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textile field

carousel automatic screen printing machine

# REVOLUTION



### Revolution in screen printing!

The goal of our designers is to create, not only technologically advanced machines, but also easy and simple to use. Moreover, the experience gained over the last few decades allows us to manufacture equipment with an excellent value-for-money.

**REVOLUTION** is the perfect expression of all this, and it takes its name from its will and ambition to revolutionise the world of textile screen printing on pre-cut and made fabrics.



#### The no-bulky automatic machine!

The automatic machines on the market have a big flaw: they are too bulky.

**REVOLUTION** has been designed to reduce its overall dimensions to the minimum. The machine has a **diameter of just 3950 mm**.

#### High accuracy and repeatability of prints

The **rotary index table** controls the rotation of the tables centring them under the printing heads; moreover, the **centring system** – one for each colour – perfectly aligns the table with the screen. Thus, there are two centring systems that offset and improve each other, ensuring high accuracy and repeatability of prints.

#### Independent printing units

Each colour is independent, i.e. it can be activated, adjusted and controlled as if it were an autonomous printing unit. For example, you can adjust:

- the distance of the screen-holders in order to use screens of any size;
- the printing stroke;
- both the speed of the squeegee and the scraper.

These are just a few examples of the many systems on the machinery.

Moreover, each printing unit is equipped with a **double-stroke lift system**: the short stroke is used during printing, making the machine very fast; the long stroke, on the other hand, is used for cleaning the screen, making this operation very easy for the user.

Each colour has a **sub control panel**, so that the essential functions of the machine are always at hand.

#### Infinite possibilities of prints

**REVOLUTION** offers a lot of possibilities to the screen printers, for example:

- 1. printing with lowered squeegee, return with raised squeegee;
- 2. printing with lowered squeegee and return with lowered scraper: very useful in printing dark garments when grater coverage is required;
- 3. repetition of printing up to 10 times: essential to achieve a high coverage on heavy garments such as sweatshirts, towels, jeans, etc.

#### Automatic ink recovery system New

Screen printing machines have a flaw: after some prints, the ink slips at the bottom of the screen and the user is forced to bring it back with a spatula. Thanks to the automatic ink recovery system, the user no longer must do this operation.

During printing, the squeegee and scraper move between two end-strokes. When the system is activated, the squeegee and scraper make a longer stroke in order to get the ink that has slipped at the bottom of the screen and bring it back for subsequent prints.

The user can choose whether to activate the system after each print, after a certain number of prints or to deactivate it (this in case the length of the screen does not allow the use of the system).



#### Intermediate colour pause system New

The printing tables of the machine can work in two different modes:

- 1. The tables always move between one colour and the next.
- 2. The tables stop in an intermediate position between the colours after each print.

This second possibility let the user add some curing systems (not included).

Moreover, thanks to this system the machine overall dimensions are reduced because **less printing** tables are needed.

#### Control panels

The machine is equipped with a **main control panel** that allows easy and quick access to all the controls, moreover with a **sub control panel** for each printing unit.

#### Safety matters!

All the controls and adjustments of the printing units are arranged in areas of easy access, so that the user never has to overcome the safety barriers to perform any operation.

It follows that **REVOLUTION**, was not only designed to quickly produce very high-quality multi-colour prints, but also, with attention to user safety.



c detail of the printing unit

detail of the printing unit





Technical data	5 colours	6 colours
Printable materials:	pre-cut and made fabrics as t-shirts, sweatshirts, shirts, slacks, socks, handkerchiefs, bandanas, pillows, bags and textile promotional items, etc.	
Printing units <sup>1</sup> :	5	6
Printing tables <sup>1</sup> :	8	
Max printing size:	500 mm x 700 mm	
Max cycles/hour <sup>2</sup> :	800	
Electrical supply <sup>3</sup> :	400 V 3-phase + neutral, 50 Hz	
Installed power:	3 kW	3.4 kW
Working pressure <sup>4</sup> :	6÷7 bar	
Overall dimensions:	Ø 3950 mm	
Usable screens:	wooden or metallic frames	
Screen thickness range:	up to 30 mm	
Usable inks:	traditional screen printing inks	

- [1] More colours/tables available on request.[2] Given values without considering the material loading/unloading time.
- [3] Any other three-phase electrical supply available on request.
- [4] The compressor is not included.

To improve the quality of the product, the Mismatic Company can do modifications in the manufacturing without any obligation to notify the same to the Customer.





#### Standard features

- Independent printing units
- Printing heads opening: as a book, pneumatic system
- Printing heads height from printing tables during screen cleaning operation: 350 mm
- ❖ [] screen-holder: adjustable; possibility to adapt different sized screens
- Screen insertion/extraction: printing unit lateral side
- Screen block/unblock: automatic New
- Squeegee and scraper independent speeds
- Squeegee and scraper speed: adjustable by control panel
- Squeegee and scraper pressure: adjustable
- Squeegee and scraper slope: adjustable
- Independent adjustment of the printing stroke for each printing unit
- Printing stroke: adjustable by end-stroke
- Printing repeats: from 1 to 10 repeats
- Automatic ink recovery system New
- **❖ Double centring system to guarantee a high printing precision and repeatability** (patented)
- ❖ Intermediate colour pause system New
- Screen micrometric adjustment: by X-Y axes
- ❖ Main control panel: equipped with colour touch-screen LCD monitor
- One sub control panel for each printing unit
- Four working modes: manual, step-by-step, single and automatic with timer







LCD monitor

#### The machine is equipped with

- #1 sets of printing tables
- #1 set of squeegees
- #1 set of scrapers
- #1 pedal to start the printing cycle



## The machine can be equipped with

- the infrared (IR) and hot air dryer model 640/105
- the infrared (IR) and hot air dryer model DUPLO



**C** IR and hot air dryer model **640/105** 

IR and hot air dryer **⊃** model **DUPLO** 

