

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

TEX_S with a max. screen size up to H 1200 x W 1250 mm / H 47" x W 49"

TEX_L with a max. screen size up to H 1200 x W 1600 mm / H 47" x W 63"

TEX_XL with a max. screen size up to H 1500 x W 2000 mm / H 59" x W 79"

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)

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 supplied by Grünig.

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.

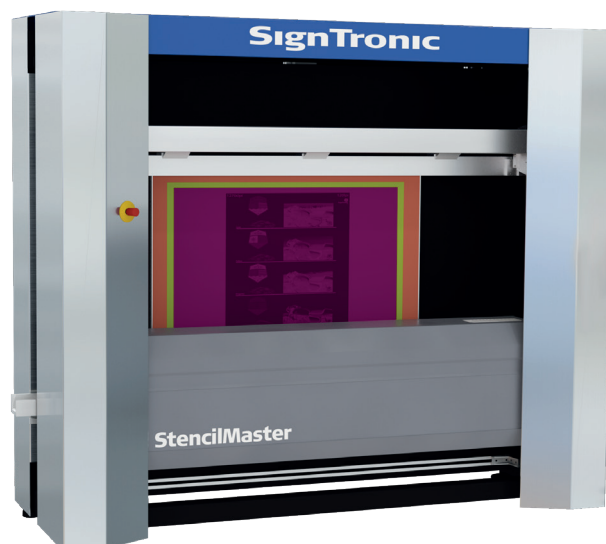
Bidirectional exposure: Thanks to the to-and-fro movement, this standard working method is extremely precise and fast.

Automatic positioning of the screens: All the StencilMasters of the TEX-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 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.



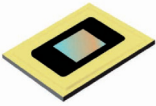
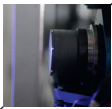
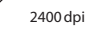
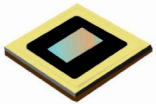
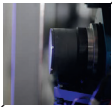
STM TEX

StencilMaster[®]

Technical Specifications

Technical data	STM-TEX_S	STM-TEX_L	STM-TEX_XL
Height	2035 mm (80")	2035 mm (80")	2324 mm (91")
Width	2400 mm (94")	3040 mm (120")	3040 mm (120")
Depth	985 mm (39")	985 mm (39")	985 mm (39")
Net weight kg/lbs	ca. 1350 (2970)	ca. 1480 (3256)	ca. 1620 (3564)
Max. screen format (H x W) mm/inch	1200 x 1250 (47 x 49)	1200 x 1600 (47 x 63)	1500 x 2000 (59 x 79)
Max. exposure format (H x W) mm/inch	1050 x 1040 (41 x 41)	1050 x 1600 (41 x 63)	1350 x 1600 (53 x 63)
Available resolution	1270 dpi, 1609 dpi (HR1)		
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	Intergated 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)		
RIP software	SignTronic ST.Rip		
Technical data are subject to alterations. Only terms and conditions of Grunig-SignTronic AG are valid			

MODULAR Cts CONCEPT

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