

member of



ENG/ITA

# MCS

DYEING & FINISHING MACHINERY



## SILURO

HIGH TEMPERATURE BEAM DYEING MACHINE



THINK BEFORE YOU PRINT

# OUR HISTORY



DYEING & FINISHING MACHINERY



MCS & TERMO INNOVATION ZONE



COMMISSION ECO-DYEHOUSE



AUTOMATION & SOFTWARE



[mcsgroup.it](http://mcsgroup.it)  
Bergamo - Italy



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,
- Termopowder 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:

- Italica.

## 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.



## BEAM DYEING MACHINE

La macchina di tintura in largo su subbio ad alta temperatura è di comune e largo impiego nel settore, e tuttora è resa attuale ed affidabile dalla MCS. Propone un vasto programma di modelli in linea con le esigenze tecnologiche e produttive dei nostri giorni.

SILURO permette di tingere articoli di tessuto sintetico, di 100% Pes e 100% PA, di maglieria rettilinea con cachemire di AC/PA; oppure 100% PA ma anche articoli di COT/PES; pizzo di PA 100%; maglieria elastica di PA/Lycra etc...

**Siluro è interamente ingegnerizzato e costruito in MCS.**

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

*The beam dyer for open width dyeing at high temperature is widely used in the textile industry. MCS can offer an up-dated and reliable machine in a wide range of models according to different technologic and production needs.*

*A big variety of articles can be dyed in SILURO machine synthetic fabrics 100% PES and 100% PA, warp-knits such as cashmere AC/PA or 100% PA, COT/PES articles, 100% PA lace, PA/LYCRA elastic knits, etc.*

*SILURO is entirely engineered and built in MCS.*

*Each new model is tested and exhibited, in our R&D department "Blue Area" integrated into the MCS group's dye-house MCS.*



## LA STORIA DELLE MACCHINE IN APERTO MCS

1970 MCS produce il primo SILURO per EUROPIZZI

1983 ITMA Milano: MCS espone il primo modello di Comby Jigger-HT idraulico

1991 ITMA Hannover: MCS espone i primi modelli di Maxi e Mid Jigger-LT idraulici

1999 ITMA Parigi: MCS espone il primo modello Comby Jigger-HT elettronico

2003 ITMA Birmingham: MCS espone Siluro Ecoturbo

2008: MCS reingegnerizza tutti i Jigger a catalogo.

2019 ITMA Barcelona: MCS espone il primo modello di Mini Jigger-LT elettronico e il concept del Double Jigger C4-143

2023 ITMA Milano: MCS espone il primo Double Jigger C4-143

## HISTORY OF MCS OPEN-WIDTH MACHINES

1970 MCS produced the first Siluro for Europizzi

1983 ITMA - Milan: MCS exhibits the first hydraulic Comby Jigger-HT model

1991 ITMA - Hannover: MCS exhibits the first hydraulic Maxi and Mid Jigger-LT models

1999 ITMA - Paris: MCS exhibits the first electronic Comby Jigger-HT model

2003 ITMA - Birmingham: MCS exhibits Siluro Ecoturbo

2008: MCS re-engineering all the Jiggers in the catalog.

2019 ITMA Barcelona: MCS exhibits the first electronic Mini Jigger-LT model and the concept of the Comby Jigger C4.

2023 ITMA Barcelona: MCS exhibits the first model of the Comby Jigger HT-C4.

## BEAM DYEING MACHINE

### CARATTERISTICHE

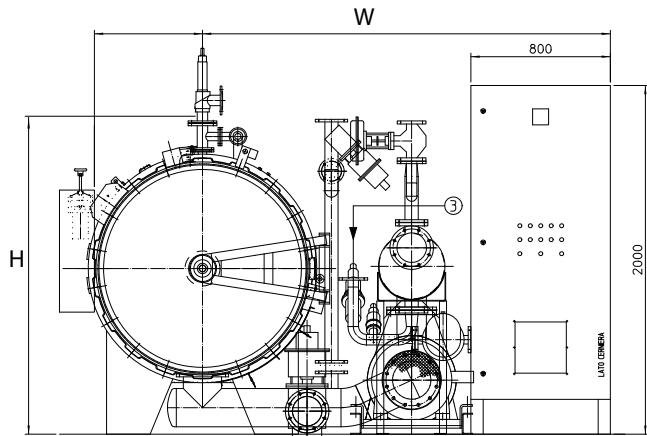
- Rapporto bagno minimo 1:5
- Subbio semplice e/o gemellato di diverso diametro
- Vaso di espansione aperto (o chiuso pressurizzato)
- Riscaldamento indiretto.
- Controllo automatico della pressione della pompa
- Regolazione completamente automatica con PC industriale PCx-TEx, by Termoelettronica
- Predisposizione con cucina colori centralizzata
- Sistema di dosaggio d'alcali
- Sistema scarico bagno rapido modello MQD
- 2° serbatoio d'aggiunta prodotti completo di mixer

### MAIN FEATURES

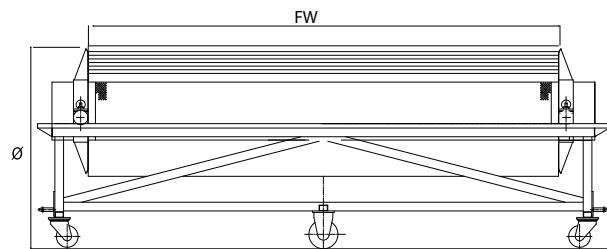
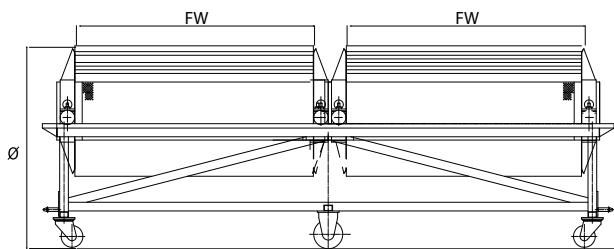
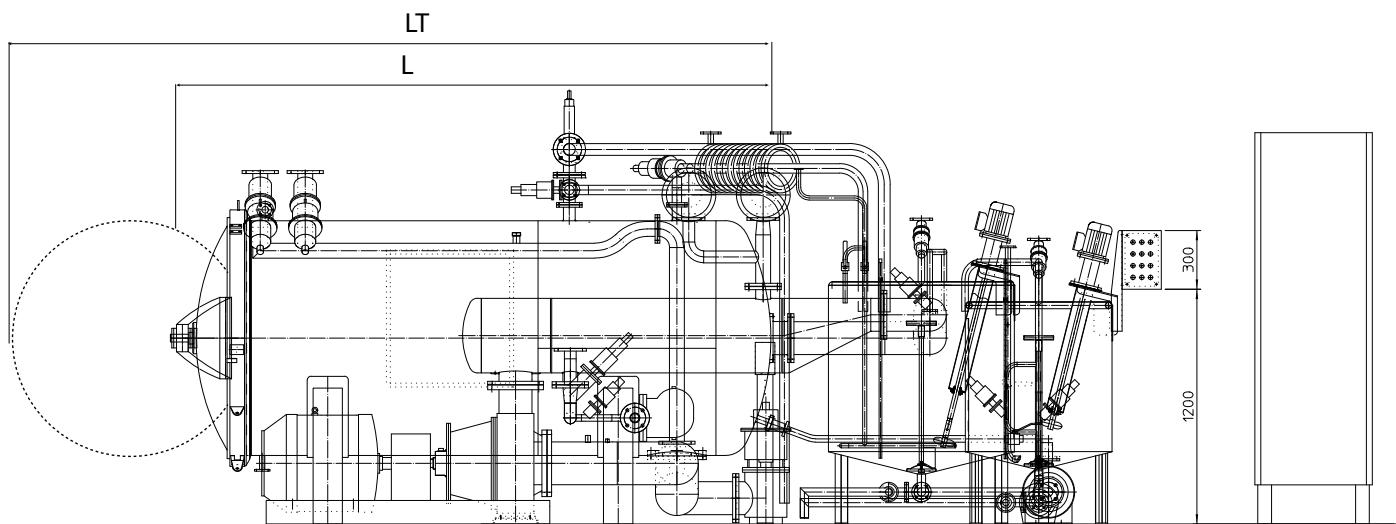
- Minimum liquor ratio 1:5
- Single and/or double beams of different diameter
- Expansion tank, open or pressurised
- Heating by steam, diathermic oil or overheated water, through an external heat-exchanger
- Pump pressure with automatic control inside/outside
- Micro touch-screen by Termoelettronica model PCx-TEx
- Pre-arrangement for computerised dyestuff-kitchen
- Product dosing system.
- Drain by main pump, mod. MQD
- 2° side tank for products, with pneumatic level probes and mixer



## BEAM DYEING MACHINE



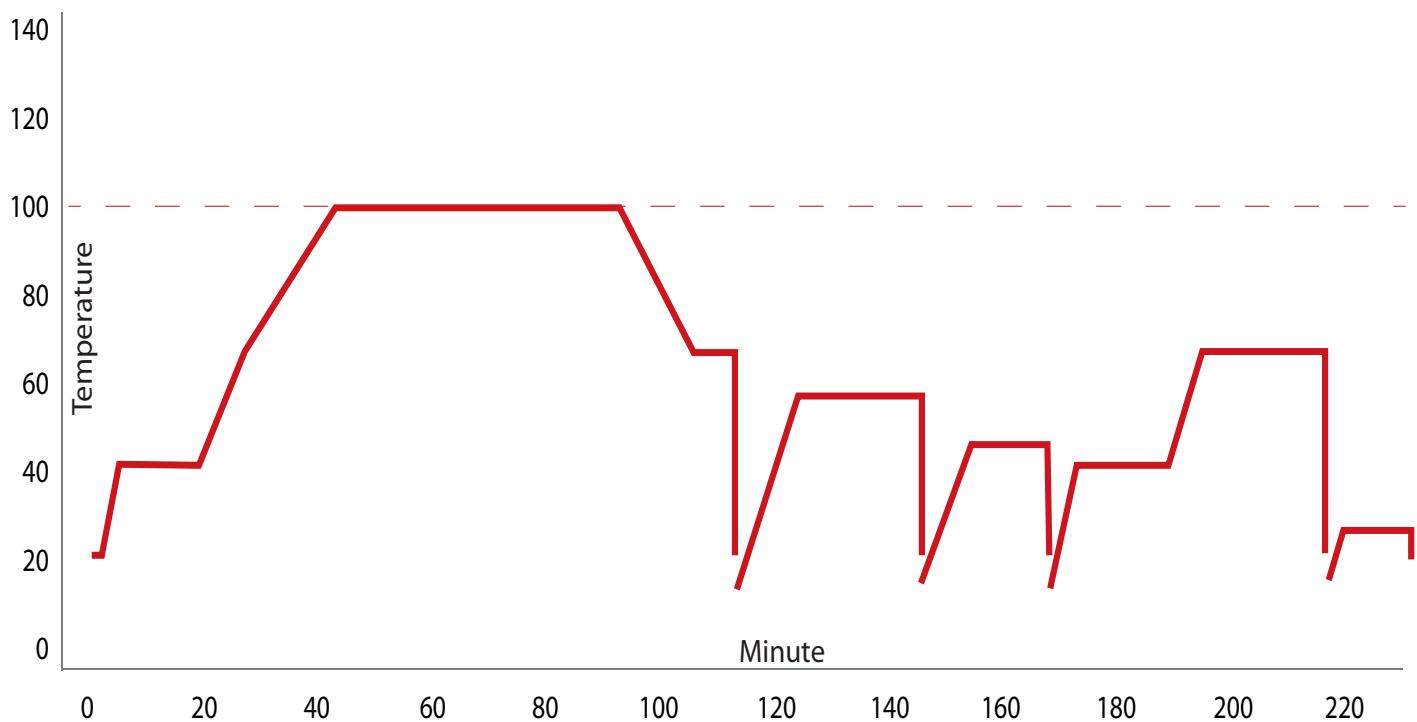
MCS reserve the right to change technical data and specifications without prior notice.



	AT 08/273	AT 09/650	AT 10/856	AT 11/1027	AT 12/1200	AT 13/1400	AT 14/1600
FW [mm]	1600 - 4200	1600 - 4200	1600 - 4200	1600 - 4200	1600 - 4200	1600 - 4200	1600 - 4200
Beam ø [mm]	200	530	740	910	1080	1280	1490
W [mm]	1200	1900	2200	2400	2750	3000	3500
H [mm]	1800	2000	2000	2000	2500	2500	2850
L [mm]	3000	3350	3550	3650	3900	4000	4100
LT [mm]	3300	3750	4100	4500	4700	4900	5200

# DYEING REPORT

SILURO



FABRIC FEATURES AT14-4200 (Double Beam)	
Article	KNITTED FABRIC
Composition	80% PA 20% LY
Colour	BLACK
Weight [gr/m]	280
Weight [gr/m <sup>2</sup> ]	180
Width [cm]	155
Lot [Kg]	1020
Lot [m]	3640
Preparation	Pre Setting
Finishing	Stenter
Remarks	=

MACHINE REGULATION AT14-4200 (Double Beam)	
Delivery regul. circul. pump	1050
Internal pressure [bar]	4,2
External pressure [bar]	3,1
Thickness [mm]	34
Beam diametre [mm]	600
Liquor ratio [l/Kg]	6,2
First filling [l]	6400
Next. fillings [l]	5100

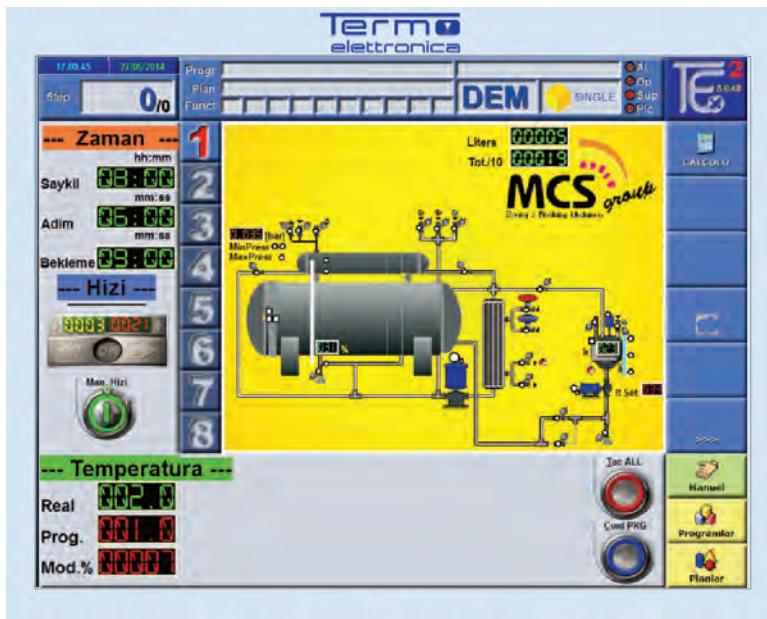
RESULTS	
Water consum. [l]	26800
Water per kg fabric [l/kg]	26,27
Steam consum. [Kgs]	2885
Steam fabric [Kgs/Kg]	2,82
Energy kg fabric [Kw/Kg]	0,105
Real time [1']	232
Program N.	00-362

## AUXILIARES

DYESTUFF	
C	Acid Dyestuff

- A Levelling agent + Buffer
- B Sodium Hydrosulfite + Soda ASH
- D Acetic Acid
- E Fixing Ag.

## CTRL-DYE



Pannello operatore sviluppato in ambiente windows per implementare in modo avanzato tutte le funzionalità diagnostiche, di monitoraggio e di automazione delle macchine di tintura.

Schermo tattile touch-screen da 15", progettato espressamente per l'impiego industriale, ogni funzionalità risulta di facile ed immediato accesso.

A richiesta è possibile l'impiego di qualsiasi micro disponibile sul mercato.

*Operation Panel developed in Windows room to improve all diagnostic functions, monitoring and automation of dyeing machines.*

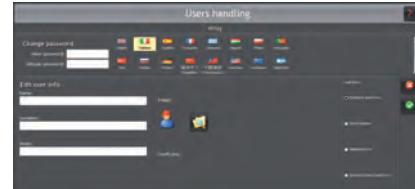
*With Touch-Screen 15", purposely designed for industrial use, the access to functions is easy and immediate.*

*Upon Customer's request it is always possible to install different brands of controllers.*

## TEXMANAGER 4.0

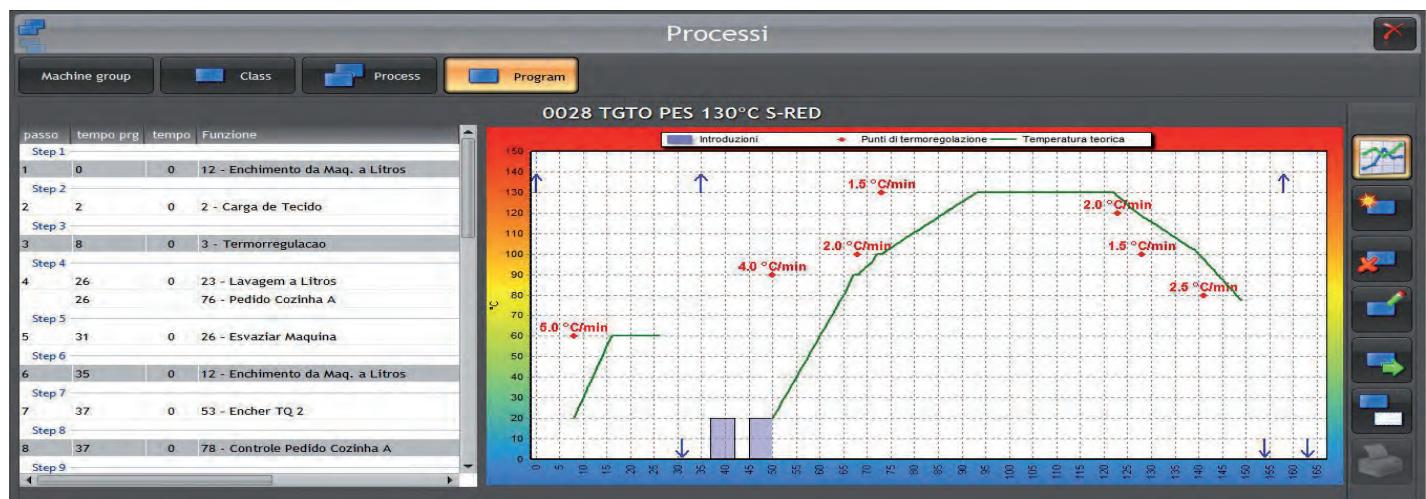
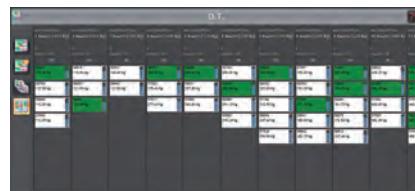
Software integrato per la gestione della produzione che include:

- Gestione del personale
- Ottimizzazione delle risorse umane
- Gestione dei macchinari
- Gestione Reparti produttivi
- Gestione Magazzino



Integrated production management software including:

- Personnel Management
- Optimization of human resources
- Management of machinery
- Software for integrated Production Management
- Management of production departments
- Warehouse management



# FEEL THE POWER OF WATER

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MCS  
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