

# SPGPrints Global Pre-Print Portfolio

Discover your perfect matching laser engraving machine.



### Direct laser engraving

Direct laser engraving is a sustainable single step dry process – simply engrave your coated screen with your desired design and print. The single step dry technology offers a process without water consumption. It eliminates costly consumables like film or ink and error-prone processes like exposing and washing. Due to the minimal number of process steps, it is time-saving and the chance of human errors is drastically reduced – resulting in the low operational costs per screen. Direct laser engraving is the easiest and most sustainable way to produce high quality screens.

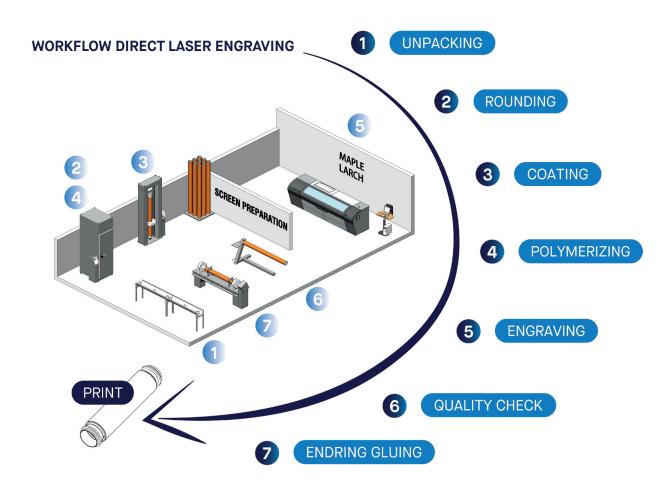
#### TAKING CARE OF OUR PLANET

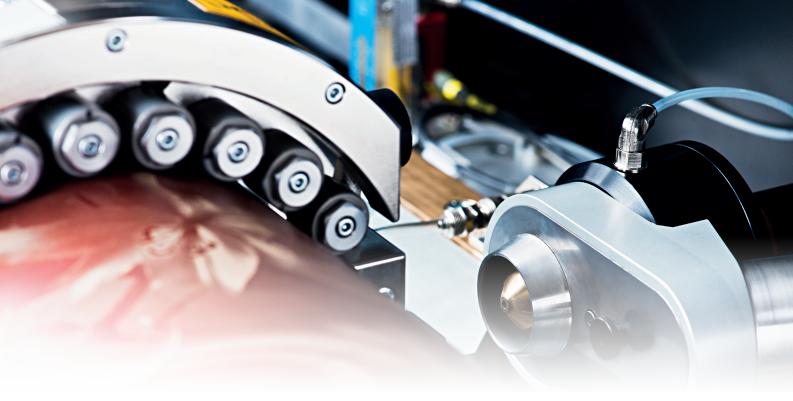
"Printing Tomorrow" is about more than shaping the future of printing technology. It's also about doing what we can to ensure a sustainable future for our planet. At SPGPrints saving energy, water and chemicals is a priority. We monitor and purify the water and air we use before it leaves the factories and process our waste responsibly, observing local regulations and standards. These activities are grouped in 3 categories:

- More sustainable products and solutions
- Greater process efficiency
- Extended equipment lifetime

## Direct laser engraving technology

Perfect quality, a short time to print, high reproducibility: finding the most suitable rotary screen engraving machine can provide your printing business with many benefits. SPGPrints' engraving technology has been the leader in the textile industry for more than 37 years, developing and delivering many direct laser engraving machines in the global textile printing market. The engraving systems are developed, engineered and produced at SPGPrints Austria. Constant improvements in function and productivity are offering a fast, efficient, high-quality and eco-friendly approach to imaging.







#### **Direct laser engraver**

The MAPLE is SPGPrints' market-leading direct laser engraving system and improved evolution of our bestLEN. This engraving machine fulfills all demanding conditions of the textile market. In combination with the specially developed CAM software, it leads to increase productivity and higher levels of consistency. It enables a sustainable workflow without water consumption, as well as a fully controlled engraving process. Equipped with an automatic laser power calibration and a screen centring ring, perfect halftone graduation and register accuracy assure maximum level of repeatability.

The MAPLE is the ideal laser engraving system to achieve a high-quality printing result with strong performance.



#### **FEATURES**

#### · Sustainable working process

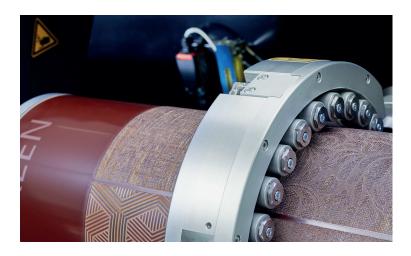
single step dry process - no water consumption

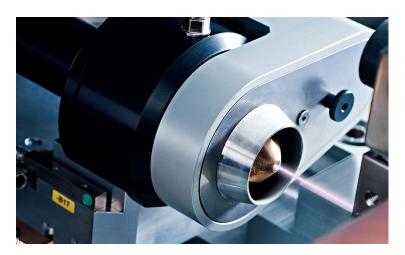
#### · High reproducibility

due to reduced process steps and auto-calibration

#### Ideal for

engraving shops and medium/large printers





#### **TECHNICAL SPECIFICATIONS**

ser Sealed single beam laser 250 W

Screen length 300 - 3500 mm

Screen repeat 518 - 1168 mm

Resolution variable up to 2540 dpi

**Productivity** ~ 20 min. (R640/1750)





#### **Direct laser engraver**

The LARCH, previous ecoLEN, was developed for engraving departments which need a smaller amount of engraved screens, but do not want to make compromises in quality. The LARCH incorporates the same technology as the MAPLE, but at significantly lower investment costs. With the LARCH, you enjoy advantages of laser engraving such as single step dry process and lower operational costs. Of course, the LARCH is also equipped with our in-house developed CAM software <code>bestIMAGE</code>, with features such as extensive rasterlist, jobfiles and SMART-GUI.

If your business is growing, the LARCH can be quickly upgraded to full MAPLE performance.



#### **FEATURES**

Sustainable working process

single step dry process - no water consumption

· Affordable laser engraver

cost - effective investment with consistent quality

· Ideal for

small to medium printers





#### **TECHNICAL SPECIFICATIONS**

\_aser

Screen length

Screen repeat

Resolution variable up to

**Productivity** 

sealed single beam 150 W

300 - 3500 mm

518 - 1168 mm

2540 dpi

~ 40 min. (R640/1750)

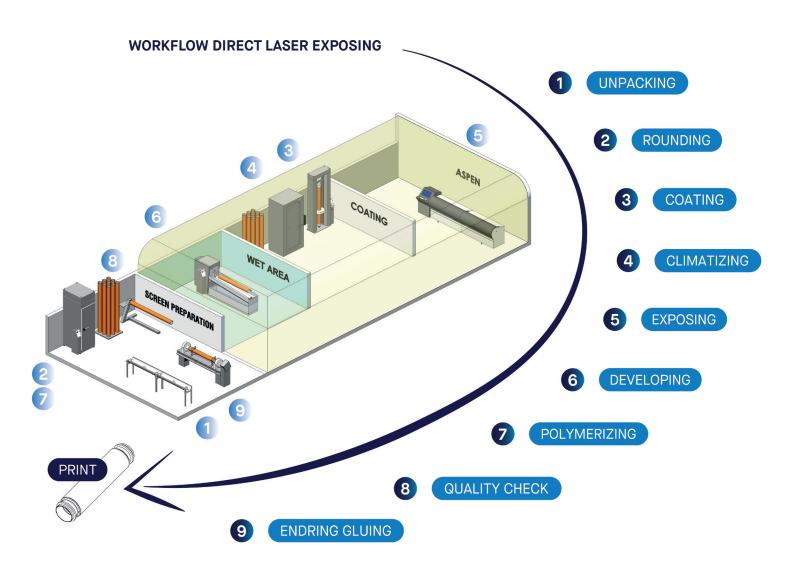


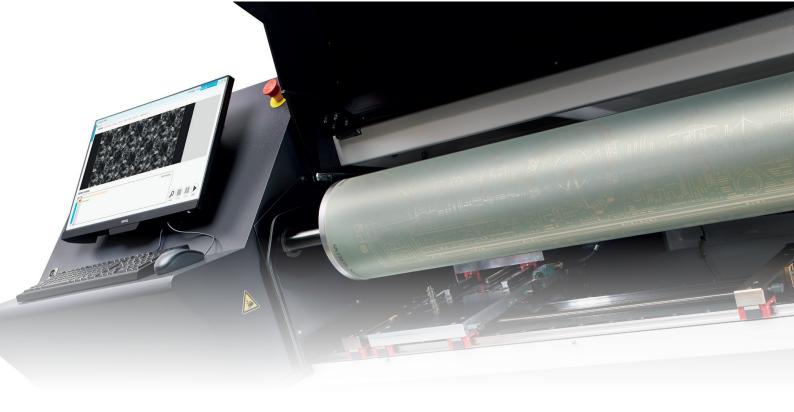
### **Direct laser exposing**

Direct laser exposing is the inverted imaging of a screen. The entire workflow remains the same like other exposing technologies with film or ink-masking. SPGPrints offers an easy integrable machine with a smart engraving workflow due to an in-house developed software. Therefore, our direct laser exposing technology is especially suitable for customers who already have the wet process, but who want to improve their quality, output and productivity. SPGPrints' multibeam laser diode technology made it possible to offer high performance on an affordable investment level.

## Direct laser exposing technology

Repeatable, consistent quality, reliability and high productivity: these are the core competences of SPGPrints` direct laser exposing technology. With more than 37 years of expertise in the textile printing industry, we are driven to boost your production, so you and your customers are satisfied with high quality products.







#### **Direct laser exposer**

#### SPGPrints' ASPEN is the recently released and improved model of our successful smartLEX.

The machine features a 15% - 40% increased productivity (6 beam machine) compared to the previous model. The multibeam technology ensures high productivity. The easy operation due to our SMART GUI software enables to produce high quality screens without complex engraving job preparation. For experienced operators, an expert software is available at any time to allow further customized engraving settings.



#### **FEATURES**

Easy integrable

into existing working process

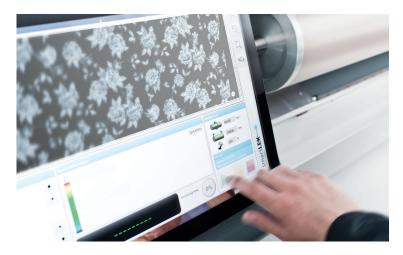
High productivity without quality limitations

standard 4 beam laser unit optional 6 beam laser unit available

Easy operation

in-house developed CAM software **bestIMAGE** 





#### **TECHNICAL SPECIFICATIONS**

Laser UV source multibeam

Screen length 300 - 3500 mm

Screen repeat 640 - 1168 mm

Resolution variable up to 2540 dpi

Productivity ~ 16 min. (4 beams - R640/1750)

~ 12 min (6 heams - **B**640/175

~ 12 min. (6 beams - R640/1750)

**Optional** 6 beam laser unit



## **Conventional equipment**

SPGPrints offers a wide range of high-end conventional pre-print equipment. In order to achieve a high-quality printing result, also the following screen preparation conventional equipment is important to implement.

- Coater
- Polymerizer
- Climatizer
- Developer
- Gluer
- · Light stand
- Unpacker





#### Coater

In order to achieve a perfect printing result, it is very important that even the screen coating is of top quality. It has to be applied evenly and with the correct lacquer thickness. Due to the special construction of SPGPrints coater MANDARIN, with vibration-free rope drive, swimming squeegee holder and one bottom control, an accurate, perfect and reproducible coating is guaranteed.

#### **FEATURES**

- · Single- and double squeegee
- Variable speed control
- · Vibration-free twin-drive





#### **Polymerizer**

In order to avoid registration problems during engraving and printing, the screens have to be well-rounded before coating. Uniform polymerization is the precondition for a long life time of the screens and long runs on the printing machine. The very accurate temperature distribution inside SPGPrints' polymerizer ORANGE ensures perfect rounding and uniform polymerization of the screens.

#### **FEATURES**

- Automatic, reproducible process
- Equal temperature from top to bottom
- · Low energy consumption





#### APRICOT

#### **Gluer**

In order to obtain a perfect, accurate printing result, it is of highest importance that the endrings are glued entirely parallel and precisely into the screen. This can be achieved with SPGPrints' universal gluer APRICOT which is designed with a torsion-free frame, precise guidance and superior parallelism of the endring fixations. Due to the integrated heating units, a precise and fast gluing process is guaranteed.

#### **FEATURES**

- · Very short gluing time
- · All common endring types with one machine
- Automatic temperature and gluing-time control





#### **Light stand**

Allows easy inspection of engraved screens. The light stand ALMOND makes inspecting screens a good deal easier and also more efficient. It can also be used for retouching work.





#### **Unpacker**

Protect your screens during unpacking.
The OLIVE is an unpacking device
specifically designed for safely unpacking
of screens, without the risk of creasing. It
is suitable for various screen repeat sizes
and lengths.



#### Climatizer

SPGPrints' climatizer PEAR is equipped with a heating and a cooling unit. In this way, the screens can be dried after the coating process and also stored for several days before the exposing process.

#### **FEATURES**

- · Equal temperature from top to bottom
- · Heating and cooling unit process controlled
- · Suction connection





#### **Developer**

Especially on screens exposed with fine line designs or smooth halftones, an even and homogenous developing is essential for a faultless printing result. Due to the moving spray pipes equipped with quality nozzles and pressure control, a perfect and reproducible developing result is ensured.

#### **FEATURES**

- Stainless steel construction
- Pressure control
- Automatic, reproducible process





## CAD Software for textile market

#### Defining and editing designs are simpler than ever using our bestIMAGE software.

This modular and user-friendly CAD software, developed in-house, allows easy and efficient textile design development. The new software is an "open platform", that is fully compatible with all SPGPrints pre-print textile systems, as well as a host of non-SPGPrints engravers.

#### **KEY FACTS**

- Modular concept create your own & unique **bestIMAGE** configuration
- SPGPrints "all-in-one" \*.LYR file contains all information of:
  - design and separations
  - layers, bitmaps & vector objects
  - engraving information
  - production database
  - colors & color management
  - simulation setup
- CAD <-to-> CAM connection
- · Direct \*.PDF import & direct engraving
- "On-the-fly" rastering





## **Engraving service**

#### SPGPrints offers a full service engraving shop.

Our experienced design studio works out the repro using **bestIMAGE** software. Screens are prepared for engraving. The in-house laser engraver transfer the images to the screens. To ensure perfect quality, our quality control center checks each order before packaging. We supply engraved screens in industries like label, wallpaper, textile, carpet as well as technical applications like aircraft, automotive and many more.





### Our complete Service Level Agreement offering

#### Need expert advice?

Of course, every production environment and customer requirement is different. As a long term partner for producers in all parts of the world we know this from experience. Based on information and insights we can advise the most suitable level of support. Our aim is to align with your needs and in-house technical competence. That's how we stick to our mission to contribute to the success of our customers. Do you need more advice or information? Just talk to us.

#### **REMOTE SUPPORT**

Remote Support includes remote monitoring of your systems for swift analyses and direct access to a centralized back office with skilled service specialists. Regardless where you are located, the first line service organisation in your region can immediately escalate to a second line in case more expertise is required. With remote service we aim to solve your issue remotely, once possible. This is the fastest way to solve problems that don't require onsite visits.

#### **MAINTENANCE SUPPORT**

Maintenance Support includes remote support and covers Field Service Engineer (FSE) visits for planned preventative maintenance. It also covers the parts and consumables that are necessary for periodic maintenance. Based on operating data, we can ensure the right tooling and parts to come with the engineer at your location.

#### **FULL SERVICE SUPPORT**

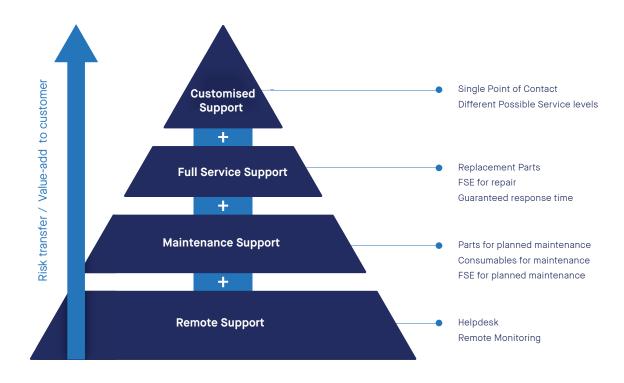
In addition to the standard Maintenance Support agreement, the Full Service Support option also covers the costs of repairs. That is including labour costs of the Field Service Engineer and any replacement parts that are required to resolve the problem. Most importantly, the Full Service Support agreement offers a guaranteed response time. We know if your production is stalled, you're in need for fast and accurate service.

#### **CUSTOMISED SUPPORT**

For a growing number of customers we provide Customised Service Support agreements that include tailor made service level agreements. This is usually required for production sites with multiple installations, more complex independencies and 24/7 operation that does not allow for any interruption. Based on assessment we can design and implement an optimal service package.

#### **BREAK-FIX SERVICE**

Needless to say that SPGPrints is also there for you with accurate Break-Fix service, in which case you bear the costs per event. Besides unplanned costs, the unplanned request for specialist attention or required availability of specific spare parts can cause undesired delays. This type of service transfers most of the risk to the customer, but we always try to minimize the impact as much as we can.





#### **About SPGPrints**

Throughout our unique history, SPGPrints developed into an internationally acknowledged authority in textile printing, dedicated to bringing colour to the world. In recent years, our unique rotary screen printing concept allowed us to move beyond textile printing and offer solutions for labels, banknotes, COVID-19 testing strips, and more. And while still a distinct leader in rotary printing, we have also become a pioneer and a key player in the market for digital printing. In 1991 we were the first in the industry to launch a digital textile printer. Not much later we started producing ink for all leading digital technologies. Over the years, we have been awarded over 300 patents and we have built an international network in more than 100 countries. These days our focus on innovation is as strong as ever with taking care of our planet as a constant priority. We take pride in putting our customers first, letting their ambitions inspire us, and deploying our expertise, resources and network to help them to achieve their goals. Our solutions are designed to empower customers worldwide in all stages of the printing process; from pre-press to printing, from textile to industrial - and beyond. That is the global impact of a global player.

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