

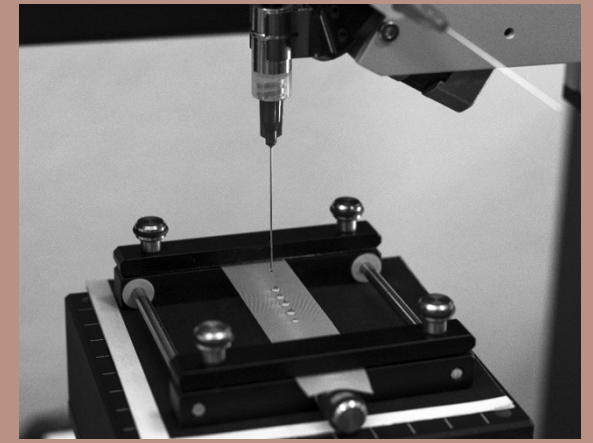
# SAATI LTS Machines

2024

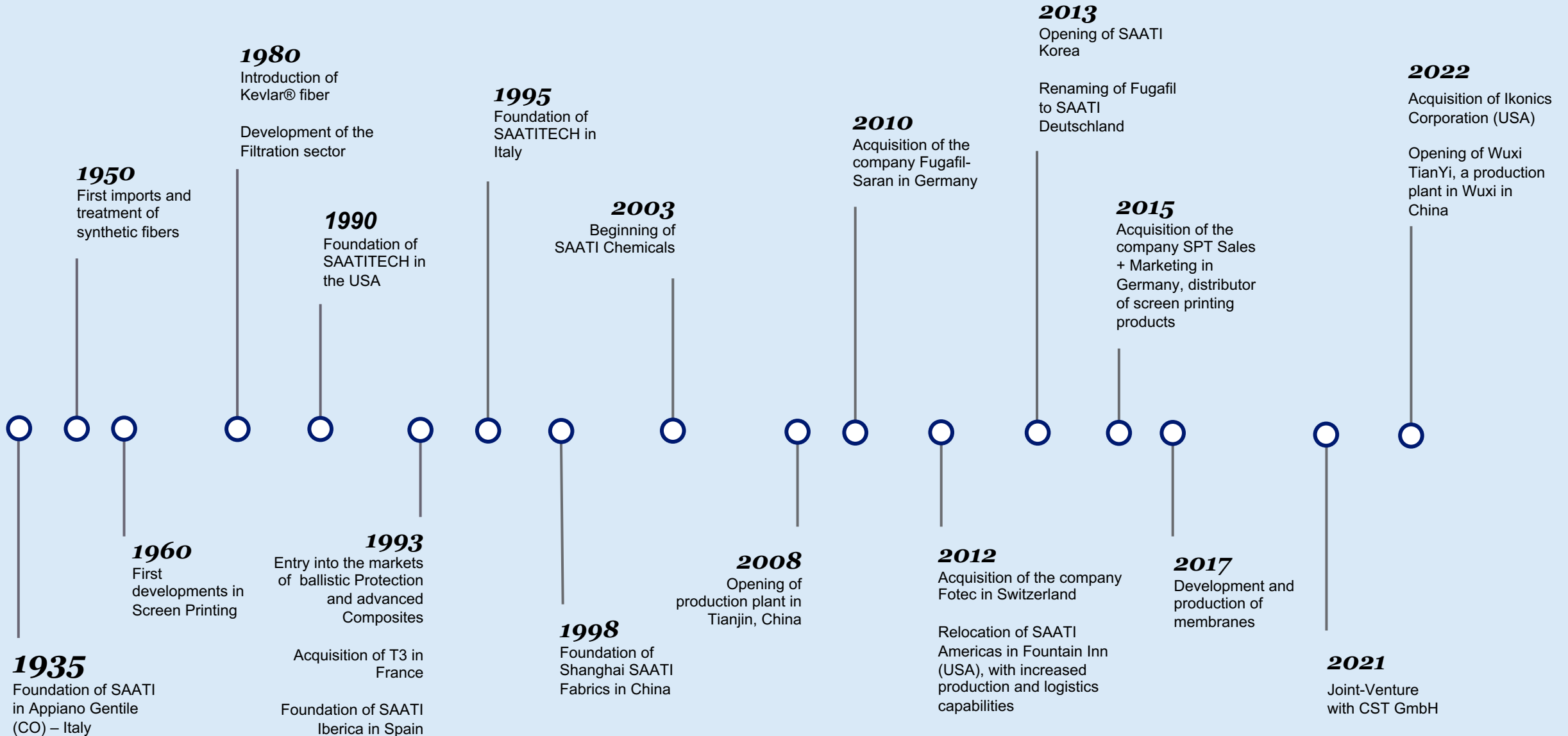
# Introduction

SAATI is a global leader in the development, production, and commercialization of cutting-edge technical fabrics, membranes, chemicals and equipment engineered for several industrial applications.

Our expertise encompasses multiple markets, including healthcare, automotive, aerospace, consumer electronics, food, appliance, textile, graphics, glass, architecture, and ballistic protection. Each business unit operates with an independent production process, ensuring flexibility and adaptability to the evolving requirements of each market.



# Milestones



# Our Company



**€ 187 M**

Sales Volume  
(2023)

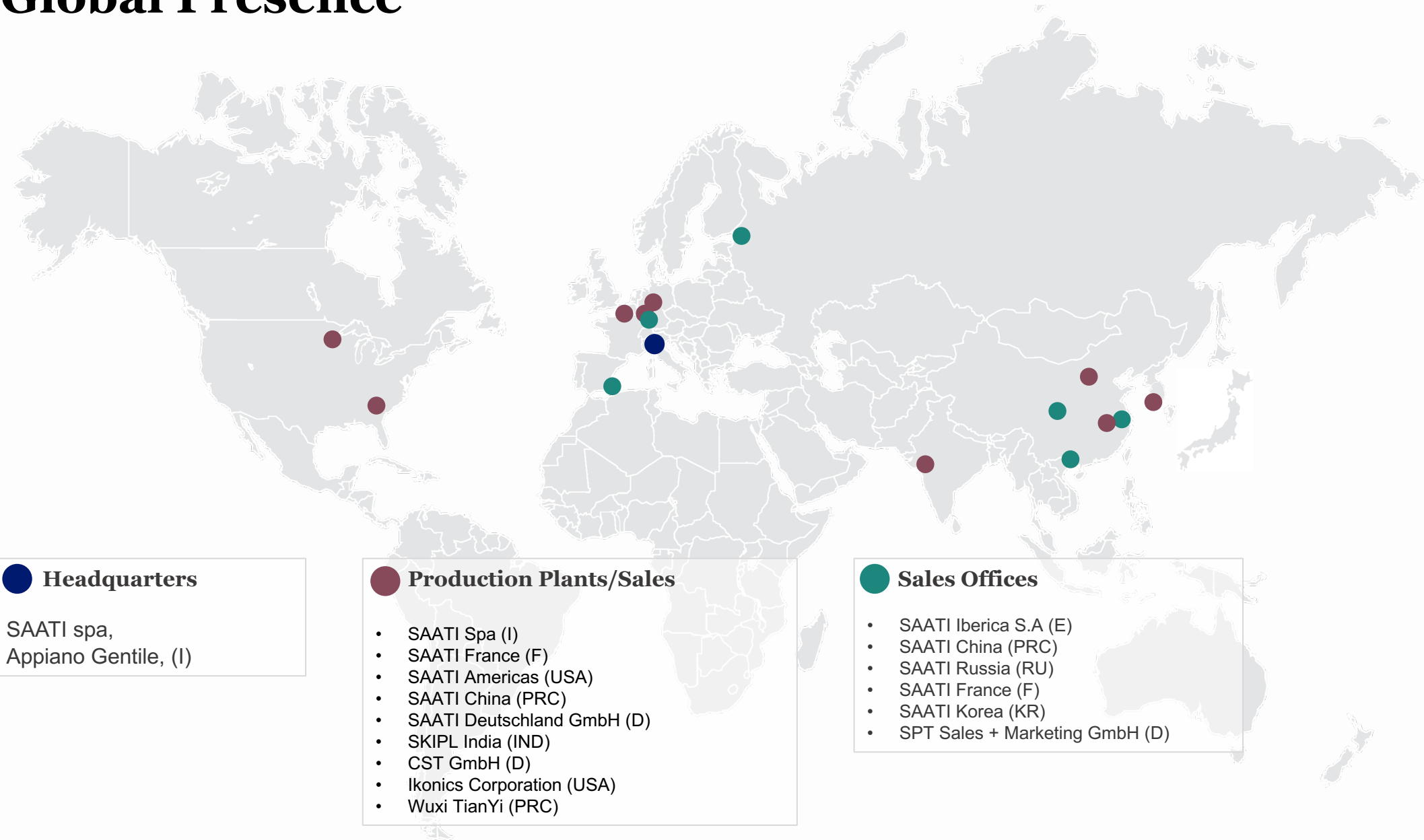
**1030**

Employees  
(worldwide)

**4**

Distinctive Areas of Application  
(Printing, Filtration, Chemicals and  
Protection)

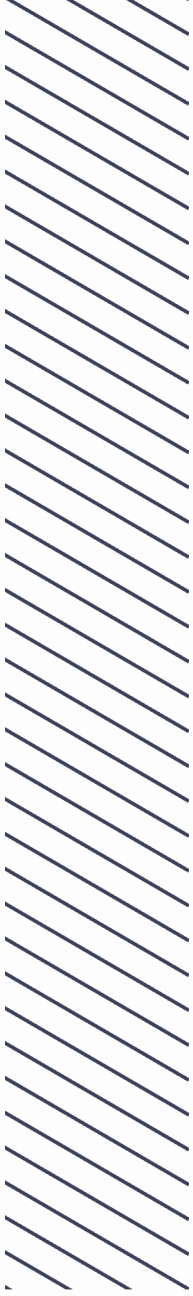
# Global Presence



**● Headquarters**  
SAATI spa,  
Appiano Gentile, (I)

- Production Plants/Sales**
- SAATI Spa (I)
  - SAATI France (F)
  - SAATI Americas (USA)
  - SAATI China (PRC)
  - SAATI Deutschland GmbH (D)
  - SKIPL India (IND)
  - CST GmbH (D)
  - Ikonics Corporation (USA)
  - Wuxi TianYi (PRC)

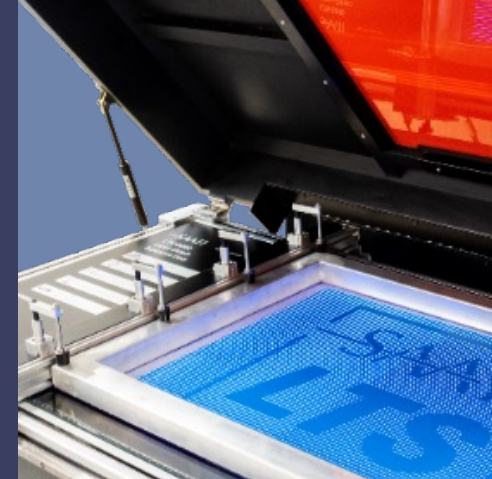
- Sales Offices**
- SAATI Iberica S.A (E)
  - SAATI China (PRC)
  - SAATI Russia (RU)
  - SAATI France (F)
  - SAATI Korea (KR)
  - SPT Sales + Marketing GmbH (D)



# What We Do



**Monofilament  
Multifilament  
& Aramid  
Fabrics**

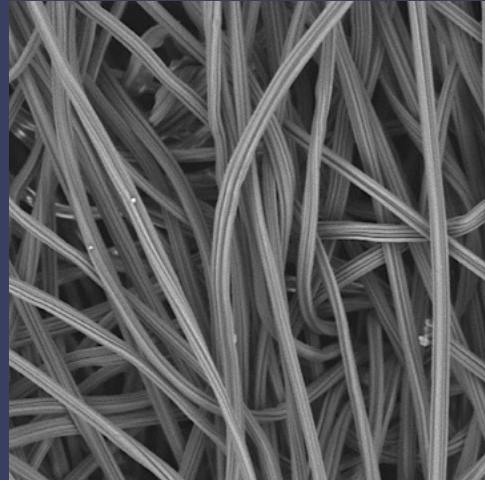


**Screen Printing  
Equipment**

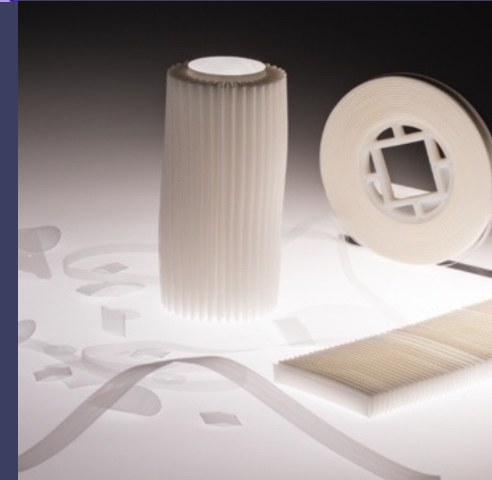
**Screen Printing  
Emulsions &  
Chemicals**



**Conveyor  
Belts**

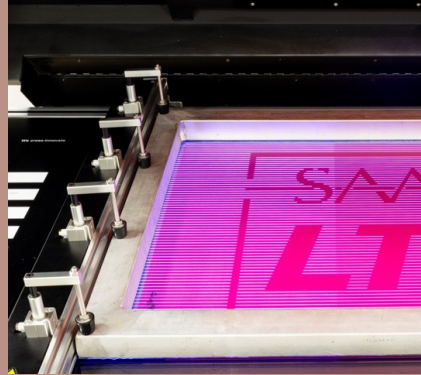


**Membranes**



**Fabricated  
Parts**

# Screenprinting



## Main Application Areas



We are “**Solution Provider**” in the pre-press/on-press screen printing sector.

We are the **only industrial company** in the world to simultaneously manufacture and sell both textiles, chemical products & equipment for the screen printing process.

This synergy helps to ensure the best quality, an extensive range and the highest performance levels in the application phase.



**SAATI  
LTS Direct  
Laser Combo  
Image &  
Exposure  
Machines**



# LTS Range – 1<sup>st</sup> Gen

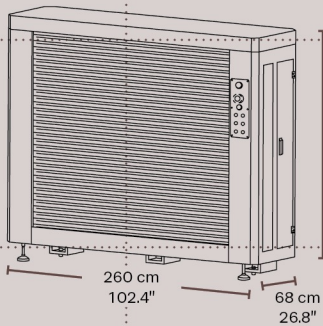
Machine	Weight		Machine Size		Max Single Frame Size		Max Image Size	
	(lbs)	(kg)	(in)	(cm)	(in)	(cm)	(in)	(cm)
<b>LTS 1015</b>	2646	1200	102.4 x 26.8 x 78.7	260 x 68 x 200	59.1 x 74.8	1500 x 1900	39.4 x 59.1	<b>100 x 150</b>
<b>LTS 8012</b>	2039	925	86.6 x 22.8 x 64	220 x 58 x 163	41.3 x 63	105 x 160	31.5 x 37	<b>80 x 120</b>
<b>LTS 6012</b>	1874	850	86.6 x 22.8 x 64	220 x 58 x 163	41.3 x 63	105 x 160	23.6 x 47	<b>60 x 120</b>
<b>LTS 6080</b>	1316	597	65.7 x 32.3 x 36.6	167 x 82 x 93	33.5 x 43.3	85 x 110	23.6 x 31.5	<b>60 x 80</b>



# LTS<sup>1015</sup>

High Resolution Digital Direct Laser Image & Exposure Unit

## Dimensions



200 cm  
78.7"

260 cm  
102.4"

68 cm  
26.8"

## Characteristics

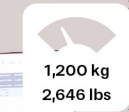
Touch screen with powerful workflow software

Glass-free vertical loading and frame lock system ensure accurate, easy screen placement and reduced pinholes

Solid metal construction provides a vibration free stencil making platform while maintaining a smaller footprint than other CTS machines



Lasers  
**160**  
Weight



1,200 kg  
2,646 lbs

Power



**110V**  
standard

**240V**  
with adapter

**1000W**  
consumption

Easy to use control panel engages and disengages frame clamps, carriages, shutter & emergency stop

Motorized safety shutter

Large frame holding area enables simultaneous imaging & exposure of either large screens, or 1 or more standard size screens

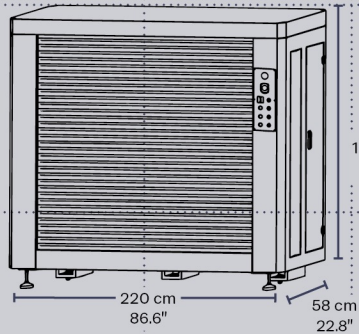
**Maximum Image Size:** 100 x 150 cm - 39.4 x 59.1"

**Max Frame Sizes:** 1 screen up to 145 x 200 cm | 59.1 x 74.8"  
or 2 two screens up to 63.5 x 91.5 cm | 25 x 36"

# LTS 8012

High Resolution Digital Direct Laser Image & Exposure Unit

## Dimensions



## Characteristics

Glass-free vertical loading and frame lock system ensure accurate, easy screen placement and reduced pinholes

Solid metal construction provides a vibration free stencil making platform while maintaining a smaller footprint than other CtS machines

Easy to use pedals engage and disengage the frame clamps



Lasers

128

Weight



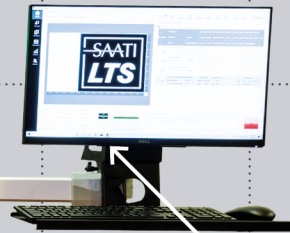
Power



110V  
standard

240V  
with adapter

800W  
consumption



Touch screen workflow

Motorized safety shutter

Large frame holding area enables simultaneous imaging & exposure of either large screens, or 1 or more standard size screens

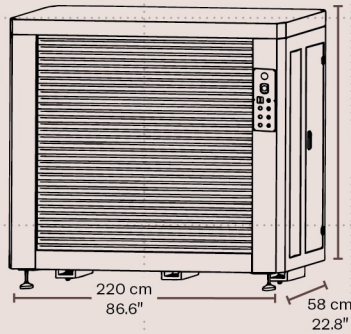
**Maximum Image Size:** 80 x 120 cm | 31.5 x 47.2"

**Max Frame Size:** 1 screen up to 105 x 160 cm | 41.3 x 63"  
or 2 screens up to 64 x 91 cm | 25 x 36"

# LTS 6012

High Resolution Digital Direct Laser Image & Exposure Unit

## Dimensions

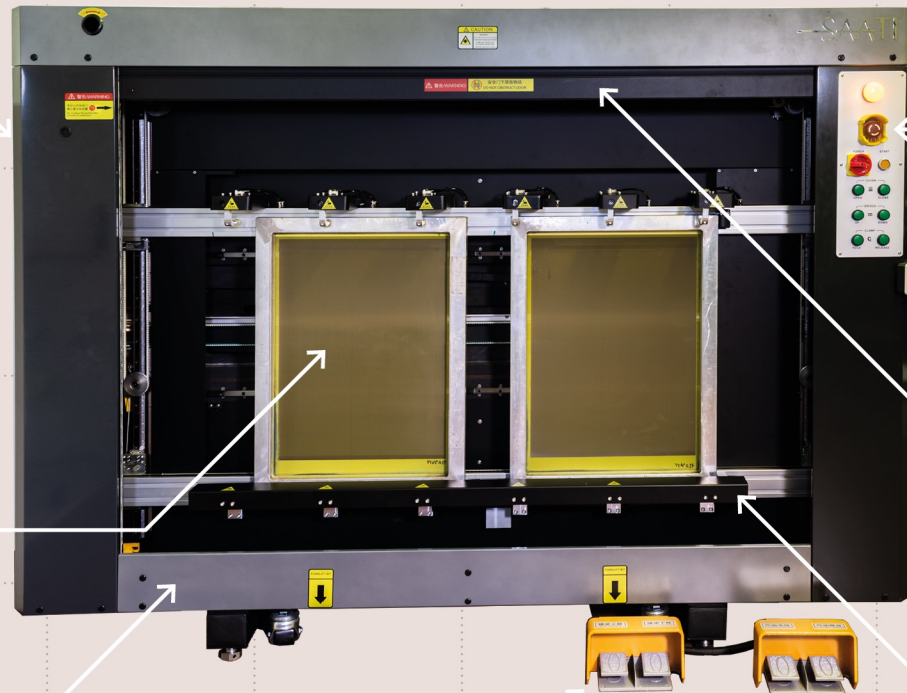


## Characteristics\*

Glass-free vertical loading and frame lock system ensure accurate, easy screen placement and reduced pinholes

Solid metal construction provides a vibration free stencil making platform while maintaining a smaller footprint than other CtS machines

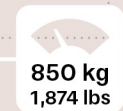
Easy to use pedals engage and disengage the frame clamps



Lasers

96

Weight



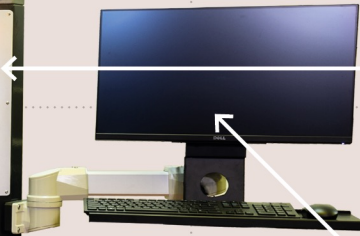
Power



110V  
standard

240V  
with adapter

800W  
consumption



Touch screen workflow

Motorized safety shutter

Large frame holding area enables simultaneous imaging & exposure of either large screens, or 1 or 2 standard size screens

**Maximum Image Size:** 60x120 cm | 23.6 x 47.2"

**Max Frame Size:** 1 screen up to 105 x 160 cm | 41.3 x 63"

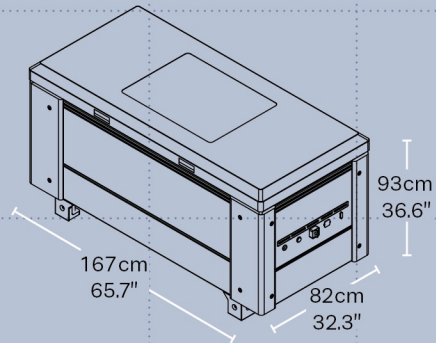
or 2 Screens up to 58 x 78 cm | 23 x 31"

\* previously designated model name 6080-VF

# LTS 6080

High Resolution Digital Direct Laser Image & Exposure Unit

## Dimensions

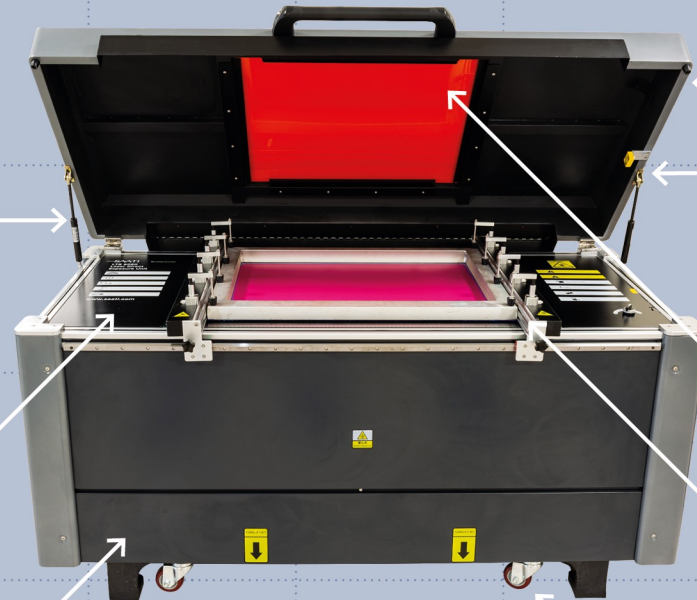


## Characteristics

Facedown glass panel with enclosing lid

**Maximum Single Frame Size:**  
85 x 110 cm | 33.5 x 43.3"

Solid metal construction provides a vibration free stencil making platform



**Lasers**

**96**

**Weight**

**597 kg**  
**1316 lbs**

**Power**



**110V**  
standard

**240V**  
with adapter

**350W**  
consumption

Safe Viewing Window for observing exposure program progress

Adaptable to various types of screen registration systems

**Maximum Single Image Size:**  
60 x 80 cm | 23.6 x 31.5"

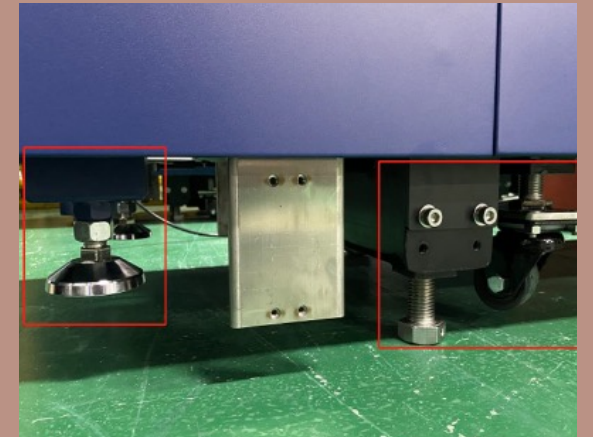
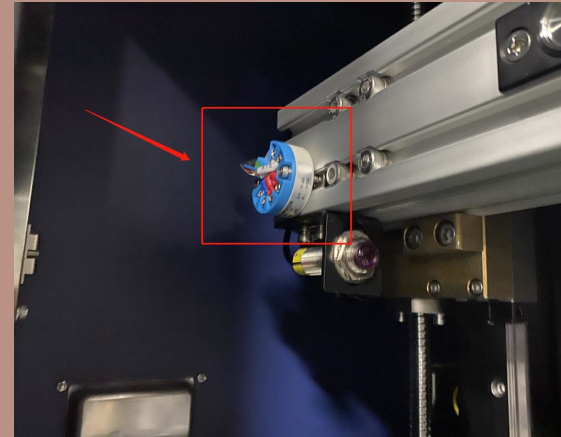
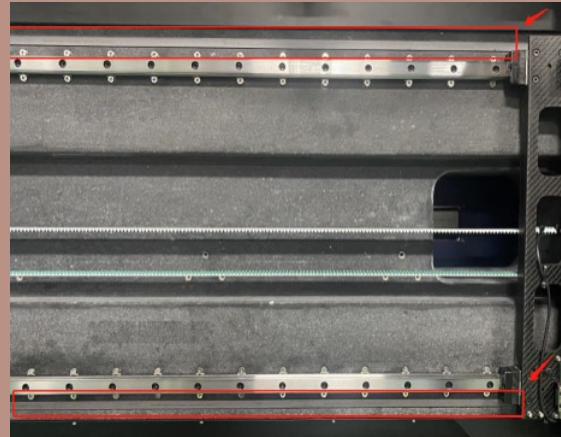
Solid casters and slim build allow easy movement through standard doorways for unit placement

# 2<sup>nd</sup> Generation LTS Debut – LTS 8012 HD

The industry leading LTS Series is part of a dynamic equipment program that continues to evolve. Over time the software becomes more powerful - without overwhelming operators - and every part of the hardware, from the casters to the encoders, is also subject to this continuous evolution.

Now SAATI unveils a clear step in the evolutionary process – the 2<sup>nd</sup> Generation LTS 8012 HD.

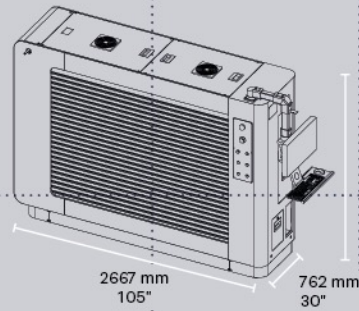
Features like 5080 DPI support, individual frame clamp controls, dual encoders and new frame temperature sensors enable an even greater level of detail, consistency and repeatability that represent the future of screen making.



# LTS 8012 HD

High Resolution Digital Direct Laser Image & Exposure Unit

## Dimensions



## Characteristics

Glass-free vertical loading and frame lock system ensure accurate, easy screen placement and reduced pinholes

Solid metal construction provides a vibration free stencil making platform while maintaining a smaller footprint than other CtS machines

Easy to use pedals engage and disengage the frame clamps



Lasers

128

Weight



Power



110V  
standard

240V  
with adapter

800W  
consumption

Touch screen workflow

Motorized safety shutter

Large frame holding area enables simultaneous imaging & exposure of either large screens, or 1 or more standard size screens

**Maximum Image Size:** 80 x 120 cm | 31.5 x 47.2"

**Max Frame Size:** 1 screen: up to 110 x 160 cm | 43 x 63"  
or 2 screens up to 64 x 91 cm | 25 x 36"

# Common Characteristics

## Operational

- 405nm laser array
- Driven by Windows 10 PC with optional RIP
- 110 / 240V Power
- Quiet, vibration-free operation
- Remote Monitoring

## Set up

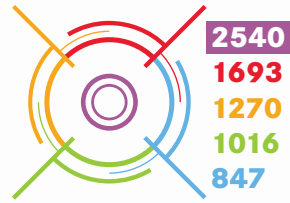
- Pass through standard door frames
- Heavy duty casters for easy movement without forklift
- No specific environmental requirements (heat/humidity)



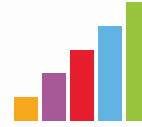


# LTS Series

## Features



**Precision Choices**  
Five DPI options let you choose the highest resolution or the shortest cycle time



**Power Settings**  
Quickly and thoroughly cure even very high EOM two-part emulsions



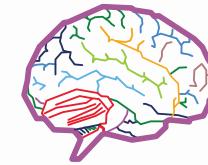
**Long Life**  
LTS lasers have an operational life of 10,000+ hours and minimal maintenance



**Flexibility**  
Register, image & expose multiple images simultaneously



**Simplified Process**  
Eliminating film registration. Image & Cure in one process

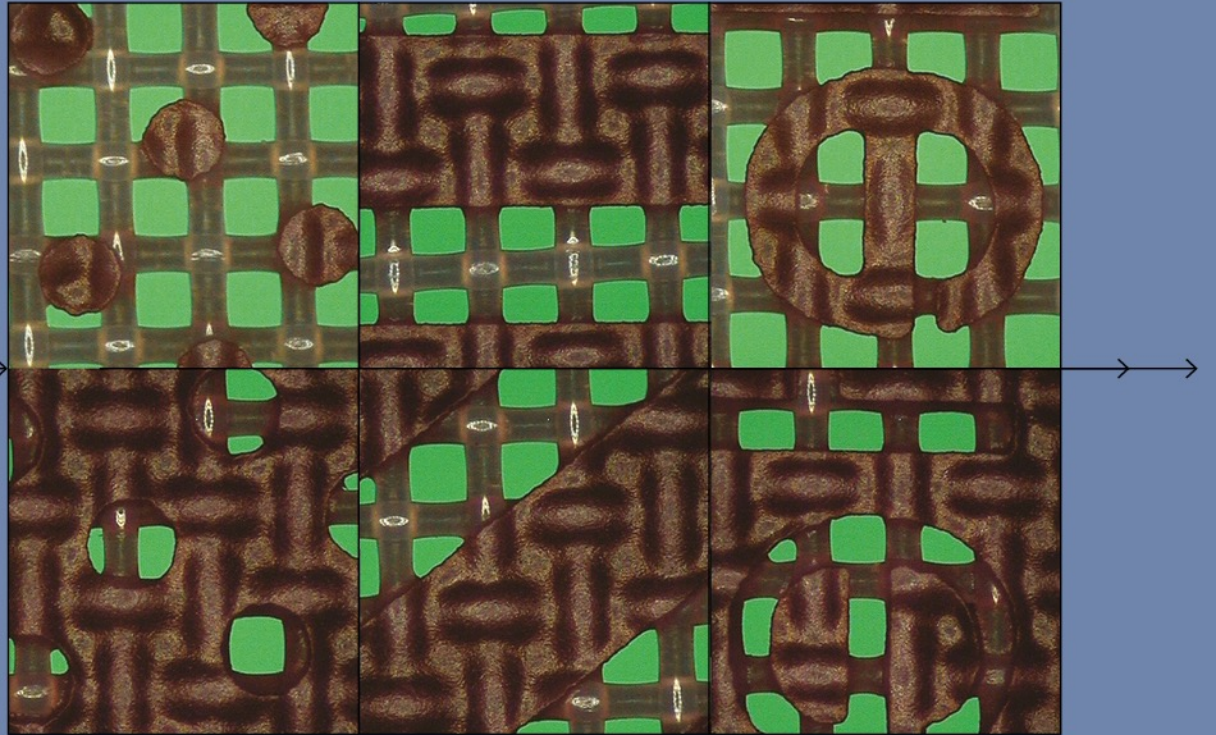


**Digital Archive**  
Keep an archive of art files, save registration settings and duplicate programs to improve your workflow

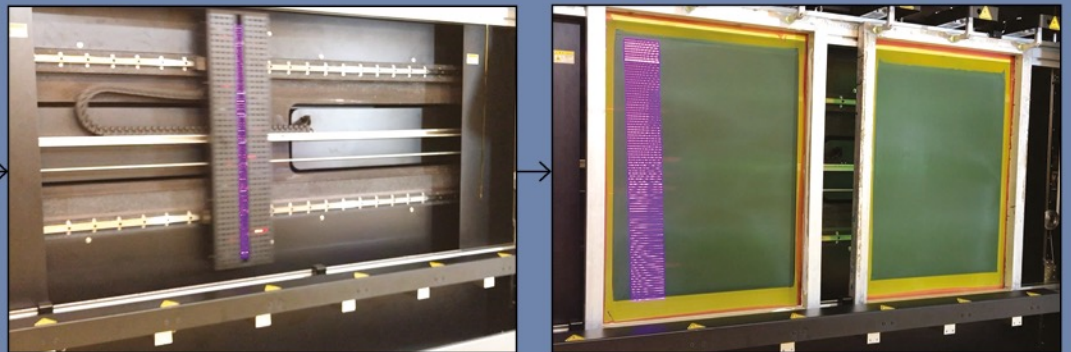
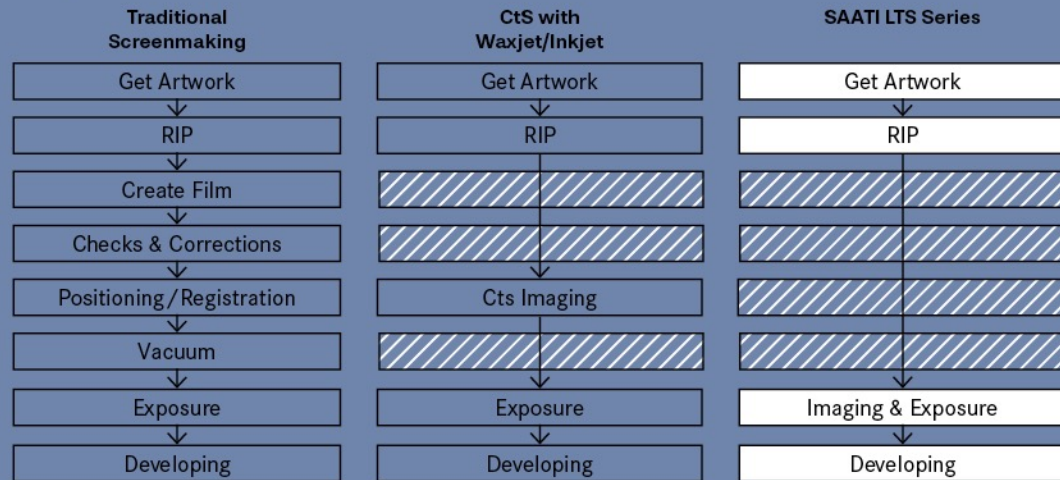
# Resolution Settings

The SAATI LTS has five resolution resolution settings, each tailored to a different types of image requirements

<b>847</b>	<b>1016</b>	<b>1270</b>	<b>1693</b>	<b>2540</b>
<b>Low Setting</b>		<b>Middle Setting</b>		<b>Highest Setting</b>
<ul style="list-style-type: none"> <li>• Fastest processing times</li> <li>• Superior to inkjet films</li> </ul>	<ul style="list-style-type: none"> <li>• Superior to inkjet/waxjet resolution</li> </ul>	<ul style="list-style-type: none"> <li>• Equivalent to DLE systems</li> </ul>	<ul style="list-style-type: none"> <li>• Superior to many other DLE systems</li> </ul>	<ul style="list-style-type: none"> <li>• Image setter quality for the most demanding prints</li> </ul>



# Improvements to Workflow



# Features & Target Markets

## 6080

- Perfect for small format & ad-specialty printers, garment printers still using film
- Face-down glass design for easy screen placement & registration
- Hardware & software support the registration & imaging of multiple small screens

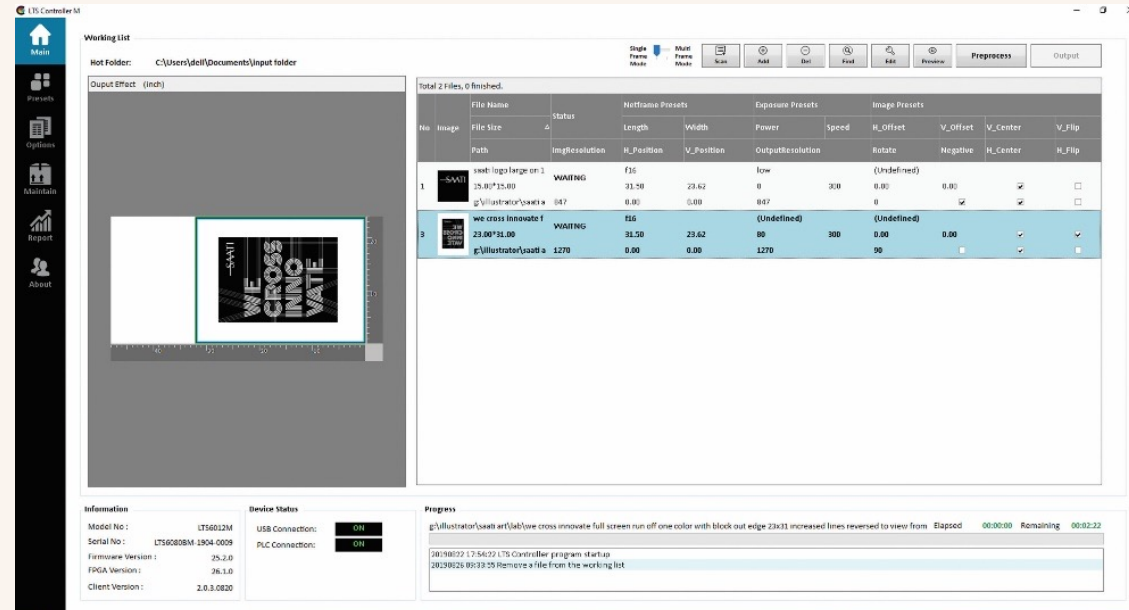
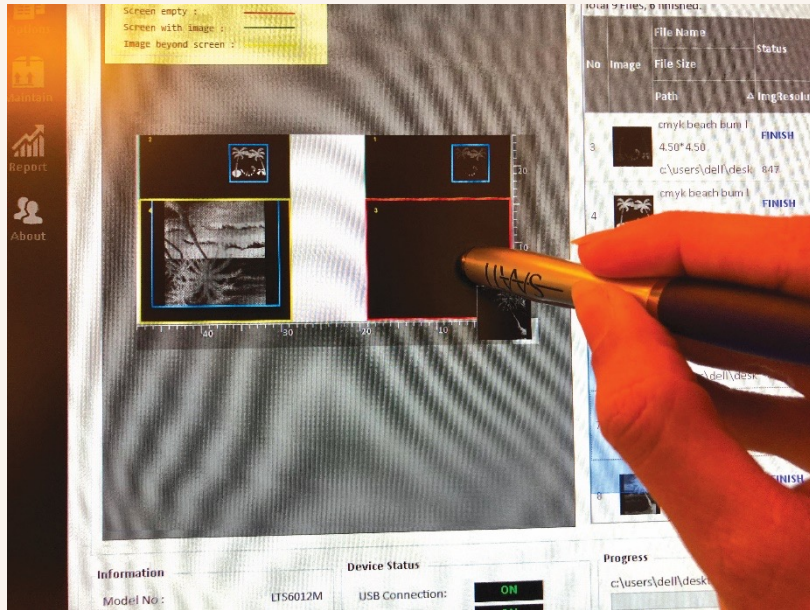
## 6012 & 8012

- Perfect for garment & apparel printers
- Glass free design with reduced pinholes - replaces ink & wax CTS machines
- 6012 capable of processing two 23x31 screens simultaneously
- 8012 capable of processing 25x36" screens simultaneously

## 1015

- Perfect for mid-format industrial & textile transfers
- Larger format screen making at an affordable price point
- Also processes two 25x36" screens at the same time
- Maintains similar screen cycle time to the smaller units in the LTS range

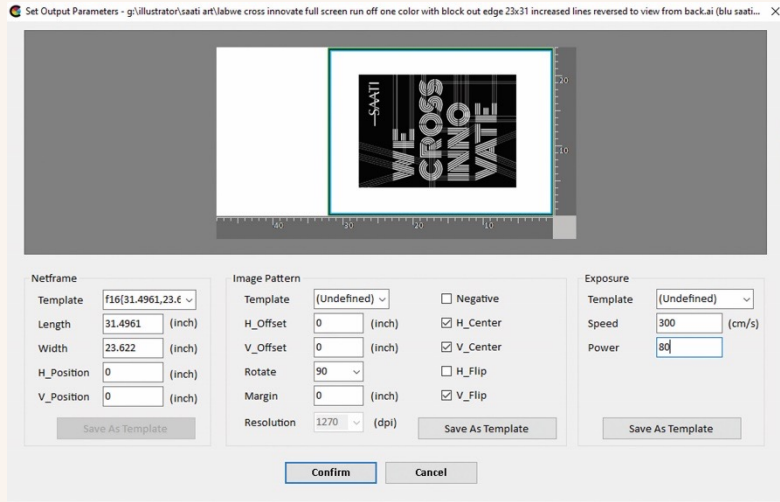
# Software Features & Workflow



## User Friendly Layout System

- Set size & location of image(s) and define exposure area
- Place multiple stencil images across 1 or more screens with touchscreen or mouse
- Finalized layouts go to queue for easy work management
- After screen imaging, layouts go to designated folder for archiving or deletion

# Software Features & Workflow



## Image & Cure at High Speed

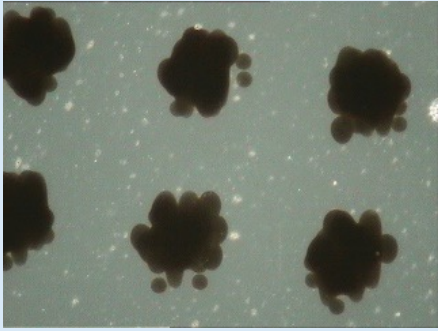
- Set the laser power and scan speed to effectively and thoroughly cure all emulsion and film types in under 3:00
- Customize settings and/or create standard templates for future use
- Proprietary file naming system allows for automatic selection of Netframe, Image Pattern & Exposure settings (not required)

Power	Speed	Resolution	FrameLength	FrameWidth	Offset	Voffset	Costtime	OutputDate	
y...	60	100	2540	508	635	50.8	0	00:06:34	2019/07/01 10:13:33
y...	80	200	2540	508	635	50.8	0	00:04:47	2019/07/01 10:23:10
g...	50	200	1270	381	635	0	0	00:02:03	2019/07/01 10:47:42
g...	100	200	1270	381	635	0	0	00:02:02	2019/07/01 10:54:36
g...	100	200	1270	381	635	0	0	00:02:03	2019/07/01 11:19:33
g...	100	300	1270	381	635	0	0	00:01:36	2019/07/01 11:40:24
f	50	100	2540	762	508	0	0	00:04:42	2019/07/01 14:21:06
f	50	200	2540	762	508	0	0	00:04:42	2019/07/01 14:21:06
f	30	200	1270	762	508	0	0	00:02:57	2019/07/01 15:15:37
sf	50	100	1270	762	508	0	0	00:01:50	2019/07/01 15:28:07
lrf	50	100	1270	762	508	0	0	00:01:50	2019/07/01 15:28:08
sl...	50	100	1270	762	508	0	0	00:01:50	2019/07/01 15:28:08
lrf	30	200	1270	762	508	0	0	00:01:29	2019/07/01 15:28:57
lrf	30	200	1270	762	508	0	0	00:01:29	2019/07/01 15:28:58
l	10	20	1270	762	508	0	0	00:03:29	2019/07/02 11:05:08
l	10	20	1270	762	508	0	0	00:03:27	2019/07/02 11:08:53
g...	10	20	1693	762	508	0	0	00:04:43	2019/07/02 11:25:04
g...	10	20	1693	762	508	0	0	00:04:34	2019/07/02 11:51:49
l	10	20	1270	762	508	0	0	00:03:29	2019/07/02 14:47:18
g...	80	200	1270	800	600	0	0	00:03:15	2019/07/02 20:25:10
g...	80	200	1270	800	600	0	0	00:03:15	2019/07/02 20:26:04

## Create Your Own Archive

- Processed files settings are saved
- Create your own file archive for easy retrieval through the search function

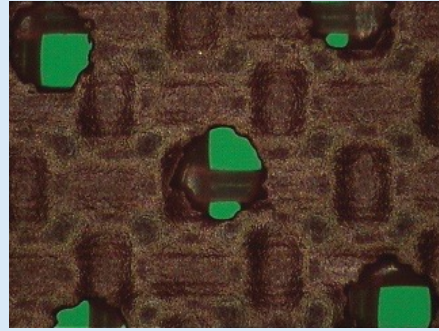
# Resolution & Definition – Inkjet vs LTS



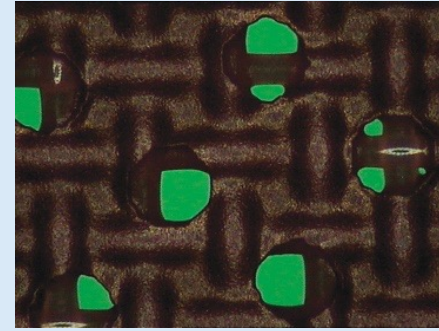
Inkjet Mask



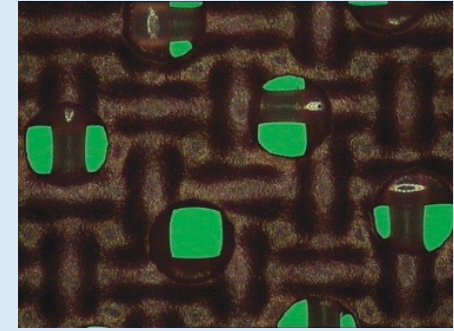
Inkjet Stencil



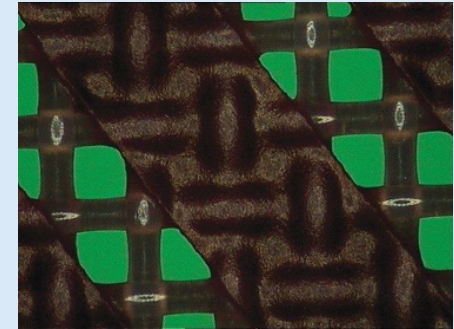
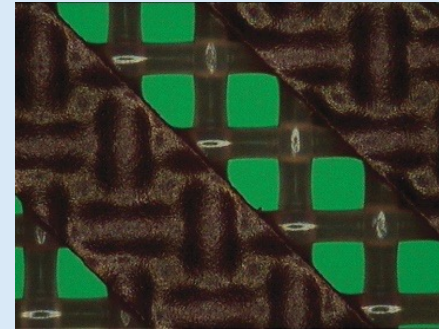
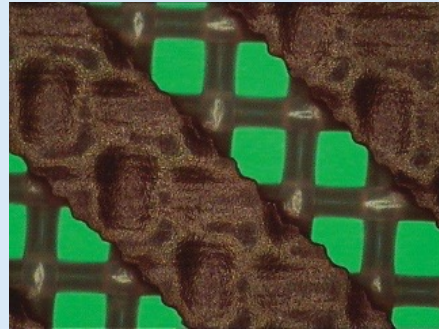
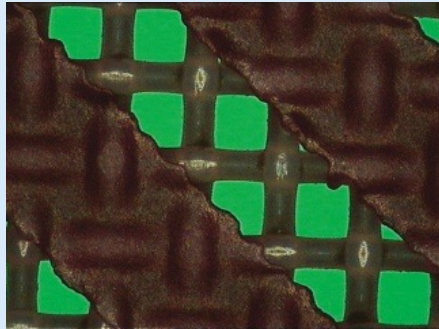
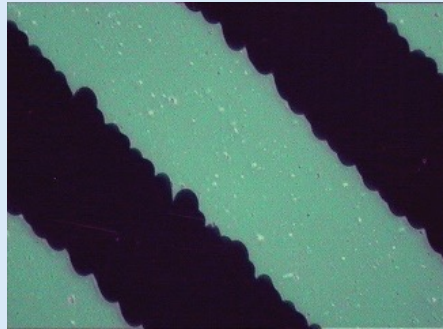
847 dpi LTS Stencil



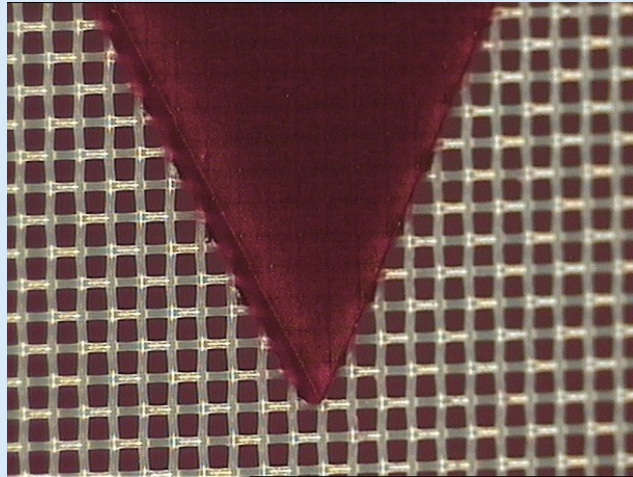
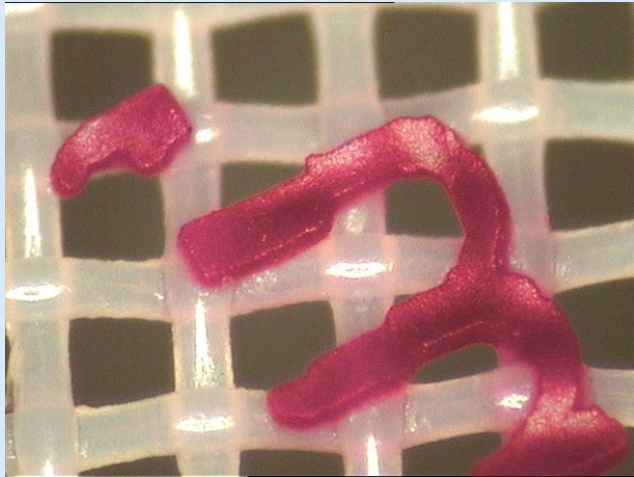
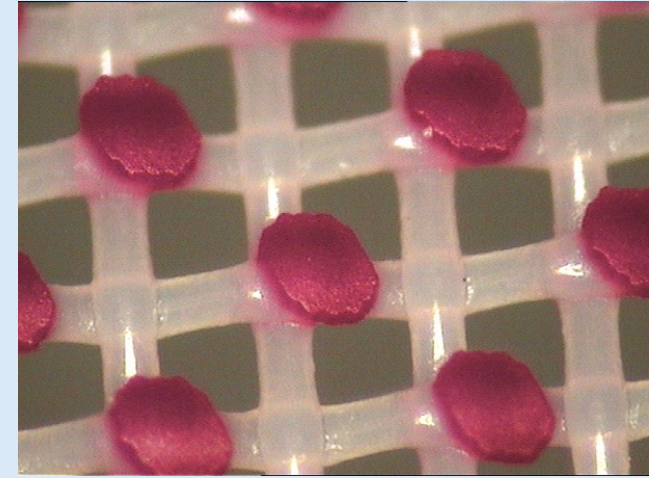
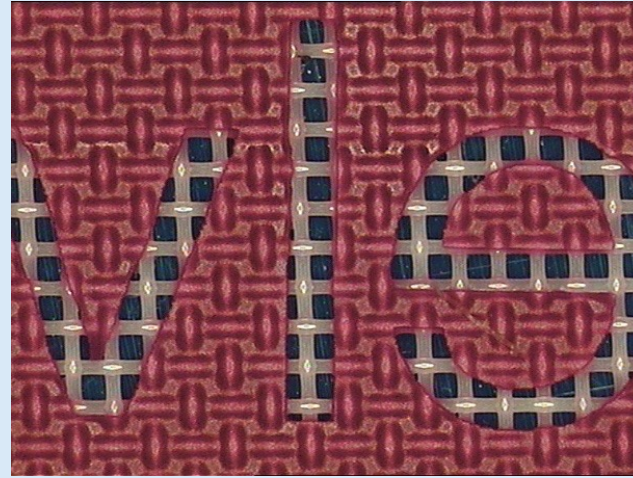
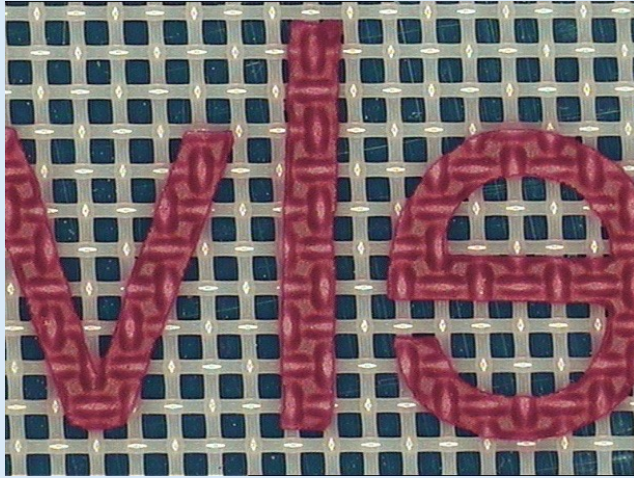
1270 dpi LTS Stencil



2540 dpi LTS Stencil

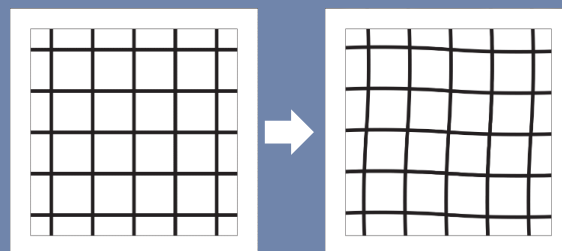


# No Limits



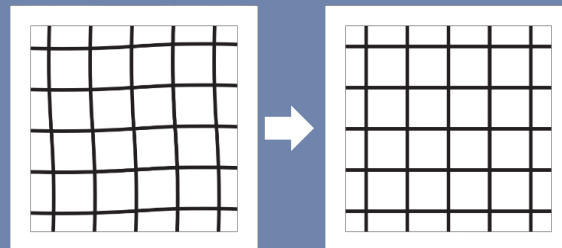
LTS technology is capable of producing stencils with all emulsion types, from all manufacturers, on any mesh - including super high thickness – without sacrificing productivity or quality

# Advanced Uses



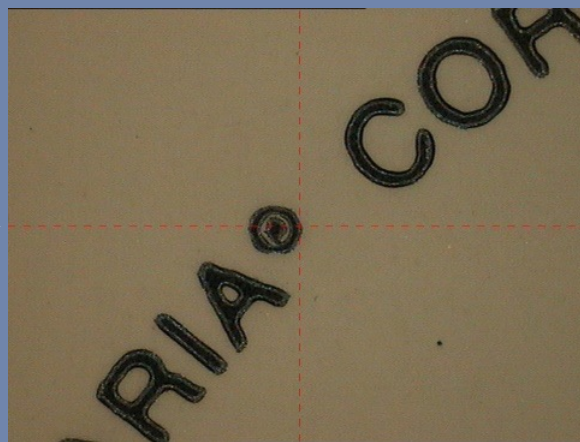
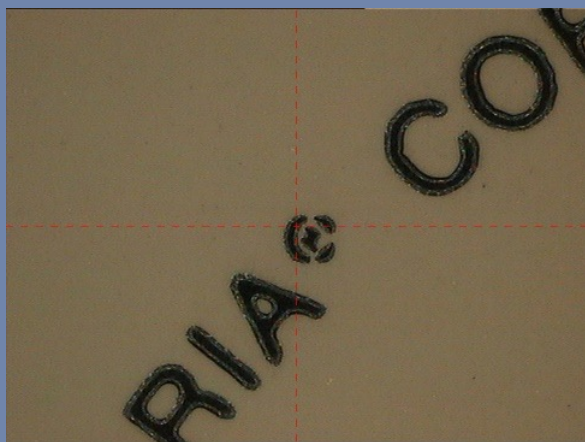
Original Image

Distorted Print



Modified Image

Corrected Print



## Match Inkjet Film

- Image size, skew & fit adjustment – Match Inkjet film

## Line Refine

- Control small elements +/- 1  $\mu\text{m}$  to retain printability





FOR THE MANY, BY THE FEW