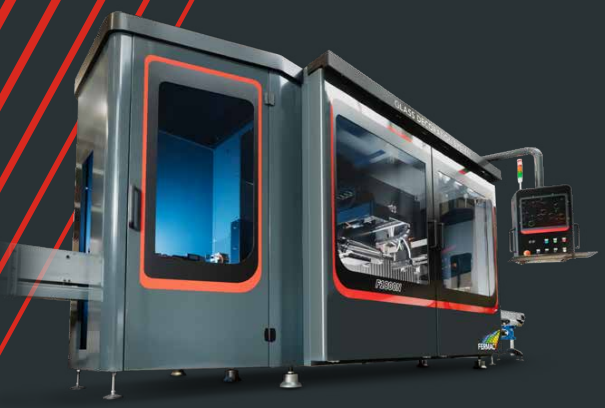
FERMAC

FLEX

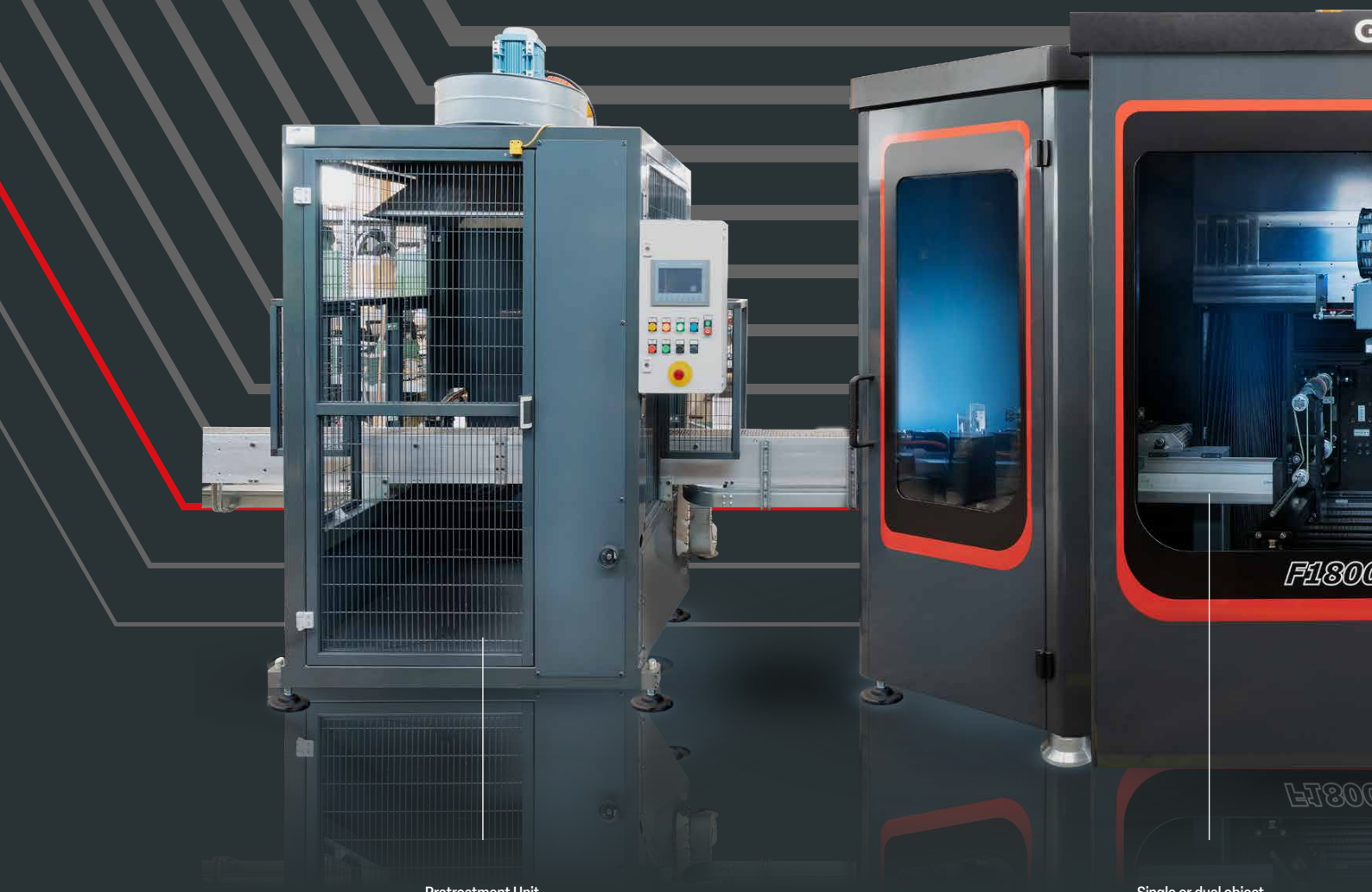
SERIES

Modular glass printing systems



Freedom of print.

Reinvent. Always.



Pretreatment Unit

Single or dual object handling

The new Flex line has been developed to answer customer need for high flexibility and versatility machines. This platform enables our customers to penetrate new markets thanks to the ability of perform short-run and complex printing. Thanks to the CMYK unique capabilities it is also possible to find new interesting niches and unexplored commercial opportunities. The Flex range comes from more than 30 years of experience in the field of glass decoration systems.

FERMAC
GLASS PRINTING TECHNOLOGIES

New ergonomical access
with sliding front doors panels

New HMI mobile panel

FLEX

when it comes to flexibility

FLAT CYLINDRICAL ELLIPTICAL CONICAL

MODULAR TECHNOLOGY FOR FUTURE PROOF SYSTEMS.

This range has been desgined on a linear concept. Our users are free to shape their own decoration system based on their specific needs. This is made possible thanks to a modular approach, that not only permits great configuration possibilities, but also to upgrade the machine with future improvements.

FERMAC
MODULAR
CONCEPT

MODULAR CHASSIS SYSTEM

F1800N

For application that need up to a maximum of 3 colours, or for CMYKdigital printing

OR

F3000N

Up to five colours or digital hybrid application (CMYK + 1 screen printing colour)

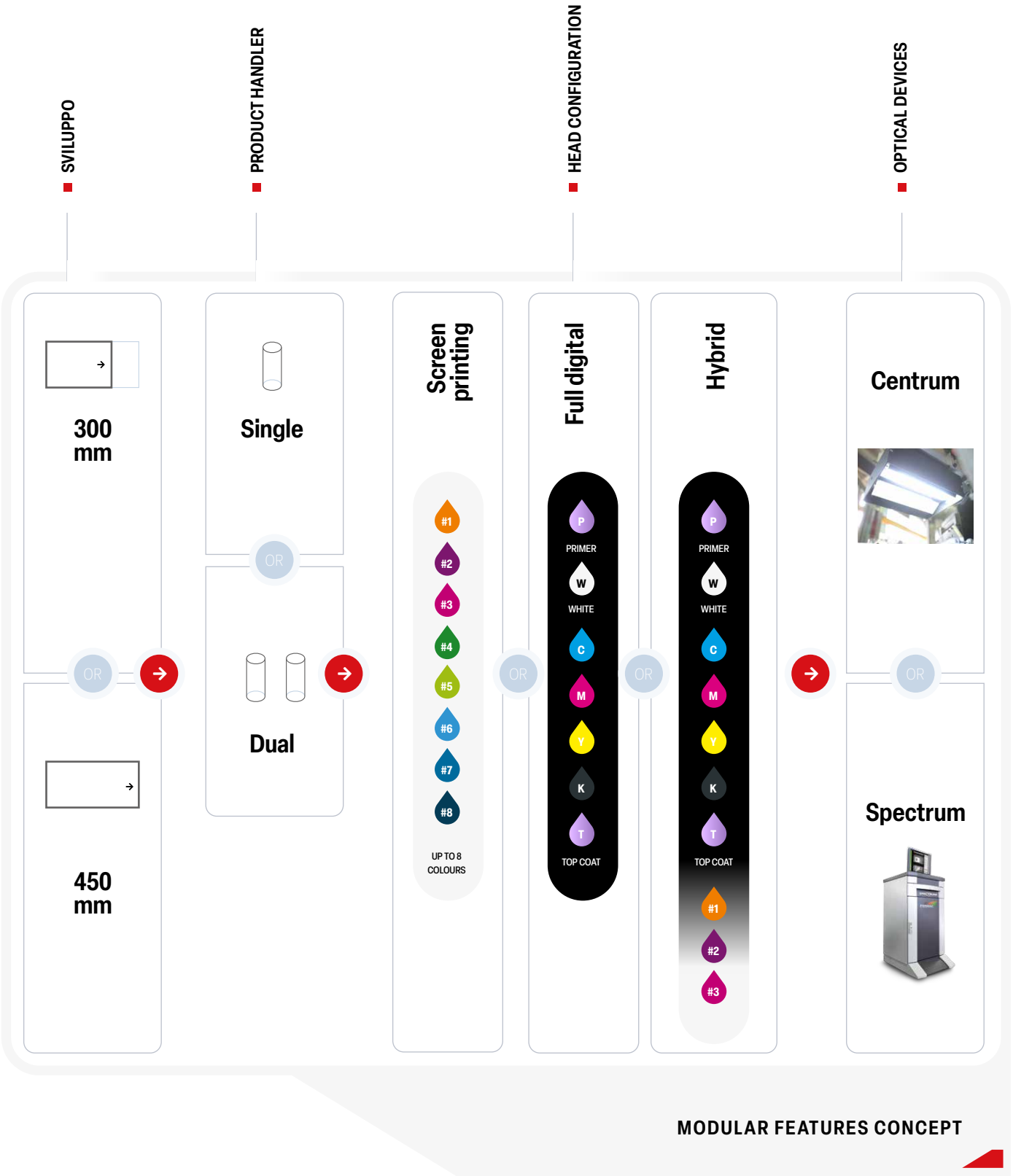
OR

F4200N

From 5 to 8 colour ideal for complex printing job

Three chassis are available in order to host different working station or options. Depending on any specific production need you can chose from 1800 up to 4200 mm of horizontal stroke of object holder carriage. See all the modules and option in the table on the next page.

EASY CONFIGURATION FOR ANY PRINTNG NEED.



MODULAR FEATURES CONCEPT

FLEX series

WORKFLOW

Choose your preferred workflow and let your machine express its maximum potential

FLEXIBILITY

Integrate different printing process maintaining the possibility of future upgrades and retrofits.

RELIABLE

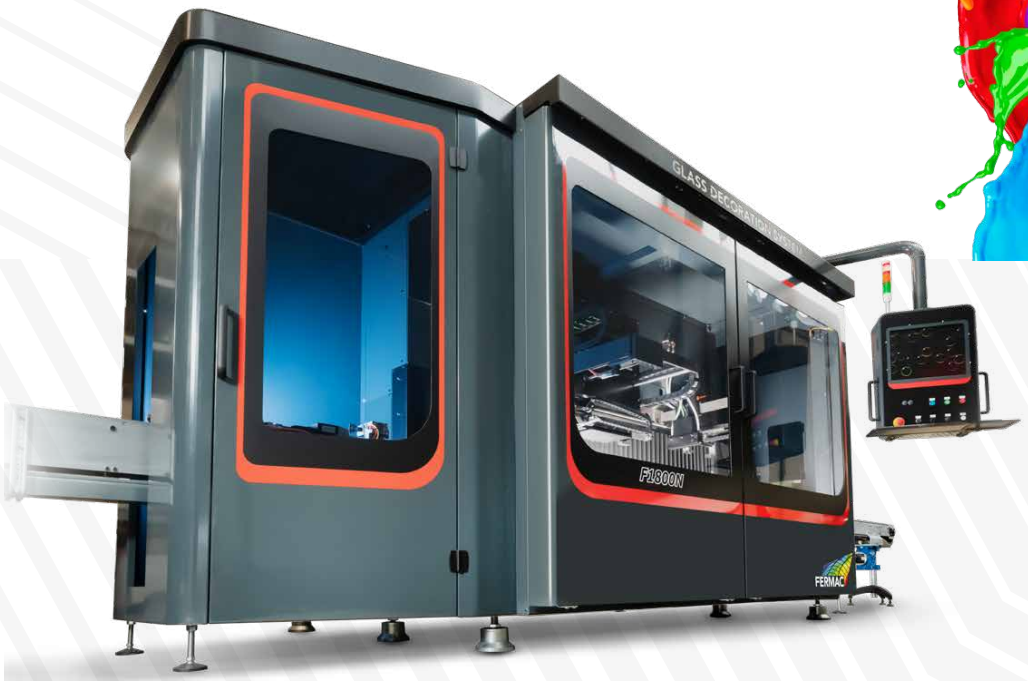
Extreme accuracy for colour registration. Maximum repetibility among prodution batches.

USE YOUR

HEADS

THE WAY YOU WANT

INLINE PRINTING HEADS WITH CERAMIC ENAMELS AND/OR UV INKS



UV+

HYB

CERAMIC

NUMBER OF COLOURS

8

Up to 8 printing heads for screen printing

Process

C+UV+ IJ

Three different printing process available (Ceramic enamel, UV inks, Ink Jet Led)

Fast changeover

<20’

Single tooling with SMED concept

FLEX range enable various configuration for the printing heads in combination with option integration, such as: Centrum (*camera for angular positioning of the item*), Spectrum (colour *High-definition camera for quality control)* UV curing lamp, Ink-jet additional print-head, hot-foil stamping module.

FLEX series

PHOTO QUALITY

CMYK printing allows perfect reproduction of continuous tone photographic images

...PLUS WHITE

White, as additional under colour printing, permits grat flexibility both for creative and technical purposes

3D EMBOSSING

A 3D embossing effect is achievable by overlapping top coat varnish layers

BECOME A CMYK NINJA

Shades of colour

16.7m *million of colurs*

Thanks to CMYK it is possible to print all colour shades of a 24bit RGB image

DPI

360/720

High resolution for ideal image rendition

Variable data

N0021

Customized list of data for creating unique pieces

Entering the world of CMYK printing on glass (*and other materials*) is the gateway to enter new markets. Radically new printing services, even short-run or test productions, can be carried out in just minutes and complements more traditional decoration process that can be performed, depending on the choosen configuration, by a FLEX machine itself. The R.I.P. *Raster Image Processor*, features data driven workflows in order to print variable data for and unlimited range of printing works.

DESIGNED BY INNOVATION
BUILT BY EXPERIENCE

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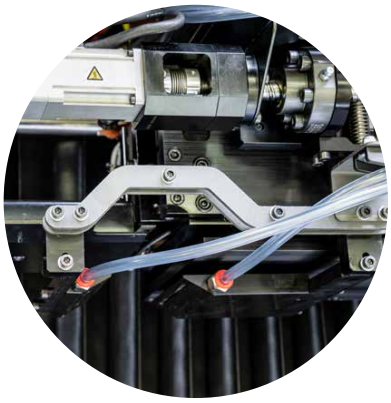
lent quam vel ius ea possimi nctur, quis vent

Ink system

Highly reliable, user friendly, ink feeding systemwith fine tuning vacuum management.

UV Led curing system

Inline integrated curing light with 395 nm Led from 2 to 24 W



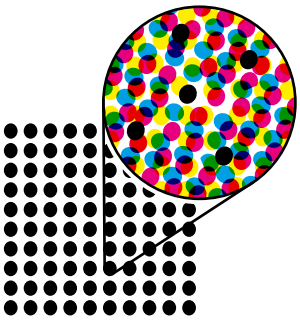
Motorized **shutter**

Motorized shutter for protecting print heads, including vacuum system for ink mist.

SIMPLIFIED MAINTENANCE AND CHANGE-OVER.

Both for everyday usage and periodic maintenance a FLEX machine is designed to be highliy time efficient. From high accessibility to servo-driven mechanisms, numerous devices have been completely redesigned from scratch, compared to the machines of previous generations. This allows operators and maintenance personnel to carry out their tasks quickly, freeing up resources for production. Ink refill, for instance, is a simple and safe operation thanks to a new vacuum management system.

Pin fixture grippers for tools-free fast changeover. Servo-driven tilting device to ensure optimal printing distance.



Precision

0,07mm

Mechanical precision needed to perform optimal 720Dpi printing

Ink Jet frequency

45Khz

Maximum jetting speed for print head

Reliability is a key feature of all Fermac machines. Every machine is built with the best italian care for quality and passion for high performance mechanics. This translates into a precision of 0,07mm, meaning better colour registration and higher repeteability.

MADE TO LAST AND SAVE ENERGY

FLEX RANGE IS FOCUSED ON AN ENVIRONMENT FRIENDLY APPROACH THAT GRANTS SIGNIFICANT COST SAVINGS.

Reduction of power comsumption is a key feature of the Flex line project. High efficiency brushless motors provide both reliability and a significant energy savings. The electronic pack is provided with a Kinetic energy recovery system (KERS) that stores energy during braking phase to restore during acceleration. Furhtermore UV Led lamps are designed to grant perfect ink curing with lowest possible current usage.

FERMAC
GLASS PRINTING TECHNOLOGIES

Power saving

40KW

For UV Led curing compared to conventional lamps

Ink consumption

-50%

Half cut the quantity of printing inks (on digital)

Costs for screens

Zero

No need for conventional screens (on digital)

TECHNICAL DATA

Horizontal stroke mm

1800

Horizontal stroke for object holder

Max colours

3

Output max pcs/min

15

With single object holder

Overall size mm

4500 x 1800 x 2200

W x L x H

Horizontal stroke mm

3000

Horizontal stroke for object holder

Max colours

5

Output max pcs/min

10

With single object holder

Overall size mm

5700 x 1800 x 2200

W x L x H

Horizontal stroke mm

4200

Horizontal stroke for object holder

Max colours

8

Output max pcs/min

5

With single object holder

Overall size mm

6900 x 1800 x 2200

W x L x H

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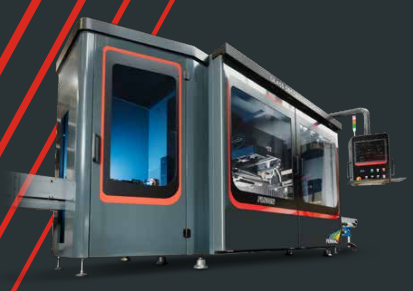

Freedom of print.

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