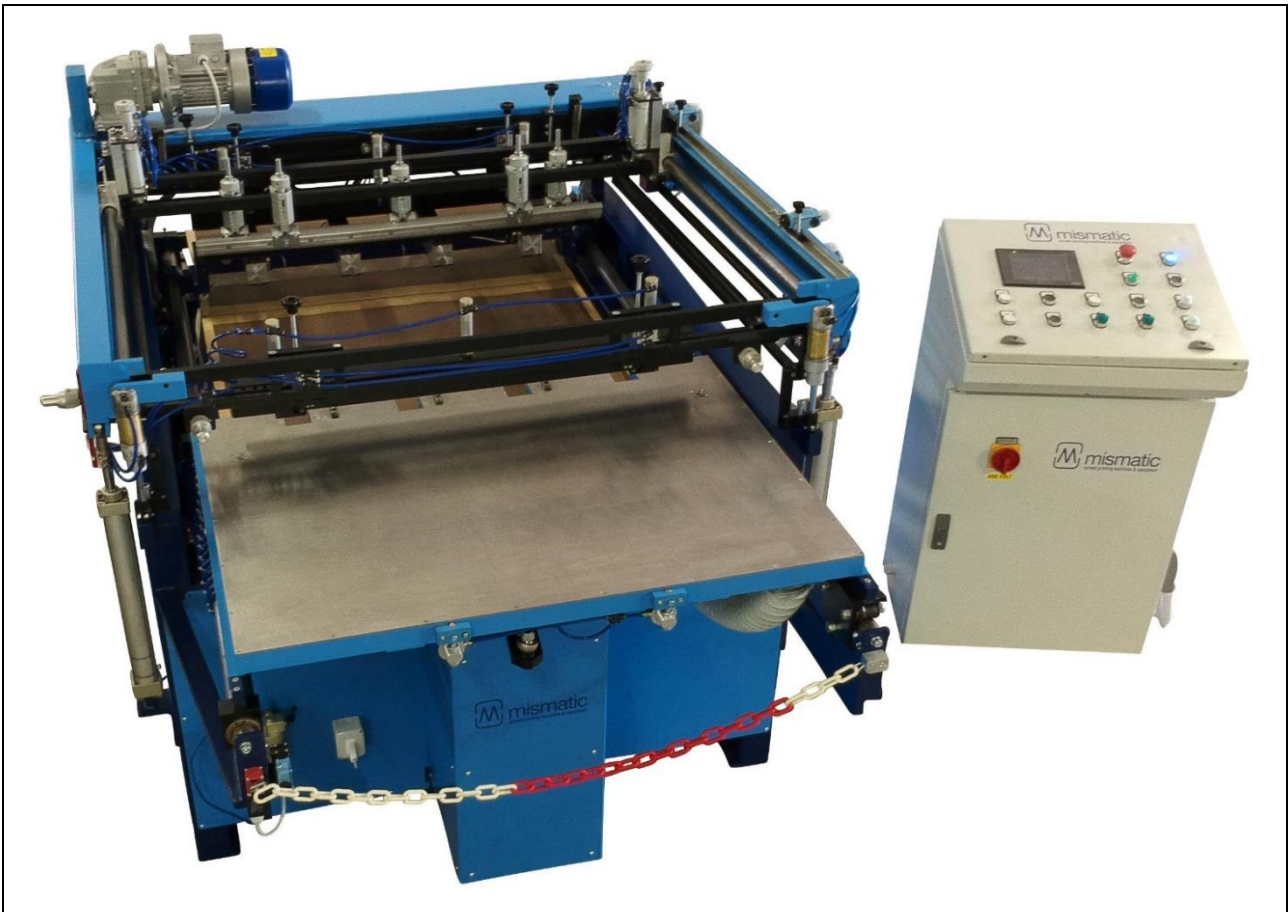


graphic field

¾ automatic screen printing machine

## VERTICAL 990



### Description

The screen printing machine model **VERTICAL 990** has been designed and built to print flexible and rigid materials. The equipment can work in semiautomatic and ¾ automatic mode.

- **Semiautomatic mode:** the user places the material on the printing table against three automatic rollaway stops, the sheet is held by the table vacuum system and moved under the printing head to be printed. Once this phase has been completed, the printing table holds again the material back and goes out of the machine; now the sheet can be unloaded.
- **¾ automatic mode:** the user places the material on the printing table against three automatic rollaway stops, the sheet is held by the table vacuum system and moved under the printing head to be printed. Once this phase has been completed, while the material is held by the gripper system, the printing table goes out of the machine, so that the sheet may fall onto the conveyor belt located under the printing head. The conveyor belt moves the material to a dryer (not included) downstream of the screen printing machine.

The machine can also be manufactured without the automatic unloading system (gripper system, conveyor belt, etc.).

### ***Automatic ink recovery system***

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 has to do this operation.

During printing, the squeegee and scraper move between two end-stroke. 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).

### ***One router ... endless possibilities!***



**VERTICAL 990** is equipped as standard with a latest generation **Ethernet / Wi-Fi router**.

Thanks to this device, the possibilities of the machine are greatly expanded.

#### **Remote service**

In the event of an electronic fault, Mismatic engineers can connect to the machinery directly from the offices in Milan (Italy) to check for any anomalies and, if needed, make the necessary changes to the software of the machine.

#### **The machine can also be controlled from tablets and smartphones**

Thanks to a **VNC server**, **VERTICAL 990** can also be controlled remotely from tablets and smartphones (iOS and Android). This technology is very convenient in some situations: for example, in cases where the machine is large and its monitor is distant from the area in which we are operating, or, to remotely monitor the production of the machinery.

#### **Free software updates**

Each software update of the machine is released free of charge to the customer.

#### **Safety**

All the data flow (in and out) of the router passes through a **secure VPN network with ISO 27001 Security Certification**.

<b>Technical data</b>	<b>51 x 71</b>	<b>71 x 101</b>	<b>81 x 121</b>	<b>101 x 141</b>
<i>Printable materials<sup>1</sup>:</i>	flexible materials as paper, cardboard and plastic sheets and rigid materials as wooden panels, metal and glass sheets			
<i>Max printing size<sup>2</sup>:</i>	510 x 710 mm	710 x 1010 mm	810 x 1210 mm	1010 x 1410 mm
<i>Max material size:</i>	560 x 760 mm	760 x 1060 mm	860 x 1260 mm	1060 x 1460 mm
<i>Min material thickness:</i>	paper from 80 g/m <sup>2</sup>			
<i>Max material thickness:</i>	7 mm (flexible materials) 25 mm (rigid materials)			
<i>Gripper margin:</i>	7 mm			
<i>Max cycles per hour<sup>3</sup>:</i>	600	550	500	450
<i>Electrical supply<sup>4</sup>:</i>	400 V 3-phase + neutral, 50 Hz			
<i>Installed power:</i>	2.5 kW		3.5 kW	
<i>Working pressure<sup>5</sup>:</i>	6÷7 bar			
<i>Overall dimensions:</i>	(L) 2140 mm x (W) 2040 mm x (H) 1480 mm	(L) 2350 mm x (W) 2350 mm x (H) 1480 mm	(L) 2450 mm x (W) 2550 mm x (H) 1480 mm	(L) 2650 mm x (W) 2750 mm x (H) 1480 mm
<i>Printing table height:</i>	1100 mm			
<i>Usable screens:</i>	wooden and metallic frames			
<i>Screens thickness range:</i>	up to 40 mm			
<i>Usable inks:</i>	traditional, ceramic and UV screen printing inks			

[1] Rigid materials such as wood, glass and metal cannot be automatically unloaded from the machine. In this case the equipment can only work in semiautomatic mode.

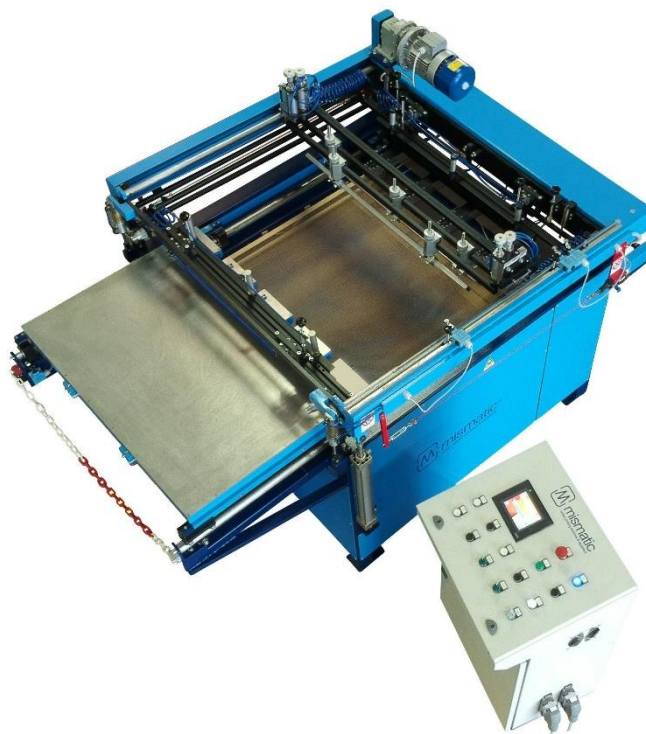
[2] Any other printing size available on request.

[3] Given values without considering the material loading time.

[4] Any other three-phase electrical supply available on request.

[5] 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

- **Material loading:** manual
- **Material positioning on the printing table:** against automatic rollaway stops with cylindrical shape and made of Nylon
- **Material unloading:** automatic, on the back side of the machine
- **Printing head opening:** clamshell
- **Printing head height from printing table during screen cleaning operation:** 450 mm
- **[ ] screen holder:** adjustable; possibility to adapt different sized screens
- **Screen insertion/extraction:** right and left side of the machine
- **Screen lock/unlock:** automatic
- **Squeegee and scraper independent speeds**
- **Squeegee and scraper speed:** adjustable by control panel
- **Squeegee and scraper pressure:** adjustable
- **Squeegee and scraper slope:** adjustable
- **Printing stroke:** adjustable by limit switches
- **Printing repeat system:** from 1 to 10 repeats. This feature is very useful when we use low covering inks, but we need a high coverage
- **Automatic ink recovery system**
- **Off-contact distance:** automatic Synchroprint adjustable up to 30 mm
- **Drilled INOX steel printing table**
- **Printing table equipped with super powerful vacuum system**
- **Sliding printing table**
- **Screen micrometric adjustment:** by X-Y axes
- **Equipped with Kevlar® reinforced fibreglass conveyor belt resistant to high temperature** (max temperature of 250°C)
- **Remote control panel equipped with colour touch-screen LCD monitor:** all monitor buttons are in your language!
- **Four working modes:** manual, step-by-step, single and automatic with timer
- **My jobs:** this feature allows to memorize all the operating parameters of the machine in a single file and to recall them when the same job reappears
- **Ethernet / Wi-Fi router:** remote service, the machine can also be controlled from tablets and smartphones, free software updates



monitor LCD



monitor LCD

### ***Option features***

- **Ethernet / Wi-Fi / 4G router:** the device has a SIM card (not included) slot

### ***The machine is equipped with***

- #1 squeegee
- #1 scraper
- #1 pedal to start the printing cycle

### ***The machine can be equipped with***

- automatic feeder
- UV hood: the hood is placed over the outer conveyor belt; thanks to the UV hood the machine becomes a compact and automatic equipment for the material printing and drying



↻ *automatic feeder*

*UV hood* ↻

