



StencilMaster® STM-TEX

DIGITAL SCREEN MAKING

In **large format screen making** (POS, Flags, multi-sheets etc.), fully automated processes are known for many years.

After a period, fully automated screen making came available to the **technical screenprinting processes** (flex-circuits, overlays, touch-panels, ceramics, ceramic decals, dials, dashboards, nameplates, inmolds, etc.).

All these screenprinting industries **benefit** by **improving** their quality, **reducing** cost of material and manpower, **improving** their time for registration and ready on presses, **reducing** turnaround times of orders and startup waste, **increasing** press throughput, etc.

Many of **our CtS (Computer-to-Screen) systems** all around the world **help** our customers to **achieve all these benefits**.

So far, **textile screenprinters** were **not working** with fully automated processes. They worked with classic films, prepared on imagesetters (laser- or inkjetprinters) or exchanged by inkjet (wax-jet or toner-transfer) direct onto the screen emulsion. All these processes need a lot of manpower and material (image registration, exposure step, development, water blow-off, drying, touch up, etc.).

Now all these steps from the 1-bit TIFF until the print-ready screen **can be performed in one system "StencilMaster STM-TEX"**. We call it "**Digital screen making**". No more external steps are involved - just one system!

How does the STM-TEX work?

An automatic screen loader takes up to 10 coated screens. Size may vary depending on need. Maximum OD is 1,2 by 1,2 m (47" by 47"). Stretched & glued and/or Newman Roller frames can be used.

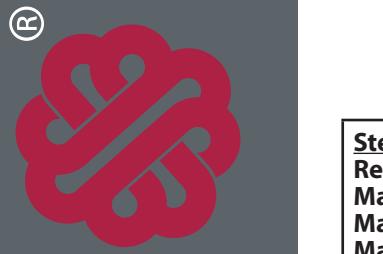
The STM "orders" the first screen from the screen loader, screen enters the STM and is positioned (registered). After auto-focus, STM starts imaging the screen. Imaging is performed by a high power UV light source using a 1270 dpi, 20µm pixel, Zeiss imaging optical engine.

On completion of the exposure, STM "sends" the imaged screen to the in-line developer and, at the same time, "orders" a new screen from the automatic screen loader.

In the developer, the screen is moistened and starts a free programmable, water recycled, developing process. At the same time, the next screen has been loaded into the STM for imaging. Once the developing process has been completed, the screen is automatically unloaded through a powerful water blow-off section for final drying into the 10 position screen un-loader.

10 screens can be processed completely automatic with a performance of up to 30 screens per hour.





Technical Specification

STM-TEX

StencilMaster

| | |
|-----------------------------------|--|
| Resolution: | 1270 dpi |
| Max. frame-format: | 1200 x 1200 mm (47in x 47in) |
| Max. exposure-format: | 1050 x 1200 mm (h x w) (41.23in x 47in) |
| Machine-measurements: | 2180 x 8655 x 2810 mm (h x w x d) (86" x 340" x 111") |
| Weight: | 3050 kg / 6730 lbs |
| Room conditions: | Yellow light, dust free, free of condensates, vibration free floor |
| Environmental temperature: | 18 - 24 °C / 65 - 75 °F |
| Relevant humidity: | 25 - 75 % |
| Power supply : | 220 - 240 V / 50-60 Hz |
| Light source: | UHP 330W |
| Exposure speed: | up to 40 m ² /h / 430 qf/h |
| Ethernet: | 1 GBit |
| Data format: | 1 Bit TIFF |
| Options: | Compose Express RIP or Colorgate Production Server7 CTS |
| Customer training: | A training on site is inclusive |
| Service contract: | Customer oriented service contracts are available |

Developer

| | |
|------------------------------------|--|
| Electric power supply EU: | 3x400 V (3L+N+PE), In-13A, Fuse 20-25A (slow-blow), 50-60Hz |
| Electric power supply US: | 3x220 V (3L+PE), In-23.6A, Fuse 40A (slow-blow), 50-60Hz |
| Compressed air supply: | 6 Bar, 0.6m ³ /h (90psi,21ft ³ /h) |
| Freshwater supply: | 1.5 m ³ /h, 3 Bar (53-160ft ³ /h) |
| Connection for waste water: | Ø108 mm (4.25in) |
| Exhaust air connection: | Ø100 mm, 500 m ³ /h, 450 Pa (Ø4 in, 25430 ft ³ /h, 0.07 psi) Tight exhaust air conduit provided by customers, of stainless steel, with mecanical anti-return valve. Ø200 mm x max.10 m (7.9 in x max.33 ft) |

**Technical data is subject to modifications.
General terms and conditions of SignTronic AG are applicable.**

