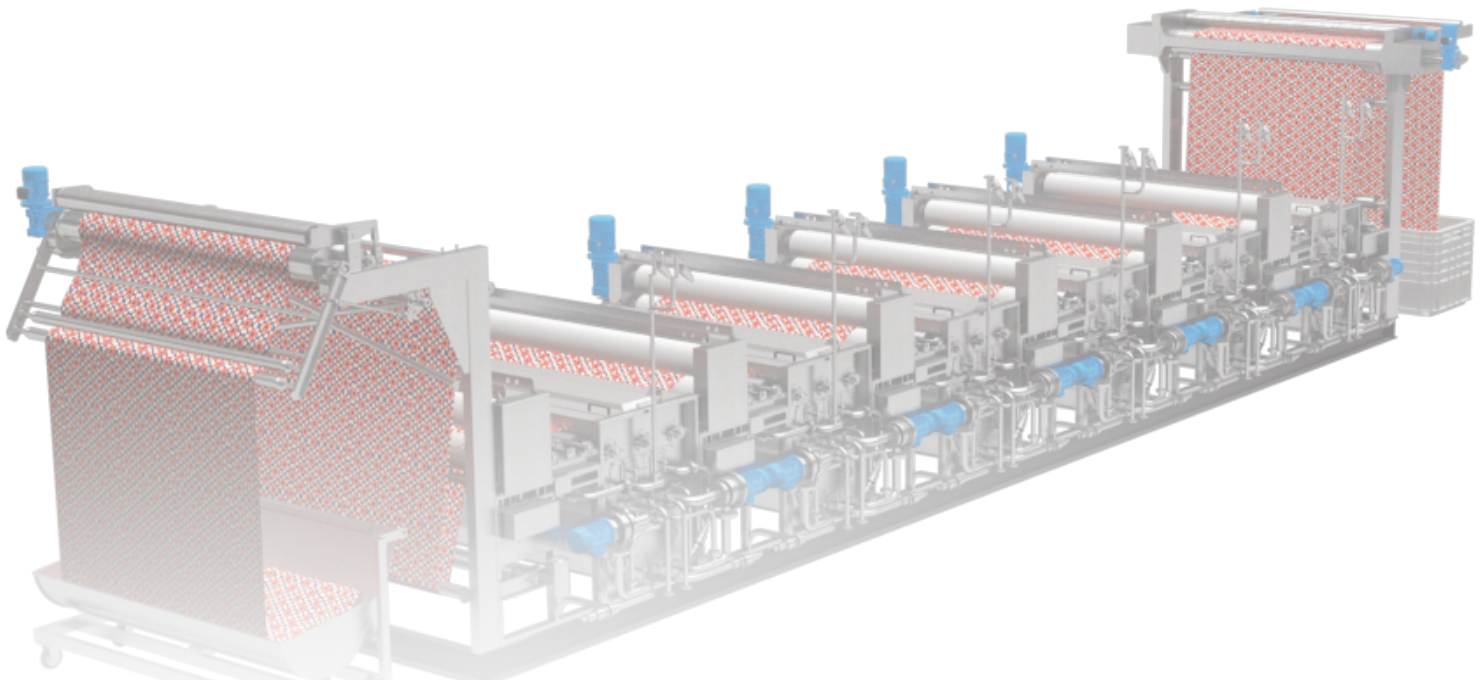
Modular and compact, it allows to process fabrics, both mesh and chain-weave, thanks to the patented system: OVERFLOW & BUBBLE SYSTEM

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.



### STORIA LINEE DI PREPARAZIONE E LAVAGGIO MCS

**1974 MCS** inizia la progettazione e lo sviluppo delle linee di lavaggio.

**1983 ITMA - Milano:** MCS espone la prima gamma per il lavaggio in corda WR

**1991 ITMA - Hannover:** MCS espone la prima gamma di lavaggi combinati LAVAPRINT

**2011 ITMA - Barcellona:** MCS espone la gamma di lavaggio a tamburo STARWASH

**2015 ITMA - Milano:** MCS espone la prima gamma di lavaggi in corda compatti MULTIWASH

**2019 ITMA - Barcellona:** MCS presenta STARWASH-EVO

**2023 ITMA - Milano:** MCS presenta 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

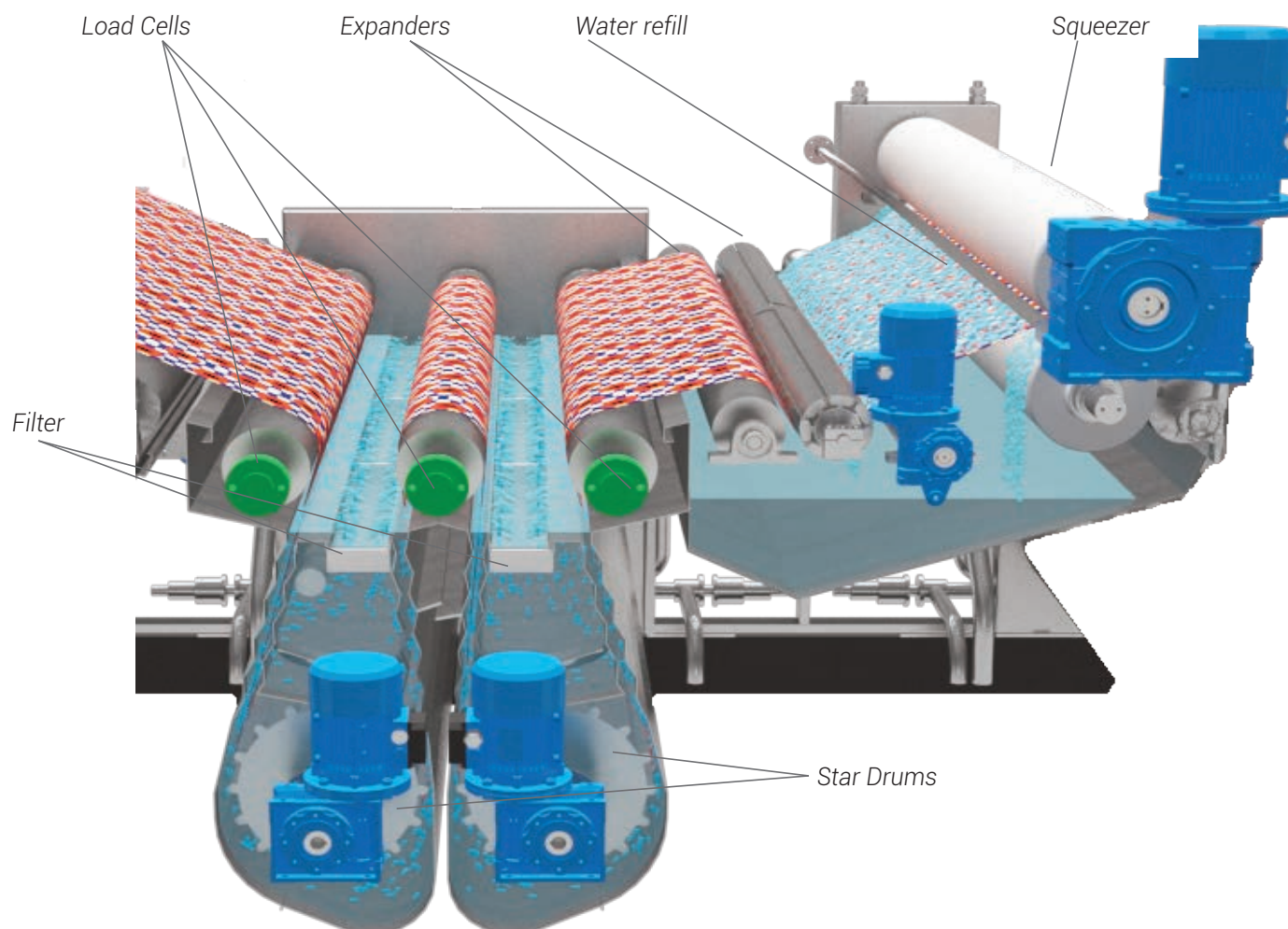
**2015 ITMA - Milan:** MCS exhibits the first compact washing range MULTIWASH

**2019 ITMA - Barcelona:** MCS exhibits the STARWASH-EVO

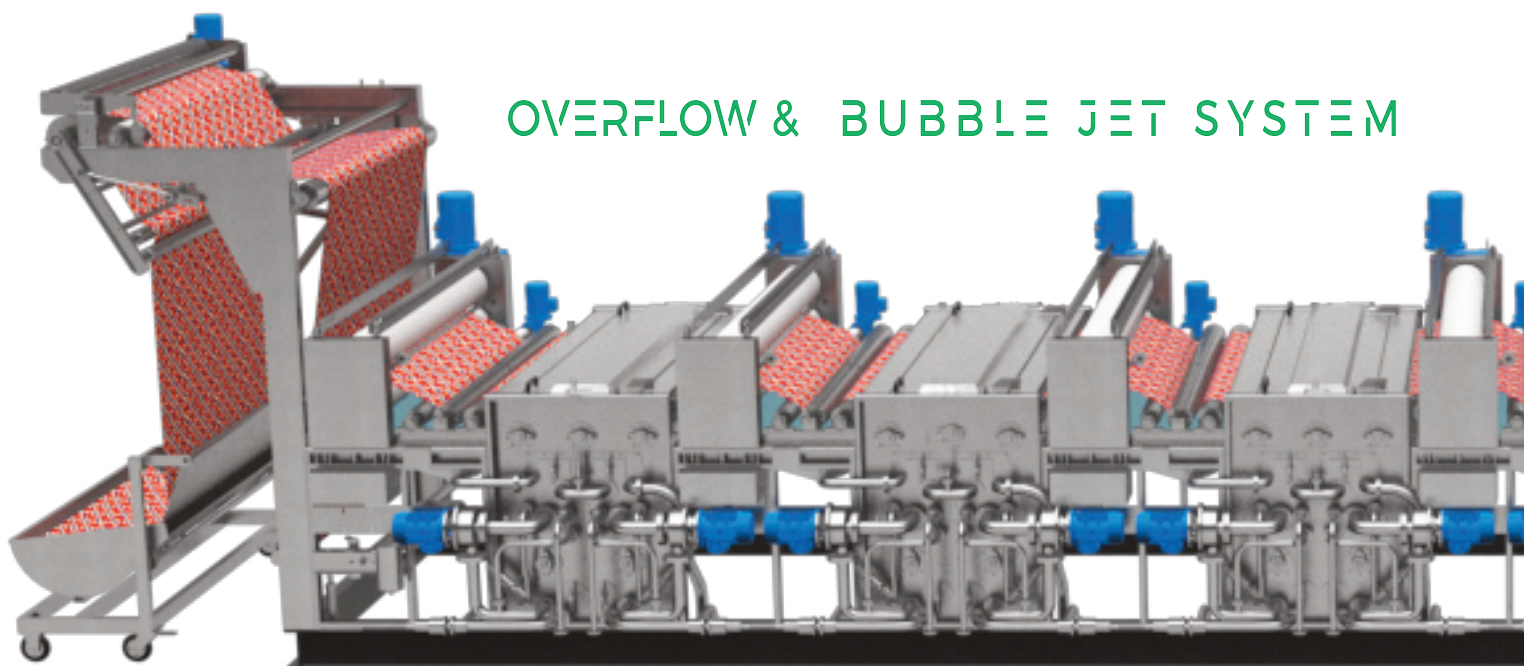
**2023 ITMA - Milan:** MCS exhibits the first modular washing range MULTIWASH-M

# STARWASH

## OPEN WIDTH WASHING RANGE

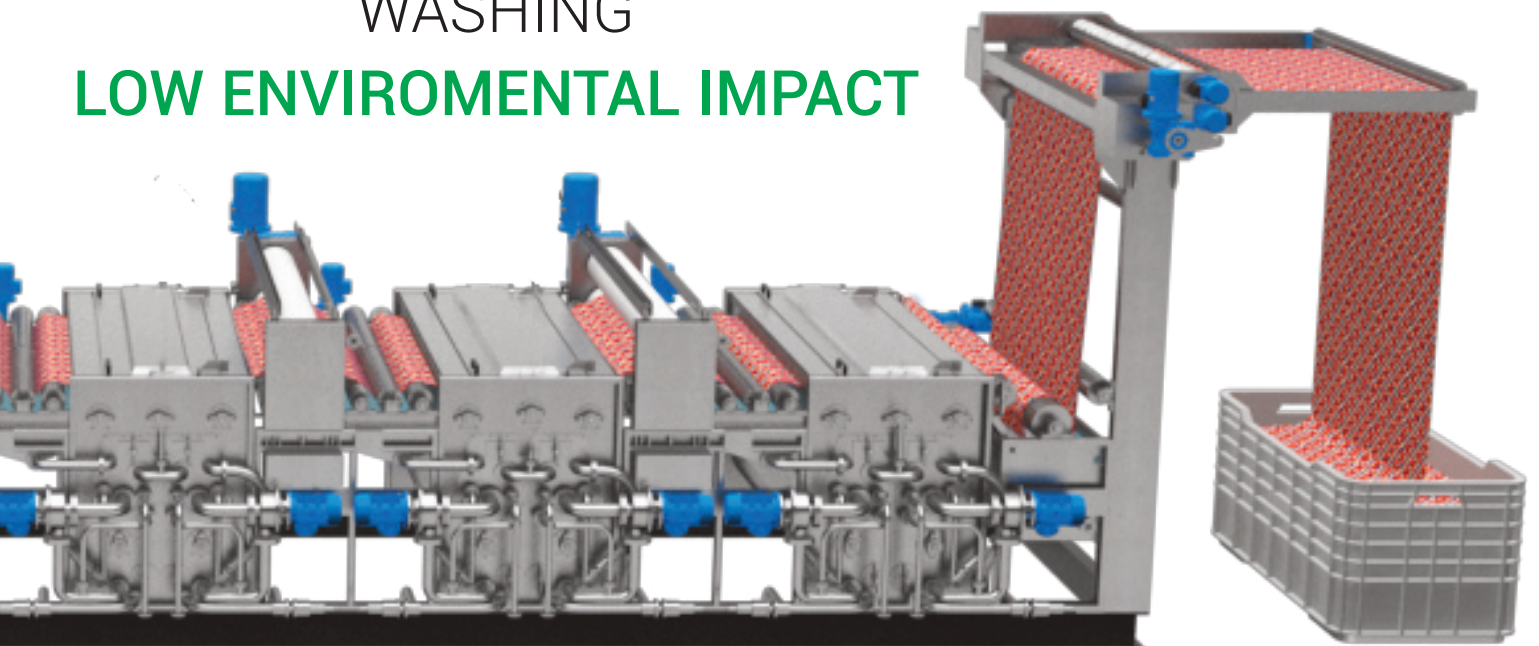


## OVERFLOW & BUBBLE JET SYSTEM



- Circolazione del bagno in controcorrente forzata
  - Tamburi di lavaggio a grande efficienza a forma stellare
  - Volume di bagno per riempimento di soli 350 l
  - Consumi specifici a partire da 10 l/kg dipendendo dal colore e tipo di lavorazione effettuata
  - Elevato numero di ricircoli e reintegri di acqua pulita (fino a 3 volte per minuto)
  - Camera tamburo con bagno in pressione per una perfetta penetrazione nella fibra
  - Profilo sagomato per un aumento dell'effetto lavante
  - Motorizzazione controllata da inverter
  - Controllo ottimizzato del tiro grazie a celle di carico montate su ogni rinvio
  - Sistema filtraggio a ricaduta per troppo pieno ottimizzata e controllata da sonda a lettura continua
  - Grande compattezza e modularità
  - Ridotte dimensioni di ingombro
  - Gestione totale della linea con PLC
  - Consumi specifici ridotti
- *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 può essere configurata per ogni tipo di lavorazioni ed esigenze richieste.

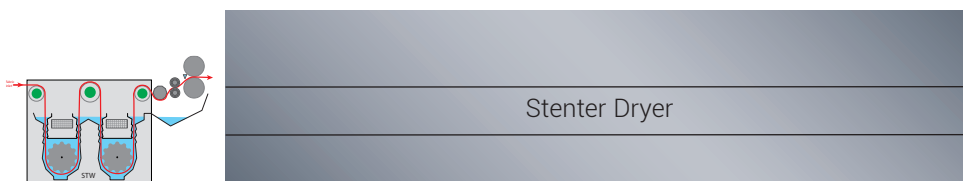
Il numero delle vasche e la loro altezza, potrà variare a seconda dal tipo di tessuto processato e dalla produzione richiesta.

Le più comuni sono indicate negli schemi sottostanti:

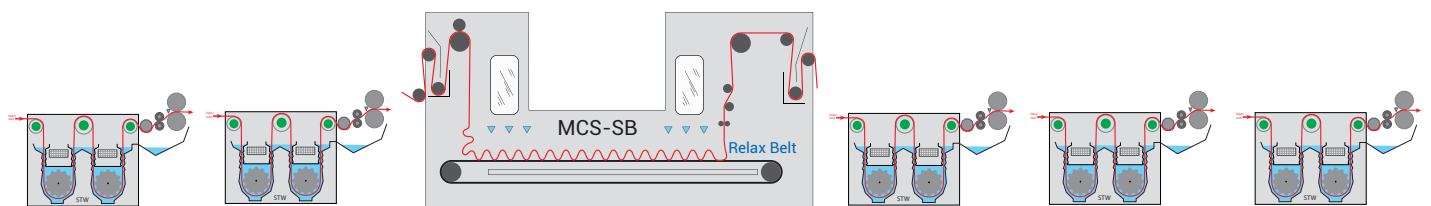
STARWASH can be configured for any type of processing and requirements.

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

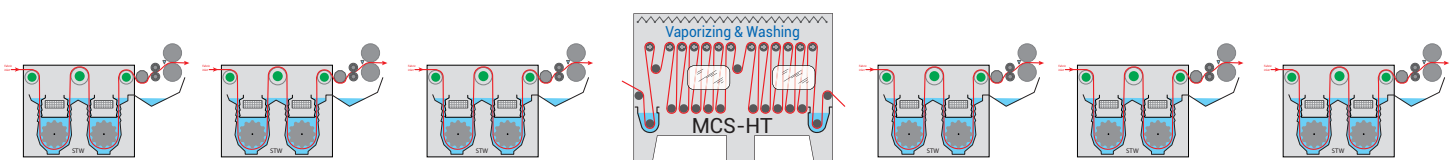
The most common ones are indicated in the schemes below:



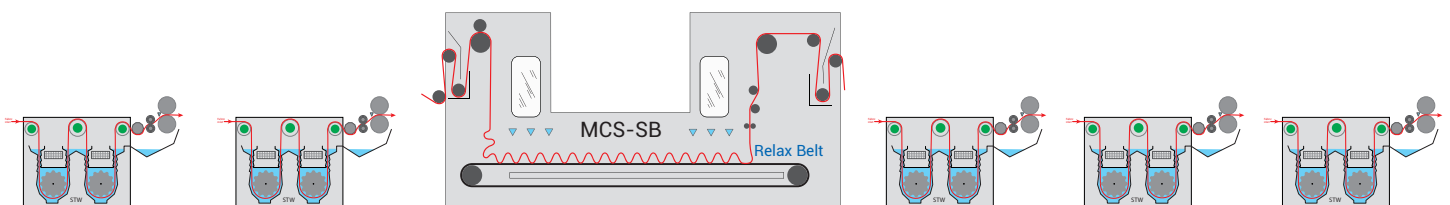
FAST SCOURING LINE



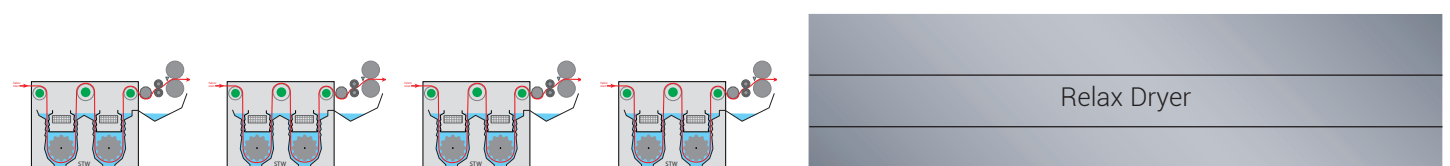
RELAX SCOURING LINE



WASHING AND WOOL CRABBING



WASHING LINE WITH RELAX BELT



WASHING LINE WITH DRYER

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

### CTRL-WASH

CTRL-WASH next gen Windows 10 IOT con schermo touch screen capacitivo e nuovo software di controllo TECOP il quale presenta un'interfaccia grafica interamente ridisegnata con sinottico dinamico in grafica vettoriale.

*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, senza installazione di software aggiuntivo consente la connessione all'impianto per monitoraggio/utilizzo dell'impianto tramite Wifi, semplifica notevolmente tutte le interazioni con la macchina(marcia/arresto).

*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.*

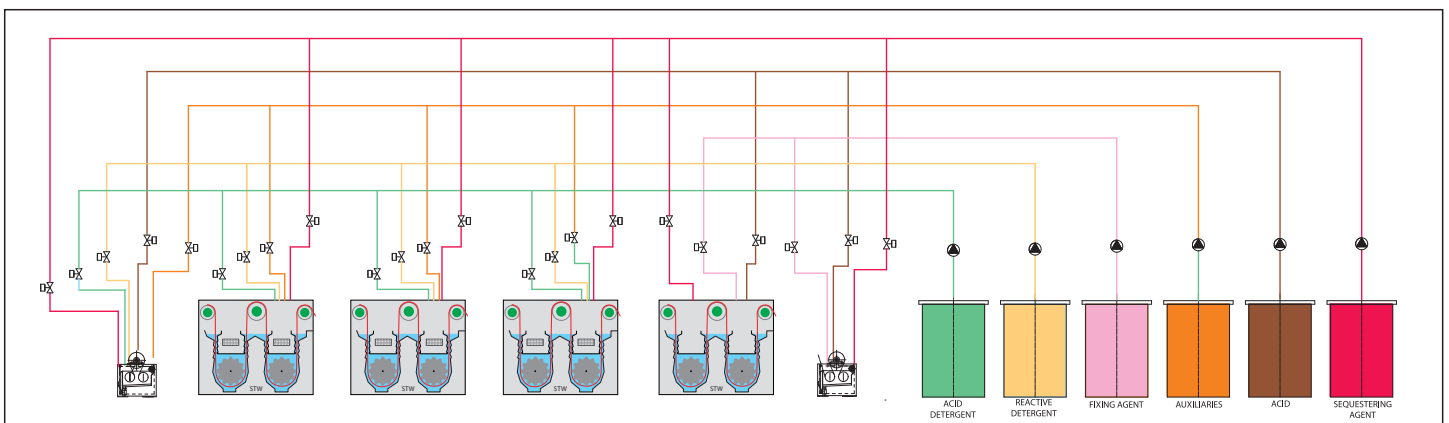
### CONT-DOSING Dosing of pure products and water control in a washing line

Il sistema CONT-DOSING è un sistema gestito da un PC in comunicazione con un PLC; può comandare fino a 8 pompe dosatrici e controllare fino a 8 ingressi d'acqua.

Le pompe dosatrici usate sono a pistone pneumatico a doppio effetto: la frequenza di comando è calcolata in modo da evitare repentine e variazioni della concentrazione del bagno.

*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

- Gestione parametrizzazioni linea
- Gestione delle pianificazioni
- Controllo real time dati macchina
- Database degli articoli

- 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)

