

# StencilMaster<sup>®</sup> STM-ONE

## A perfect screen at lightning speed!

This is the goal that motivates us to develop and manufacture in Switzerland a wide range of **Computer-to-Screen (CtS) equipment** under the designation **SWISS CtS TECHNOLOGY**. The STM-ONE is a product already based on **the third generation** of StencilMaster direct exposure systems.

The new model from SignTronic is particularly appropriate for small quantities and formats of printing screens, up to a maximum size of 1200 x 1200 mm. (47.2" x 47.2")

Due to the large number of involved process steps, the conventional screen exposure is very complex, expensive and error-prone. The CtS equipment sets new standards in this field and distinguishes itself by the following advantages: highest possible reproducibility thanks to **DIGITAL SCREEN MAKING**, absence of film and all the associated handling costs, improved printing quality, higher productivity rate, increased flexibility and lower screen costs.

**UV light source:** Powerful 330W CPL UV lamp for an optimal exposure and full curing of virtually all the direct emulsions on all the mesh types.

**Optics from ZEISS:** high light transmission, torsion-free, stable and high-precision **1270 dpi resolution** – standard resolution

**OECU (Optical Engine Control Unit):** The core of the new generation. This control unit, which has been developed by our own engineers, manages all the processes related to the exposure head. **DMD's (Digital Micro-mirror Device)** of the latest generation are controlled as efficiently as the high-precision horizontal and focusing axes.

**STPrint V.4:** The in-house conceived user software allows a centralized operation and control of the STM equipments.

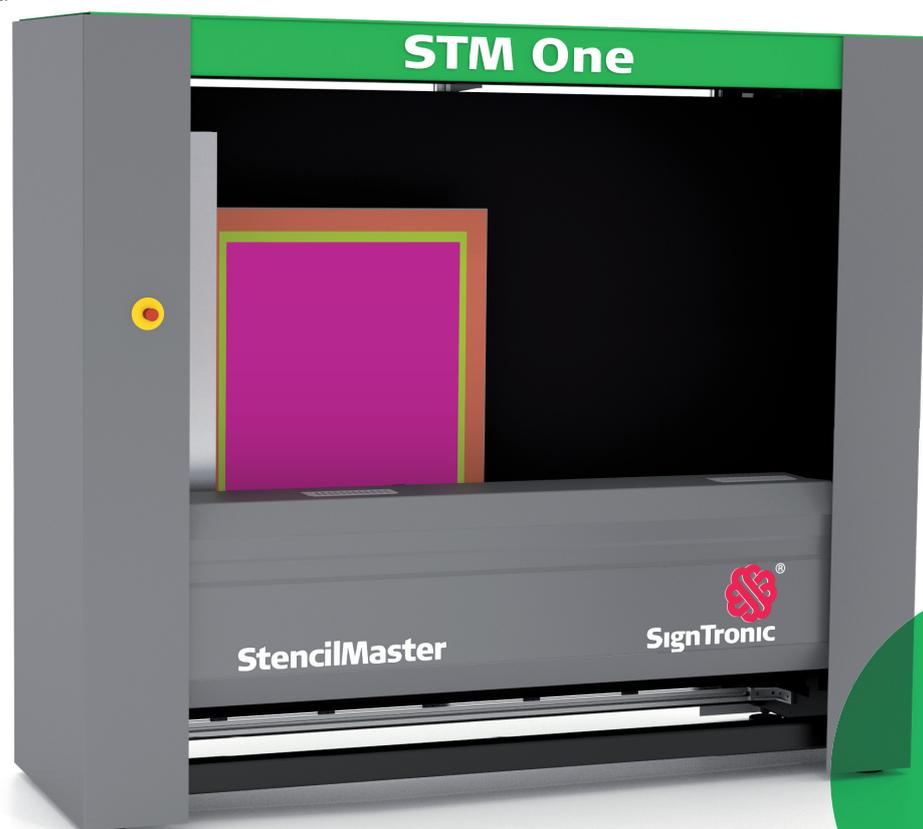
**Basic construction:** This construction method based on premium massive steel is indispensable to achieve a first-class and high-precision direct exposure. A multiple axes system is configured on the basic construction. An exposure unit with air suspension guarantees vibration-free movements. The unique drive system functions in horizontal direction.

**Bidirectional exposure:** Thanks to the to-and-fro movement, this standard working method is extremely precise and fast.

**Front loading of the screens:** The STM-ONE can be conveniently and quickly loaded from the front. This means: unobstructed access for the operator and reduced space requirement for the installation.

## Option RICB (Remote Image Control Board):

This equipment provides a simple and efficient means of monitoring and maintaining the exposure quality. Among others, the following checking and measuring activities are possible: mechanical basic setting including focus measurement, incident light metering of the entire DMD with automatic mask preparation and readjustment of the light output.



**STM  
ONE**



# Technical Specifications

Technical data	STM-ONE
Height	2000 mm (78.8")
Width	2290 mm (90.2")
Depth	870 mm (34.3")
Net weight	ca. 1500 kg (3300 lbs)
Max. screen format	1200 x 1200 mm (47.2" x 47.2")
Max. exposure format	1000 x 1000 mm (39" x 39")
Screen positioning	according to customer's specifications
Available resolution	1270 dpi
UV light source	CPL 330 W
Power consumption	~1100 W
Data interface	Ethernet 1-Gbit
Remote maintenance	Intergated in data interface (an internet connection is required)
Operating System	Windows 7
Technical requirements	
Power supply	208-240 VAC / 50Hz / 16A
Compressed air supply	6 bar (87 psi)
Compressed air consumption	max. 20 l/min (50 ft3/h)
Compressed air quality	ISO 8573-1 4.4.4
Room conditions	Yellow light, dust free, vibration-free floor
Floor load	600 - 1000 kg/m2 (110 - 180 lbs/ft2)
Ambient temperature	18 - 24° C (65 - 75° F)
Air humidity	25 - 75 % (rF)
Required data format	1-bit TIFF
Options	
RIP software	Colorgate Productionserver PS (SignTronic Edition)
Proofing software	FirstPROOF PRO
Process control	RICB (Remote Image Control Board)
Service contract	Customized service contracts are available on a optional basis
UPS (un-interruptible power supply)	Upon Request

*Technical data are subject to alterations. Only terms and conditions of Sign-Tronic AG are valid*

