

MCS

DYEING & FINISHING MACHINERY



DYNAMICA SPRINT

HT ROPE DYEING MACHINE



THINK BEFORE YOU PRINT

ROADMAP TO
ZERO
By 2030

OUR HISTORY

DYEING & FINISHING MACHINERY



MCS & TERMO INNOVATION ZONE



COMMISSION ECO-DYEHOUSE



AUTOMATION & SOFTWARE



mcsgroup.it
Bergamo - Italy



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



2025 - 1° LIVE OPEN-DAY in Blue Innovative Area

MCS show running:

- Multiwash-M
- Double Jigger-C4
- Chronoflow
- Softflow-18

2023 ITMA - Milan

MCS exhibits:

- Multiwash-M,
- Double 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 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 é uma máquina de tingimento de corda em alta temperatura (max 144 algüem C).

É uma máquina de armazenamento circular, adequada para tecidos de malha e planos com pesos variáveis.

Para artigos de pesos leves especiais é possível trabalhar em acordes duplos ou múltiplos.

O corpo da máquina pode conter de um a seis tanques, com capacidade de carga variável dependendo do modelo e da versão escolhida.

Considerando uma malha de fibra celulósica com um peso de 250 g/lin. m, as capacidades de enchimento são as indicadas na tabela na p. 10.

Todas as peças internas da máquina em contato com o tecido são construídas usando aço inoxidável certificado AISI 316/ AISI 316 L.

O Dynamica Sprint é totalmente projetado e construído em MCS.

Cada nuevo modelo es probado y expuesto, en INNOVATIVE BLUE ÁREA integrado en la tintorería del grupo 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.

HISTÓRIA DAS MÁQUINAS DE TINGIMENTO EM CORDA MCS

1967 ITMA - Paris: MCS expõe o primeiro modelo de jato de baixa temperatura

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

1983 ITMA - Milão: MCS expõe SOFTFLOW 82 HT e FLO-JET OF83 HT

1987 ITMA - Paris: MCS expõe PANDORA HT

1995 ITMA - Milão: MCS expõe SOFTFLOW 100 HT, LONG HORN HT.

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

2000: MCS apresenta la EUROFLOW LONG

2003 ITMA - Birmingham: MCS expõe MULTIFLOW SUPERIOR.

2007 ITMA - Monaco: MCS expõe FIRST HT

2011 ITMA - Barcelona: MCS expõe DYNAMICA HT

2015 ITMA - Milão: MCS expõe DYNAMICA SPRINT HT

2019 ITMA - Barcelona: MCS apresenta SOFTFLOW 18 HT, espone DYNAMICA SPRINT HT

2020: MCS projeta EUROFLOW SPORT

2023: ITMA Milão: MCS expõe 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



CARATTERISTICAS

Relação de banho até 1,8 + fator de absorção tecido
Tanque de preparação de banhos MST com sistema de controle e controle de nível
Sistema de drenagem rápida de banho modelo MQD
Hydrovario, bico de seção variável
Sistema de circulação multi-sucção (Patente MCS)
Regulagem totalmente automática com PC industrial
Tanque de adição completo com misturador e sonda de nível
Sistema de introdução de produto redesenhado
Pesquisa de costura e controle de circulação de peças
Controle de nível contínuo
Contador de litros de enchimento H2O
Sistema de lavagem de parede de máquina carrossel
Filtro principal autolimpante na entrega da bomba
Sistema de recirculação e introdução para diluição de sal

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



CARATTERISTICAS

Pasta para depósito de tecido em cada tanque de tratamento
2º tanque de adição de produto completo com misturador e sonda de nível

Possibilidade de tingimento em cordas duplas ou múltiplas

Painel operador: qualquer micro disponível no mercado pode ser utilizado (Optional)

pH-Meter: medidor de pH composto por uma sonda de alta temperatura e instrumento de leitura instalado no painel (Optional)

Medidor de fluxo de vapor: conectado ao microprocessador da máquina para registrar o consumo de vapor do ciclo (Optional)

Medidor de consumo elétrico: conectado ao microprocessador da máquina para registrar o consumo de eletricidade do ciclo (Optional)

Ar condicionado: ar condicionado no quadro elétrico com capacidade de refrigeração adequada com alimentação trifásica (Optional)

Twins System: uso combinado de várias máquinas (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



Graças ao novo sistema de aspiração e circulação banho (patent pending), Dynamica Sprint permite trabalhar com relação de banho até 1:3,5.

Igualmente, com ajuda de uma bomba centrífuga com eixo vertical multi-aspiração tal desempenho é garantido também com a carga real reduzida.

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.

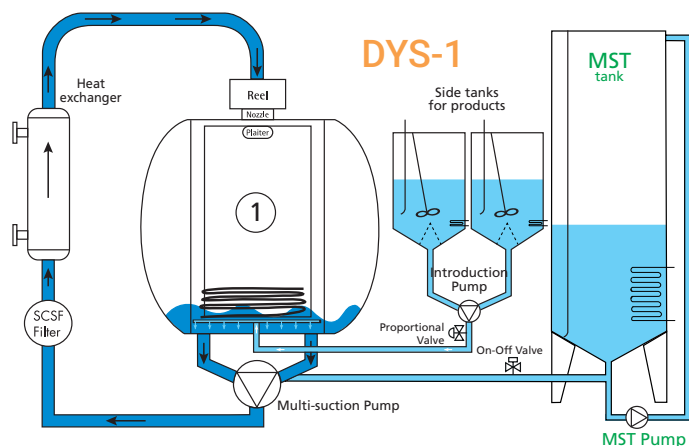
Furthermore, a multi-suction, vertical, centrifugal pump guarantees machine performances also by reduced loads.

NOVO SISTEMA INTRODUÇÃO PRODUTOS

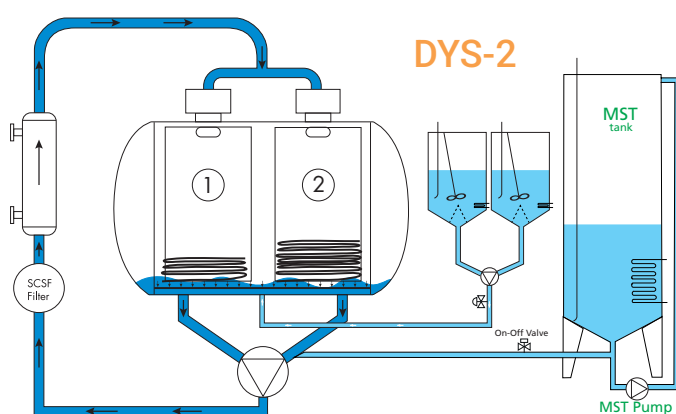
Processos são mais rápidos e seguros graças a um novo conceito para controlador entrada de produto (patente MCS) por PC de ecrã-táctil industrial (PCx-TEx da Termoelettronica)

NEW SYSTEM FOR PRODUCT INLET

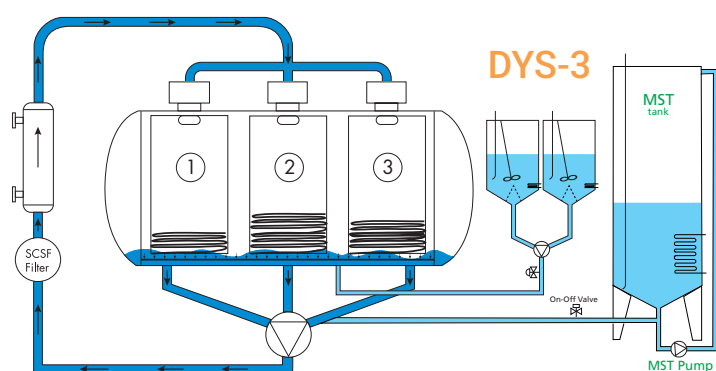
Processes are faster and safer thanks to a new concept for product inlet (MCS patent) controller by industrial touch-screen PC (PCx-TEx by Termoelettronica)



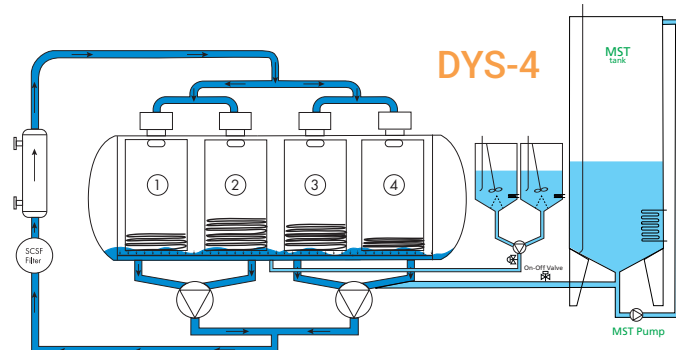
Versão com 1 depósito de tecido e 1 bomba de sucção múltipla
Version with 1 fabric deposit and 1 multisuction pump



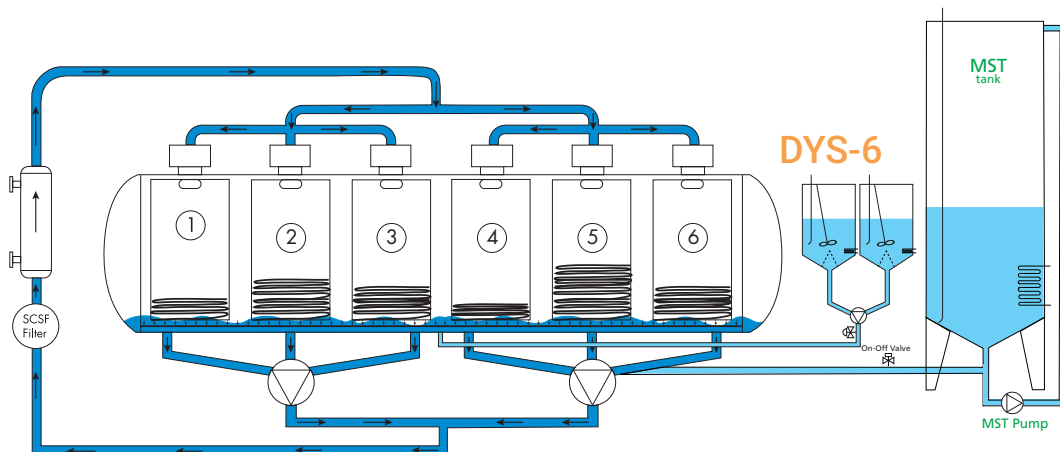
Versão com 2 depósitos de tecido e 1 bomba de sucção múltipla
Version with 2 fabric deposits and 1 multisuction pump



Versão com 3 depósitos de tecido e 1 bomba de sucção múltipla
Version with 3 fabric deposits and 1 multisuction pump



Versão com 4 depósitos de tecido e 2 bombas de sucção múltipla
Version with 4 fabric deposits and 2 multisuction pumps



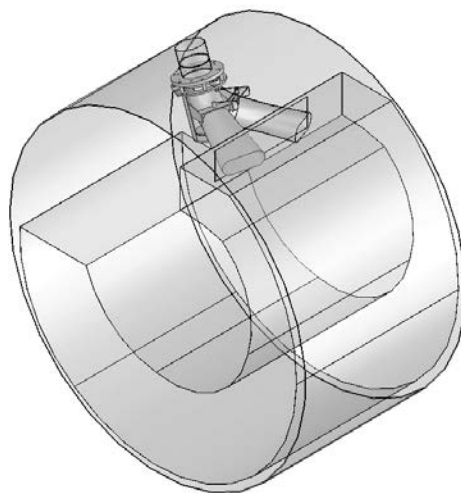
Versão com 6 depósitos de tecido e 2 bombas de sucção múltipla
Version with 6 fabric deposits and 2 multisuction pumps

LIQUOR
RATIO

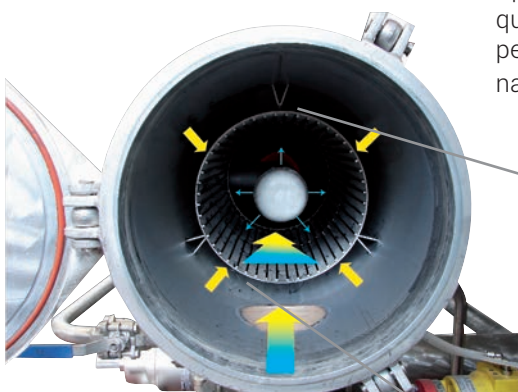
STANDARD EQUIPEMENT

Graças ao novo layout dos cestos para depósito tecido e ao sistema de enfestar combinado, é aumentada a capacidade real de carga.

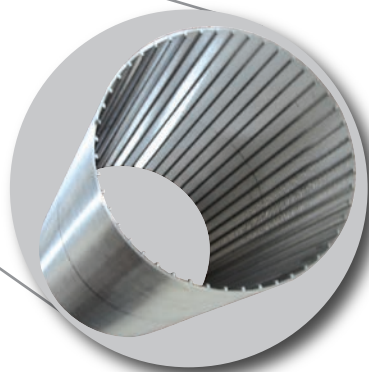
The new design of the fabric deposit troughs combined with the plaiting system increases the real capacity of the machine.



Aproveitando a pressão gerada pela bomba de circulação e o banho presente na máquina, a cada descarga do banho é executada uma lavagem do filtro SSCF (patent pending), reduzindo assim as operações de limpeza e garantindo o correto funcionamento da bomba principal. (aumenta o desempenho) .



SELF-CLEANING STATIC FILTER ON DELIVERY PUMP



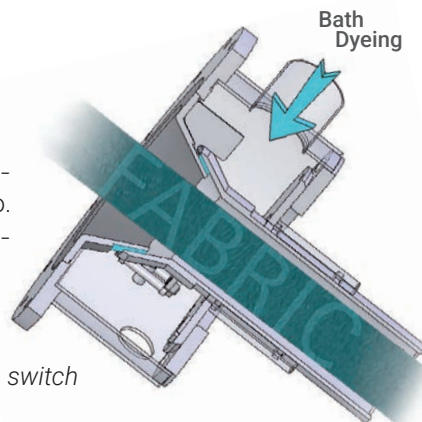
Taking advantage of the pressure generated by the circulation pump and of the liquor inside the machine, by every liquor drain, the SSCF Self-Cleaning-Filter (patent pending) is being washed-off. This fact remarkably reduces the cleaning operations of filters and improves the performance of the circulation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

HYDROVARIO VARIABLE NOZZLE

O Hydrovario é um bico com seção de passagem da variável banho circular. Permite alternar de uma ação FLOW típica para uma ação JET ou intermediária com um único bico. A Hydrovario é movida através de um acionamento elétrico que permite um posicionamento seguro e preciso.

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): tanque para preparação banho com sistema de controle e gestão do nível através a sonda pneumática, para redução dos tempos mortos nas fases de enchimento com banho.

MQD (machine quick drain): descarga rápida via bomba de circulação principal.

Tanques 1 e 2 auxiliares para adição produtos completos de mixer, sonda pneumática, serpentina de aquecimento e recirculação banho máquina.

Graças a tal sistema se reduzem ulteriores tempos mortos e os tempos de espera mesmo na presença de sistemas automáticos de distribuição.

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.

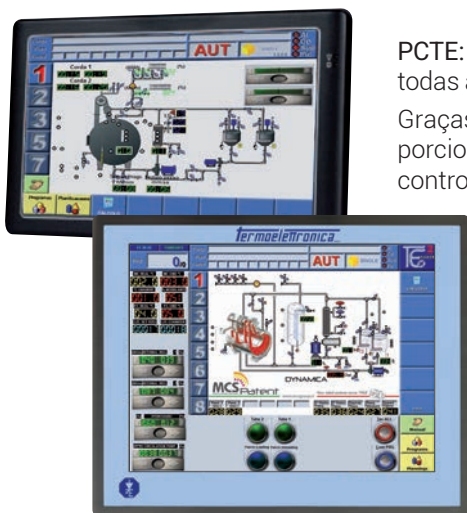
MQD, machine quick drain, by main circulation pump.

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 industrial desenvolvido em ambiente Windows para implementar de forma avançada todas as funções de diagnóstico, monitorização e automatização das máquinas de tingimento. Graças ao ecrã tátil touchscreen, especificamente concebido para utilização industrial, proporciona um acesso fácil e rápido às funções. Sob pedido é possível a utilização de qualquer controlador disponível no mercado.

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-1J	180	2800	4000	5300
DYS-2J	360	3700	4000	5300
DYS-3J	540	4900	4000	5300
DYS-4J	720	5900	4000	5300
DYS-6J	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

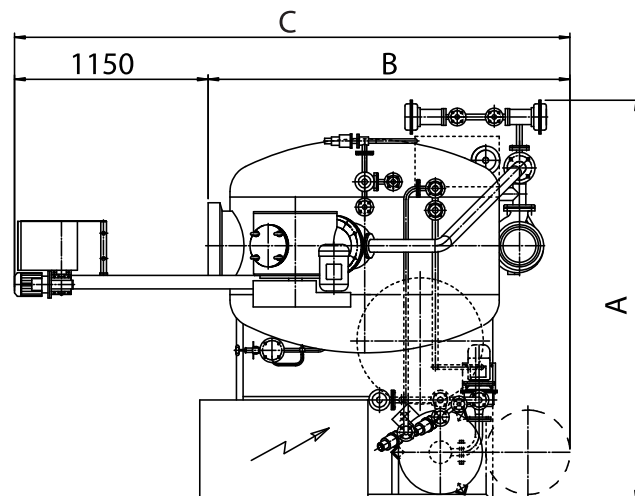
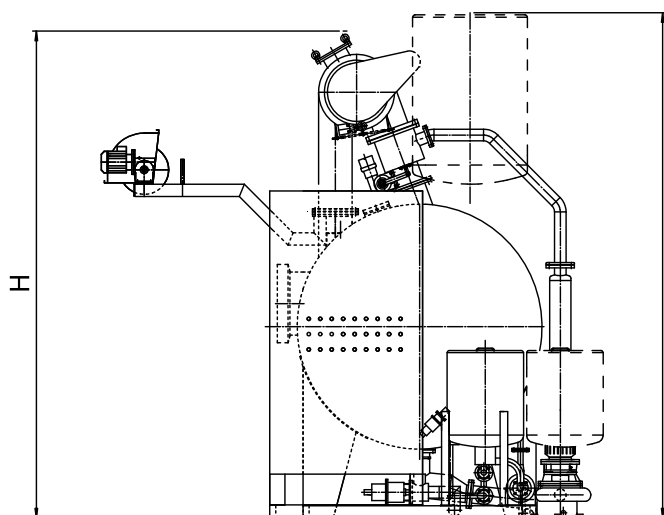
	Loading [Kg]	A [mm]	B [mm]	C [mm]
DYS-1XXU	300	3400	4000	5300
DYS-2XXU	600	5000	4000	5300
DYS-3XXU	900	6700	4000	5300
DYS-4XXU	1200	8300	4000	5300
DYS-6XXU	1800	12200	4000	5300

KAPPA - SMALL PRODUCTION

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



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.

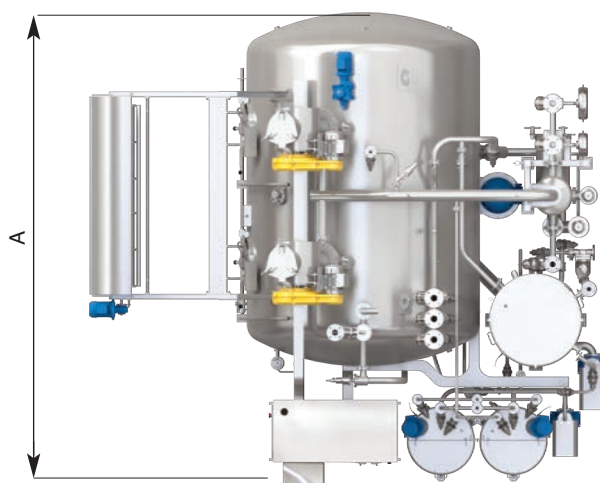
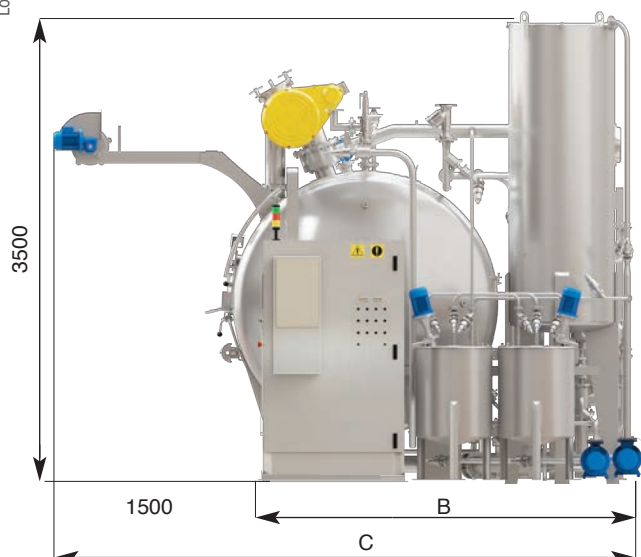
HEAVY TOWEL VERSION

	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-1SSTT	400	3750	4000	5300
DYS-2SSTT	800	5600	4000	5300
DYS-3SSTT	1200	7300	4000	5300
DYS-4SSTT	1600	9200	4000	5300
DYS-6SSTT	2400	12850	4000	5300



FEEL THE POWER OF WATER

DYEING & FINISHING MACHINERY



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