

MCS

DYEING & FINISHING MACHINERY



DYNAMICA SPRINT

HT ROPE DYEING MACHINE



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,
- 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 Ter-moelettronica owner-ship.

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.



DYNAMICA SPRINT

HT ROPE DYEING MACHINE

Dynamica Sprint è una macchina per la tintura in corda in alta temperatura (max 144°C).

È una macchina a deposito circolare, idonea per tessuti sia a maglia che ortogonali a grammature variabili.

Per articoli di pesi particolarmente leggeri è possibile lavorare in corda doppia o multipla.

Il corpo macchina può contenere da una a sei vasche, con capacità di carica variabile a seconda del modello e dalla versione prescelta.

Considerando una fibra cellulosica a maglia con peso di 250 g/lin.m, le capacità di carica sono quelle indicate in tabella a pag. 10.

Tutte le parti interne della macchina in contatto con il tessuto sono costruite impiegando acciaio inossidabile AISI 316/AISI 316 L. certificato.

Dynamica Sprint è interamente ingegnerizzata e costruita in MCS.

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

***Dynamica Sprint** is a high temperature rope dyeing machine (max 144°C).*

It is a circular deposit machine, suitable for both knitted and orthogonal fabrics with variable weights.

For particularly light weight items, it is possible to work in double or multiple rope.

The machine body contains from one to six trough, with variable charge capacity depending on the model and the chosen version.

Considering a knitted cellulosic fiber with a weight of 250 g/lin.m, the charge capacities are those indicated in the table on page 10.

All the internal parts of the machine in contact with the fabric are built using certified stainless steel AISI 316/AISI 316 L.

***Dynamica Sprint** 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 DELLE MACHINE DA TINTURA IN CORDA MCS

1967 ITMA - Parigi: MCS espone il primo modello di jet a bassa temperatura.

1979 ITMA - Hannover: MCS espone JET-HT e OVERFLOW MO/80 LT

1983 ITMA - Milano: MCS espone SOFTFLOW 82 HT e FLO-JET OF83 HT

1987 ITMA - Parigi: MCS espone PANDORA HT

1995 ITMA - Milano: MCS espone SOFTFLOW 100 HT, LONG HORN HT.

1999 ITMA - Parigi: MCS espone MULTIFLOW HT, SOFTFLOW 100 SUPERIOR HT

2000: MCS presenta la EUROFLOW LONG

2003 ITMA - Birmingham: MCS espone: MULTIFLOW SUPERIOR.

2007 ITMA - Monaco: MCS espone FIRST HT

2011 ITMA - Barcellona: MCS espone DYNAMICA HT

2015 ITMA - Milano: MCS espone DYNAMICA SPRINT HT

2019 ITMA - Barcellona: MCS presenta SOFTFLOW 18 HT, espone DYNAMICA SPRINT HT

2020: MCS Progetta EUROFLOW SPORT

2023: ITMA Milano: MCS Espone CHRONOFLOW e SOFTFLOW 18 HT

ROPE DYEING MACHINE HISTORY

1967 ITMA - Paris: MCS exhibits: the first low temperature jet model.

1979 ITMA - Hannover: MCS exhibits JET-HT and OVERFLOW MO/80 LT

1983 ITMA - Milan: MCS exhibits SOFTFLOW 82 HT and FLO-JET OF83 HT

1987 ITMA - Paris: MCS exhibits PANDORA HT

1995 ITMA - Milan: MCS exhibits: SOFTFLOW 100 HT, LONG HORN HT.

1999 ITMA - Paris: MCS exhibits: MULTIFLOW HT, SOFTFLOW 100 SUPERIOR HT

2000 : MCS presents the EUROFLOW LONG

2003 ITMA - Birmingham: MCS exhibits: MULTIFLOW SUPERIOR.

2007 ITMA - Monaco: MCS exhibits FIRST HT

2011 ITMA - Barcelona: MCS exhibits DYNAMICA HT

2015 ITMA - Milan: MCS exhibits DYNAMICA SPRINT HT

2019 ITMA - Barcelona: MCS presents SOFTFLOW 18 HT, exhibits DYNAMICA SPRINT HT

2020 : MCS design the EUROFLOW SPORT

2023 ITMA Milan: MCS exhibits CHRONOFLOW and SOFTFLOW 18 HT

DYNAMICA SPRINT

HT ROPE DYEING MACHINE



CARATTERISTICHE

- Rapporto bagno fino a 1,8 + fattore di assorbimento tessuto
- Serbatoio di preparazione bagno MST con sistema di controllo e gestione di livello
- Sistema scarico bagno rapido modello MQD
- Hydrovario, ugello a sezione variabile
- Sistema con pompa multiaspirante (MCS Patent)
- Regolazione completamente automatica con PC industriale
- Serbatoio d'aggiunta prodotti completo di mixer e sonda di livello
- Sistema introduzione prodotti riprogettato
- Ricerca cuciture e controllo circolazione pezza
- Controllo di livello continuo
- Contaltri di riempimento H2O
- Sistema di lavaggio pareti macchina a giostra
- Filtro principale autopulente in mandata pompa

MAIN FEATURES

- Liquor ratio* untill 1,8 + fabric absorption
- Vertical tank* for liquor preparation MST with system for the control / management of level
- Drain* by main pump, mod. MQD
- Nozzles* at adjustable section, Hydrovario model
- Multi pump* suction with variable speed motor (MCS Patent)
- Micro touch-screen* by industrial PC
- Side tank* for products, with pneumatic level probe and mixer
- New system* of product introduction
- Seam detector/fabric* run control
- Continuous* level control
- Water liter* counter
- Carousel* washing system
- Self cleaning* static filter in main delivery pump

DYNAMICA SPRINT

HT ROPE DYEING MACHINE



CARATTERISTICHE

- Sistema di ricircolo** ed introduzione per diluizione sale
- Faldatore per deposito** tessuto in ogni vasca di trattamento
- 2° serbatoio** d'aggiunta prodotti completo di mixer e sonda di livello
- Possibilità di tintura** in doppia o multicorda
- Pannello operatore:** è possibile l'impiego di qualsiasi micro disponibile sul mercato (Optional)
- pH-Metro:** Misuratore di PH composto da sonda per alta temperatura e strumento di lettura installato nel quadro (Optional)
- Misuratore di portata vapore:** collegato al microprocessore macchina per registrazione consumi vapore del ciclo (Optional)
- Misuratore di consumo elettrico:** collegato al microprocessore macchina per registrazione consumi elettrici del ciclo (Optional)
- Condizionatore:** condizionatore su quadro elettrico di adeguata potenza frigorifera con alimentazione trifase (Optional)
- Twins System:** Sistema di abbinamento macchine (Optional)

MAIN FEATURES

- System** for the reduction/liquor recycling and salt introduction
- Plaiter** for a better circulation of the fabric in each fabric deposit
- 2nd side tank** for products, with pneumatic level probes and mixer
- Possibility to **work in double or multi rope**
- Operation panel:** Upon Customer's request it is always possible to install different brands of controllers (Optional)
- pH-Meter:** composed of high temperature probe and reading instrument installed in the panel (Optional)
- Steam flow meter:** Steam flow meter with system connected to the processor microprocessor for steam cycle (Optional)
- Electric consumption meter:** connected to the machine microprocessor for recording the electrical consumption of the cycle (Optional)
- Conditioner:** Air conditioner with adequate cooling power with 3-phase power supply (Optional)
- Twins System:** Connection machines system (Optional)

OPTIMIZATION OF DYEING LIQUOR CIRCULATION



SELF-CLEANING
STATIC FILTER

MULTISUCTION
PUMP

PRODUCTS
INTRODUCTION

Grazie al nuovo sistema di aspirazione e circolazione bagno (patent pending), *Dynamica Sprint* consente di lavorare con rapporti bagno 1:3,5.

Inoltre con l'ausilio di una pompa centrifuga ad asse verticale multi aspirante tali prestazioni sono garantite anche con carico reale ridotto.

Thanks to the realisation of a new system for liquor suction and circulation (patent pending), *Dynamica Sprint* allows to dye at low liquor ratio, down to 1:8 + fabric absorption.

Furthermore, a multi-suction, vertical, centrifugal pump guarantees machine performances also by reduced loads.

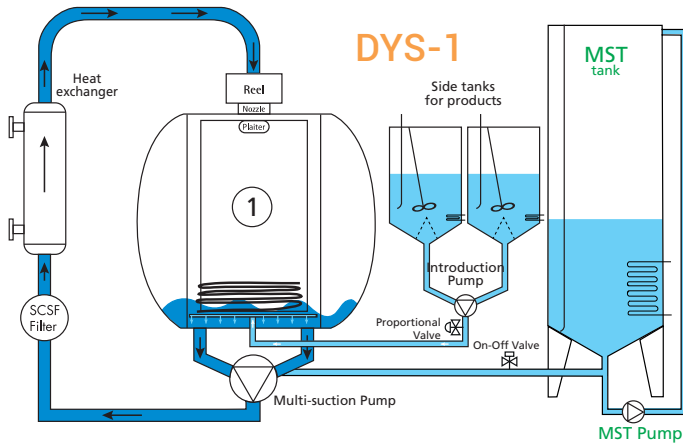
NUOVO SISTEMA INTRODUZIONE PRODOTTI

Il Rivoluzionario processo di introduzione prodotti e aspirazione del bagno di tintura, garantisce processi più sicuri, più rapidi e riproducibili.

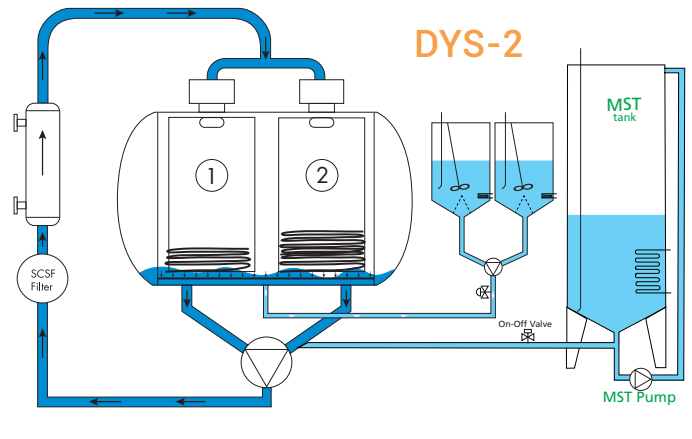
Regolazione con software di ultima generazione e touch-screen (PCx-TEx di Termoelettronica).

NEW SYSTEM FOR PRODUCT INLET

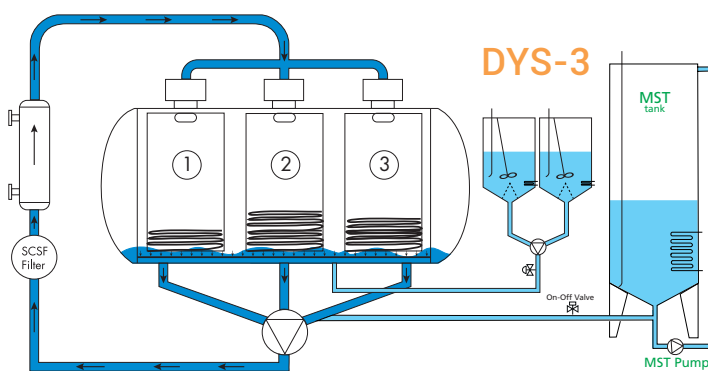
Processes are faster and safer thanks to a new concept for product inlet (MCS patent) controller by industrial touch-screen PC (PCx-TEx by Termoelettronica)



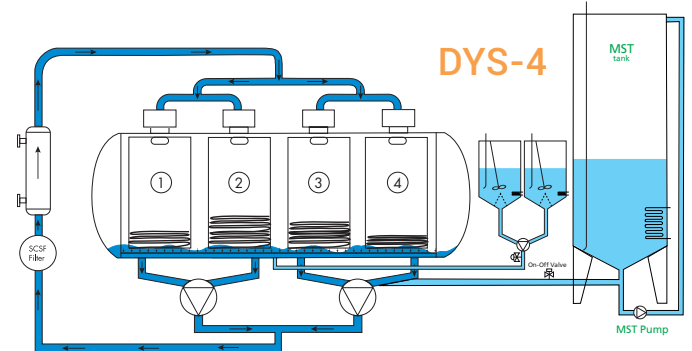
Versione con 1 vasca con una 1 pompa multiaspirante
Version with 1 fabric deposit and 1 multisuction pump



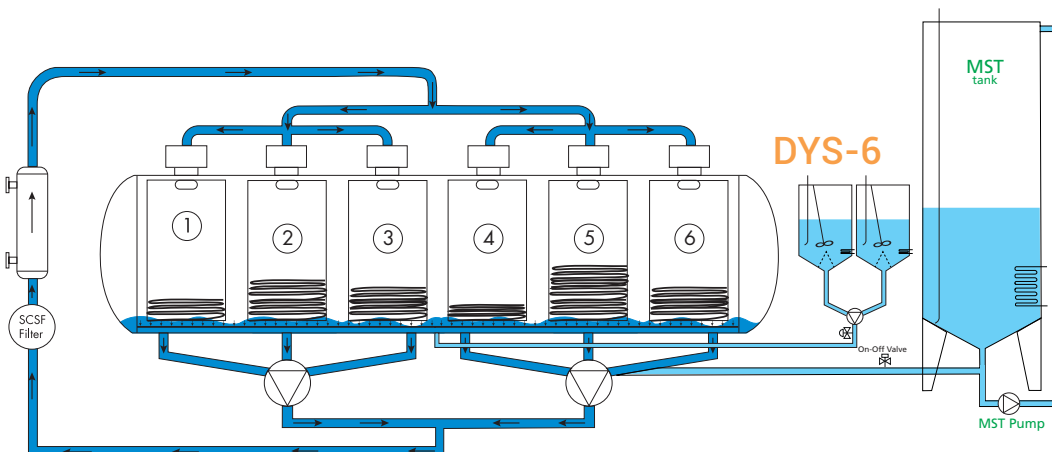
Versione con 2 vasche con 1 pompa multiaspirante
Version with 2 fabric deposits and 1 multisuction pump



Versione con 3 vasche e 1 pompa multiaspirante
Version with 3 fabric deposits and 1 multisuction pump



Versione con 4 vasche con 2 pompe multiaspiranti
Version with 4 fabric deposits and 2 multisuction pumps



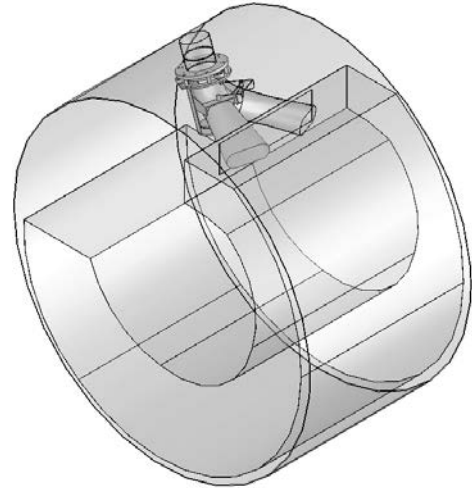
Versione con 6 vasche e 2 pompe multiaspiranti
Version with 6 fabric deposits and 2 multisuction pumps

**LIQUOR RATIO
1,8+FABRIC ABSORPTION**

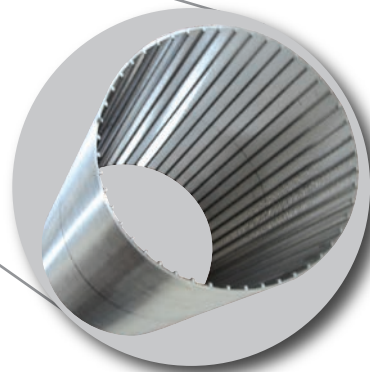
STANDARD EQUIPEMENT

Grazie al nuovo layout delle vasche di deposito tessuto e sistema di faldatura combinato, viene aumentata la capacità reale di carico.

The new design of the fabric deposit troughs combined with the plaiting system increases the real capacity of the machine.



Sfruttando la pressione generata dalla pompa di circolazione e il bagno presente in macchina, ad ogni scarico bagno viene effettuato un lavaggio del filtro SSCF (patent pending), consentendo la riduzione delle operazioni di pulizia e il corretto funzionamento della pompa principale (aumento delle prestazioni).



Taking advantage of the pressure generated by the circulation pump and of the liquor inside the machine, by every liquor drain, the SSCF Self-Cleaning-Filter (patent pending) is being washed-off. This fact remarkably reduces the cleaning operations of filters and improves the performance of the circulation pump itself.

SELF-CLEANING STATIC FILTER ON DELIVERY PUMP

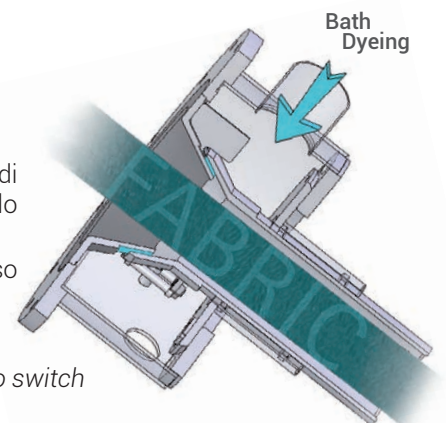
HYDROVARIO VARIABLE NOZZLE

L'Hydrovario è un ugello a sezione di passaggio del bagno circolare variabile. Permette di passare da un'azione tipicamente FLOW ad un'azione JET o intermedia con un solo ugello.

Viene movimentato attraverso un azionamento elettrico che consente un sicuro e preciso posizionamento.

The Hydrovario is a nozzle with passage section of the circular bath variable. It allows to switch from a typical FLOW action to a JET or intermediate action with a single nozzle.

The Hydrovario is moved through an electric drive that allows a safe and precise positioning.



STANDARD EQUIPEMENT

MST (machine side tank): serbatoio di preparazione bagno con sistema di controllo e gestione del livello tramite sonda pneumatica per la riduzione dei tempi morti nelle fasi di riempimento bagno.

MQD (machine quick drain): scarico rapido via pompa di circolazione principale.

Serbatoi 1 e 2 di aggiunta prodotti completo di mixer, sonda pneumatica, serpentino di riscaldamento e ricircolo bagno macchina. Grazie a tale sistema si riducono ulteriormente i tempi morti e i tempi di attesa anche in presenza di sistemi automatici di distribuzione.

MST (machine side tank) is for liquor preparation; liquor is controlled and managed by a pneumatic probe in order to reduce down times by liquor fillings.

MQD, machine quick drain, by main circulation pump.

Add tank 1 and 2 for products, each one complete with its own mixer, pneumatic probe, heating coil, liquor recycling to make product dissolving and mixing much easier. Thanks to these equipments down times and waiting times are much reduced, also in case of automatic dispensing systems.



STANDARD AUTOMATION



PCTE: PC industriale sviluppato in ambiente windows per implementare in modo avanzato tutte le funzionalità diagnostiche, di monitoraggio e di automazione delle macchine di tintura. Grazie allo schermo tattile touch-screen, 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.

PCTE: industrial PC developed in Windows room to improve all diagnostic functions, monitoring and automation of dyeing machines. With Touch-Screen, 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.

KNITTED & WOVEN VERSION

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1U	180	2800	4000	5300
DYS-2U	360	3700	4000	5300
DYS-3U	540	4900	4000	5300
DYS-4U	720	5900	4000	5300
DYS-6U	1080	8100	4000	5300

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XJ	250	3100	4000	5300
DYS-2XJ	500	4500	4000	5300
DYS-3XJ	750	5700	4000	5300
DYS-4XJ	1000	7400	4000	5300
DYS-6XJ	1500	10500	4000	5300

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XXJ	300	3400	4000	5300
DYS-2XXJ	600	5000	4000	5300
DYS-3XXJ	900	6700	4000	5300
DYS-4XXJ	1200	8300	4000	5300
DYS-6XXJ	1800	12200	4000	5300

UPHOLSTERY VERSION

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1U	180	2800	4000	5300
DYS-2U	360	3700	4000	5300
DYS-3U	540	4900	4000	5300
DYS-4U	720	5900	4000	5300
DYS-6U	1080	8100	4000	5300

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XU	250	3100	4000	5300
DYS-2XU	500	4500	4000	5300
DYS-3XU	750	5700	4000	5300
DYS-4XU	1000	7400	4000	5300
DYS-6XU	1500	10500	4000	5300

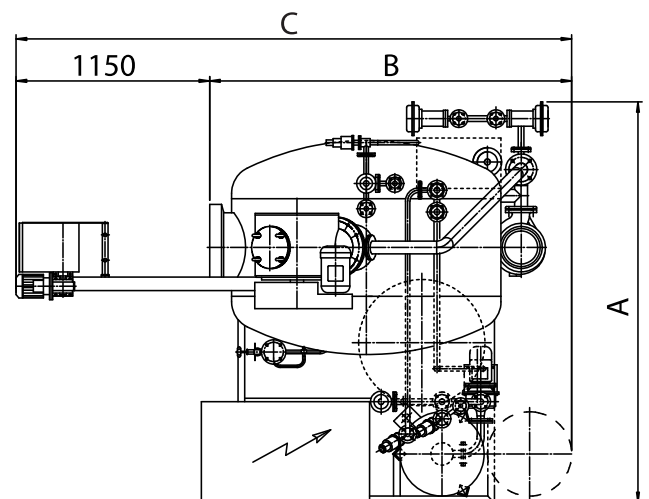
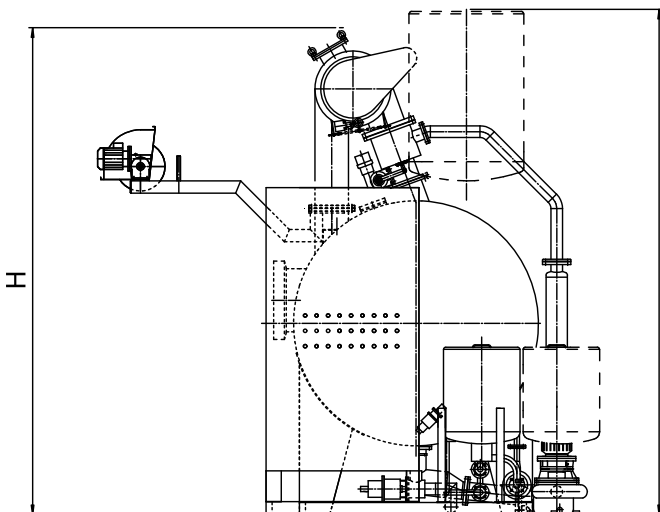
	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XXU	300	3400	4000	5300
DYS-2XXU	600	5000	4000	5300
DYS-3XXU	900	6700	4000	5300
DYS-4XXU	1200	8300	4000	5300
DYS-6XXU	1800	12200	4000	5300

KAPPA - SMALL PRODUCTION

	Loading [Kg]	A [mm]	B [mm]	C [mm]	H [mm]
K-25J	25	2380	2030	3180	3300
K-50J	50	2380	2030	3180	3300
K-100J	100	2570	2600	3750	3950

KAPPA - SMALL PRODUCTION

	Loading [Kg]	A [mm]	B [mm]	C [mm]	H [mm]
K-25-U	25	2380	2030	3180	3300
K-50-U	50	2380	2030	3180	3300
K-100-U	100	2570	2600	3750	3950



Loading capacity mentioned in this table may slightly vary depending on the type of article considered. MCS reserve the right to change technical data and specifications without prior notice.

SPECIAL TOWEL VERSION

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XT	250	3300	4000	5300
DYS-2XT	500	4700	4000	5300
DYS-3XT	750	5900	4000	5300
DYS-4XT	1000	7400	4000	5300
DYS-6XT	1500	10500	4000	5300

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XXT	300	3400	4000	5300
DYS-2XXT	600	4900	4000	5300
DYS-3XXT	900	6250	4000	5300
DYS-4XXT	1200	7800	4000	5300
DYS-6XXT	1800	10900	4000	5300

KAPPA - SMALL PRODUCTION

	Loading [Kg]	A [mm]	B [mm]	C [mm]	H [mm]
K25-T	25	2380	2030	3180	3300
K50-T	50	2380	2030	3180	3300
K100-T	100	2570	2600	3750	3950

HEAVY TOWEL VERSION LOAD UP 5 KG/LIN.M.

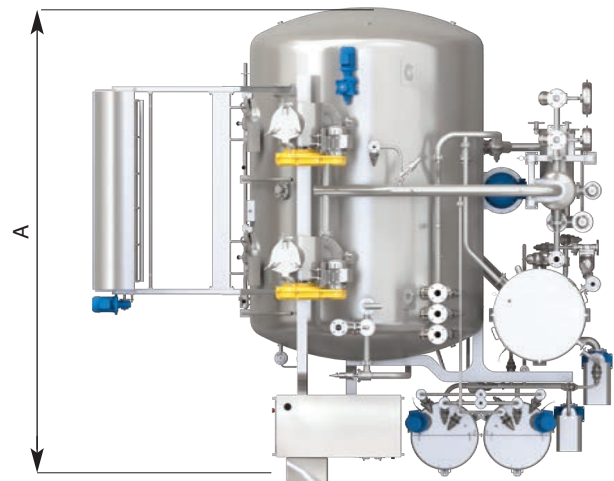
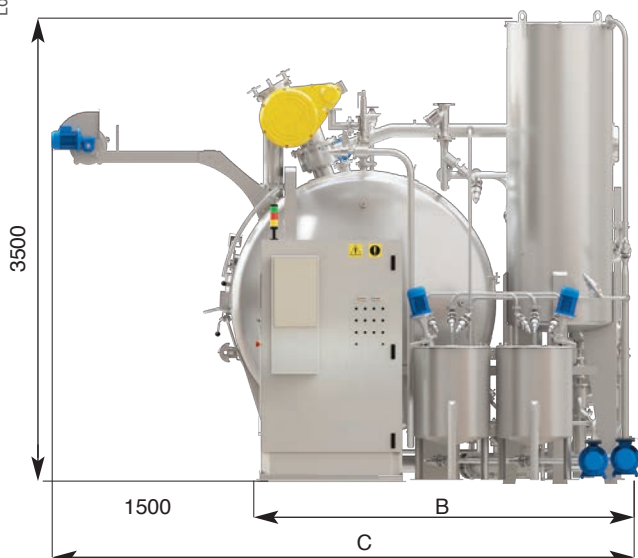
HEAVY TOWEL VERSION

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XTT	250	3300	4000	5300
DYS-2XTT	500	4700	4000	5300
DYS-3XTT	750	5900	4000	5300
DYS-4XTT	1000	7400	4000	5300
DYS-6XTT	1500	10500	4000	5300

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XXTT	300	3400	4000	5300
DYS-2XXTT	600	4900	4000	5300
DYS-3XXTT	900	6250	4000	5300
DYS-4XXTT	1200	7800	4000	5300
DYS-6XXTT	1800	10900	4000	5300

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XSSTT	350	3550	4000	5300
DYS-2XSSTT	700	5200	4000	5300
DYS-3XSSTT	1050	6700	4000	5300
DYS-4XSSTT	1400	8400	4000	5300
DYS-6XSSTT	2100	11650	4000	5300

	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1SSSTT	400	3750	4000	5300
DYS-2SSSTT	800	5600	4000	5300
DYS-3SSSTT	1200	7300	4000	5300
DYS-4SSSTT	1600	9200	4000	5300
DYS-6SSSTT	2400	12850	4000	5300



Loading capacity mentioned in this table may slightly vary depending on the type of article considered. MCS reserve the right to change technical data and specifications without prior notice.

FEEL THE POWER OF WATER

DYEING & FINISHING MACHINERY



MCS

Bergamo | Italy | mcstextile.it



THINK BEFORE YOU PRINT