

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 TEC-Series is already the **fourth generation** of StencilMaster direct exposure systems.

STM-TEC_XS with a max. screen size up to H 1200 x W 900 mm / H47" x W35"

STM-TEC_S with a max. screen size up to H 1200 x W 1250 mm / H47" x W49"

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, impressive flexibility and lower screen costs.

UV light source: Powerful **LED_Q4 (Gen6)** or **330W CPL UV lamp** for an optimal exposure and full curing of virtually all the direct emulsions on all the mesh types. As a variant, a **UV-LED DUO light source** can also be offered.

Optics from ZEISS: high light transmission, torsion-free, stable and maximum precision

Available resolution: 1270 dpi, 1609 dpi (HR1), 2400 dpi (HR2), 3040 dpi (HR3).

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 Devices)** 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 – including complete IN-LINE installations.

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 air suspension exposure unit guarantees vibration-free movements. The unique drive system functions in horizontal direction.

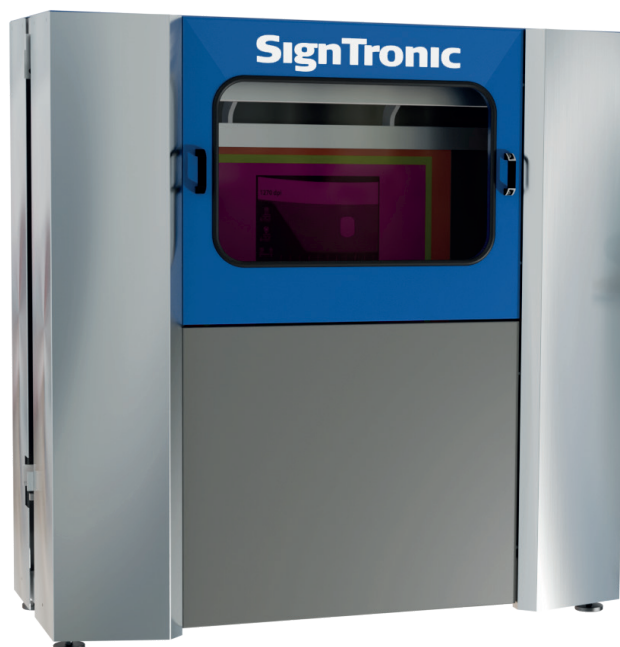
Bidirectional exposure: Thanks to the to-and-fro movement, this standard working method is extremely precise and fast.

Automatic positioning of the screens: All the StencilMasters of the TEC-Series can be loaded and unloaded from both sides. The automatic insertion feature ensures an uncomplicated handling, a fast and precise positioning as well as an optimal fastening within the installation.

Possibility of modular extension: Installation concept with the possibility to integrate all the Grünig-SignTronic IN-LINE equipments (loading and unloading magazines, developing, coating, air blower and drying modules).

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.

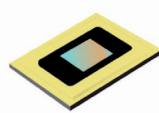
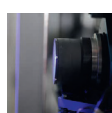
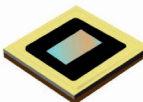
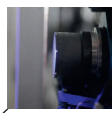


STM
TEC

StencilMaster[®]

Technical Specifications

Technical data	STM-TEC_XS	STM-TEC_S
Height	2035 mm (80")	2035 mm (80")
Width	2000 mm (79")	2400 mm (94")
Depth	985 mm (39")	985 mm (39")
Net weight kg/lbs	ca. 1250 (2755 lbs)	ca. 1350 (2970 lbs)
Max. screen format (H x W) mm/inch	1200 x 900 (47" x 35")	1200 x 1250 (47" x 49")
Max. exposure format (H x W) mm/inch	1050 x 740 (41" x 29")	1050 x 1040 (41" x 41")
Available resolution	1270 dpi, 1609 dpi (HR1), 2400 dpi (HR2), 3040 dpi (HR3)	
UV light source	LED_Q4 (Gen6), High power CPL 330 W or UV-LED DUO (385 nm / 405 nm)	
Power consumption	~1100 W	
Data interface	Ethernet 1-Gbit	
Remote maintenance	Integrated in data interface (an internet connection is required)	
Operating System	Windows 11	
Technical requirements		
Power supply	208-240 VAC / 50 - 60 Hz / 16A	
Compressed air supply	6 bar (87 psi)	
Compressed air consumption	max. 50 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	500 kg/m2 (103 lbs/ft2)	
Ambient temperature	18 - 24° C (65 - 75° F)	
Air humidity	25 - 75 % (rF)	
Required data format	1-bit TIFF	
Options		
Process control	RICB (Remote Image Control Board)	
Masterframe M	Customized reception unit for various smaller screens	
Resolution	1609 dpi (HR1), 2400 dpi (HR2), 3040 dpi (HR3)	
RIP software	SignTronic ST.Rip	
Technical data are subject to alterations. Only terms and conditions of Grunig-SignTronic AG are valid		

		UV light source	Technology DMD	Zeiss Optics / Resolution
MODULAR Cts CONCEPT	UV-LED	Q4 365 / 385 / 395 / 405 nm 	XGA 0.7"– Discovery 4100 	1270 dpi  2400 dpi
		DUO 385 nm / 405 nm 		
	Lamp UV	CPL 350–450 nm 	1080p 0.95"– Discovery 4100 	1609 dpi  3040 dpi
		UHP 350–450 nm 		