



spgprints®

# SPGPrints Global Pre-Print Portfolio

Discover your perfect matching laser engraving machine.

---

Printing tomorrow.



# 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

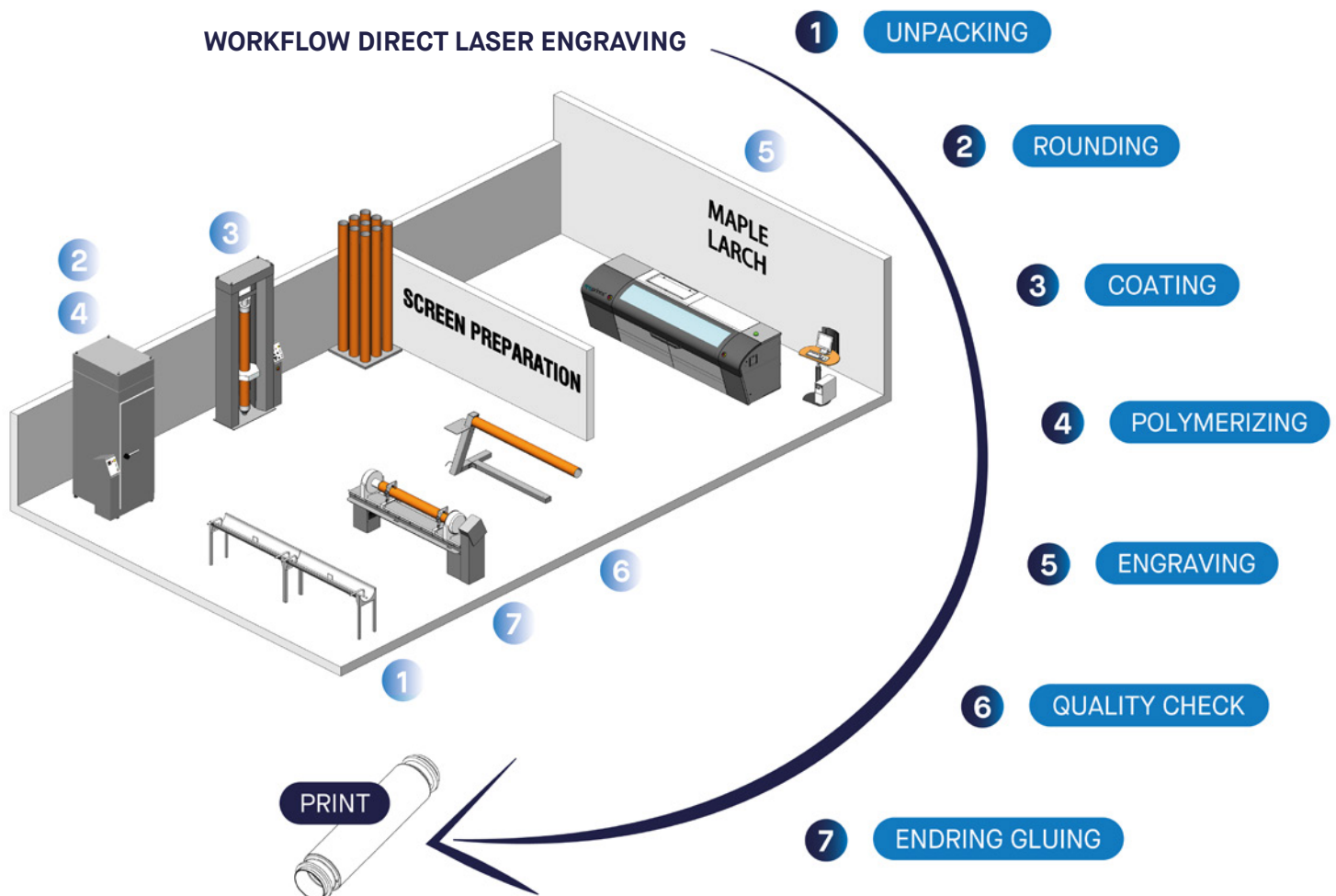
**"Printing Tomorrow"** is about more than shaping the future of printing technology. It's also about doing what we can to ensure a sustainable future for our planet. At SPGPrints saving energy, water and chemicals is a priority. We monitor and purify the water and air we use before it leaves the factories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

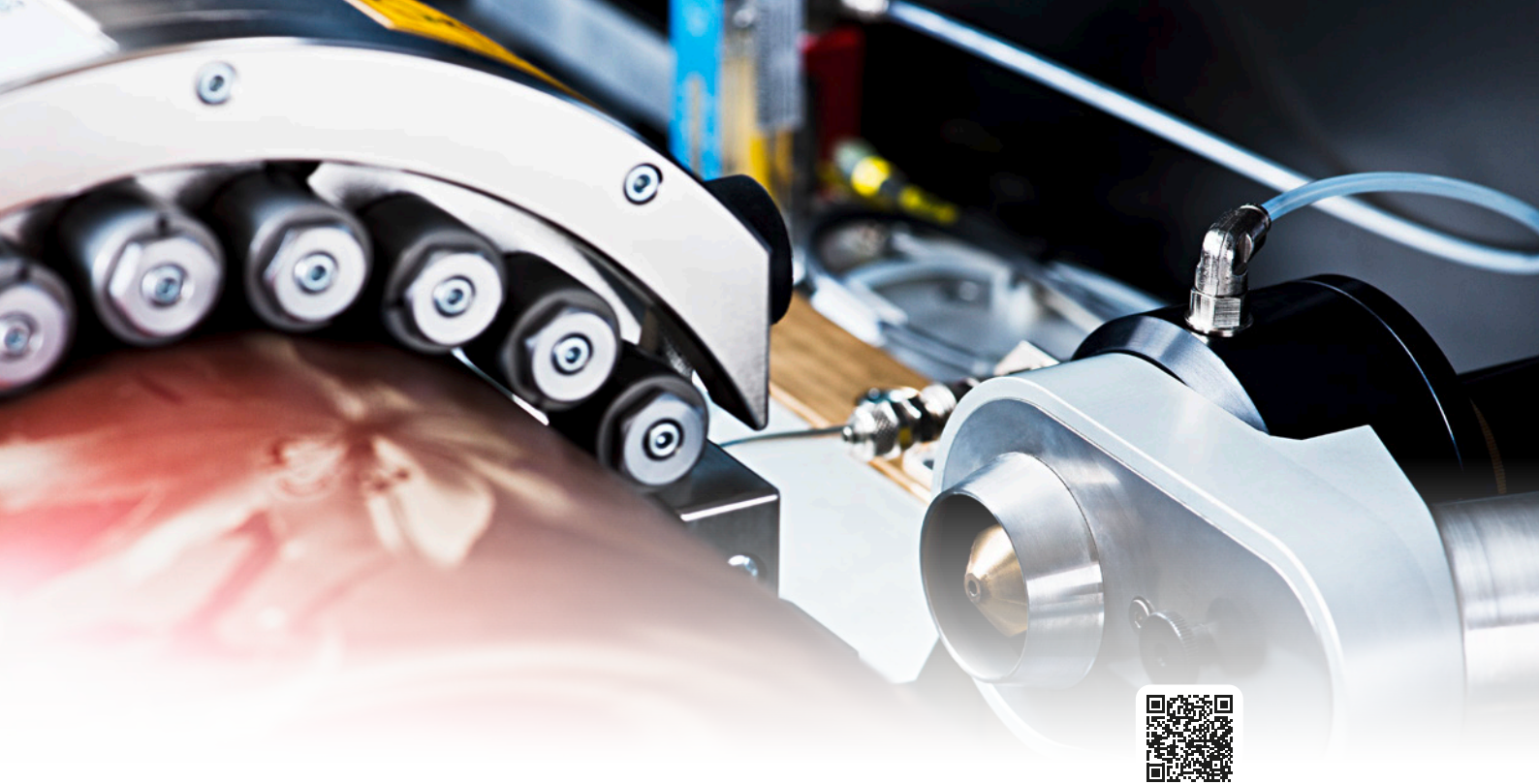
- **More sustainable products and solutions**
- **Greater process efficiency**
- **Extended equipment lifetime**

# 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' CO<sub>2</sub> engraving technology has been the leader in the textile industry for 40 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.





Scan & watch



MAPLE

### Direct laser engraver

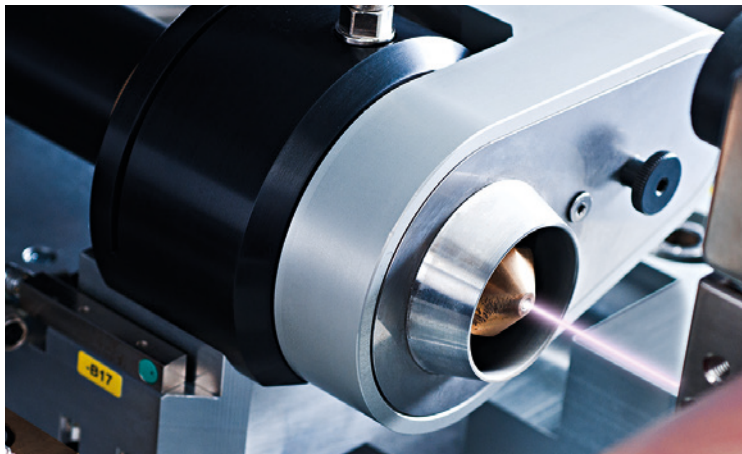
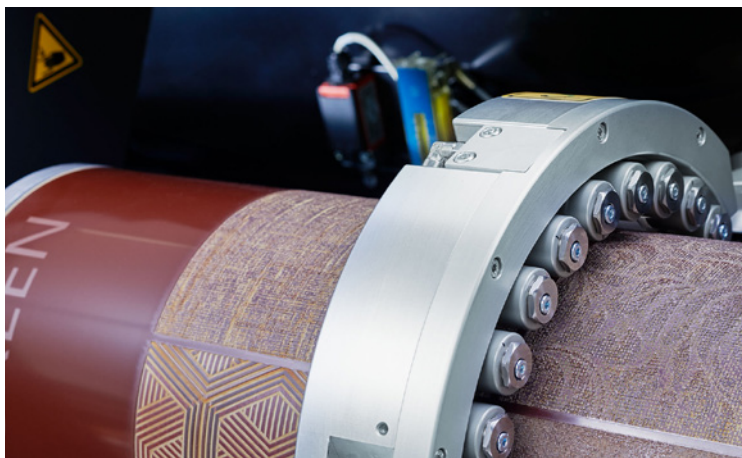
The MAPLE is SPGPrints' market-leading CO<sub>2</sub> direct laser engraving system and improved evolution of our bestLEN. This engraving machine fulfills all demanding conditions of the textile market. In combination with our in-house developed software **bestIMAGE** / **bestFLOW**, it leads to increase productivity and higher levels of consistency. The CO<sub>2</sub> direct laser engraving technology 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 gradation 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

Laser	Sealed CO <sub>2</sub> laser 250 W
Screen length	300 - 3500 mm
Screen repeat	518 - 1168 mm
Resolution variable up to	2540 dpi
Productivity	~ 20 min. (R640/1750)



Scan & watch



**LARCH**

### Direct laser engraver

The **LARCH**, is the ideal gateway into **CO<sub>2</sub> direct laser engraving technology**. The LARCH incorporates SPGPrints **bestLEN technology**, featuring the unique „single step dry process“. Compared to conventional wet-process laser exposing, SPGPrints' unique dry CO<sub>2</sub> direct laser engraving process requires fewer steps and no water consumption. Of course, the LARCH is also equipped with our in-house developed software **bestIMAGE / bestFLOW**.

With LARCH you get an efficient solution - ideal for small to medium volume companies that value both: reproducible quality and cost efficiency.



## 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

Laser	Sealed CO <sub>2</sub> laser 150 W
Screen length	300 - 3500 mm
Screen repeat	518 - 1168 mm
Resolution variable up to	2540 dpi
Productivity	~ 40 min. (R640/1750)



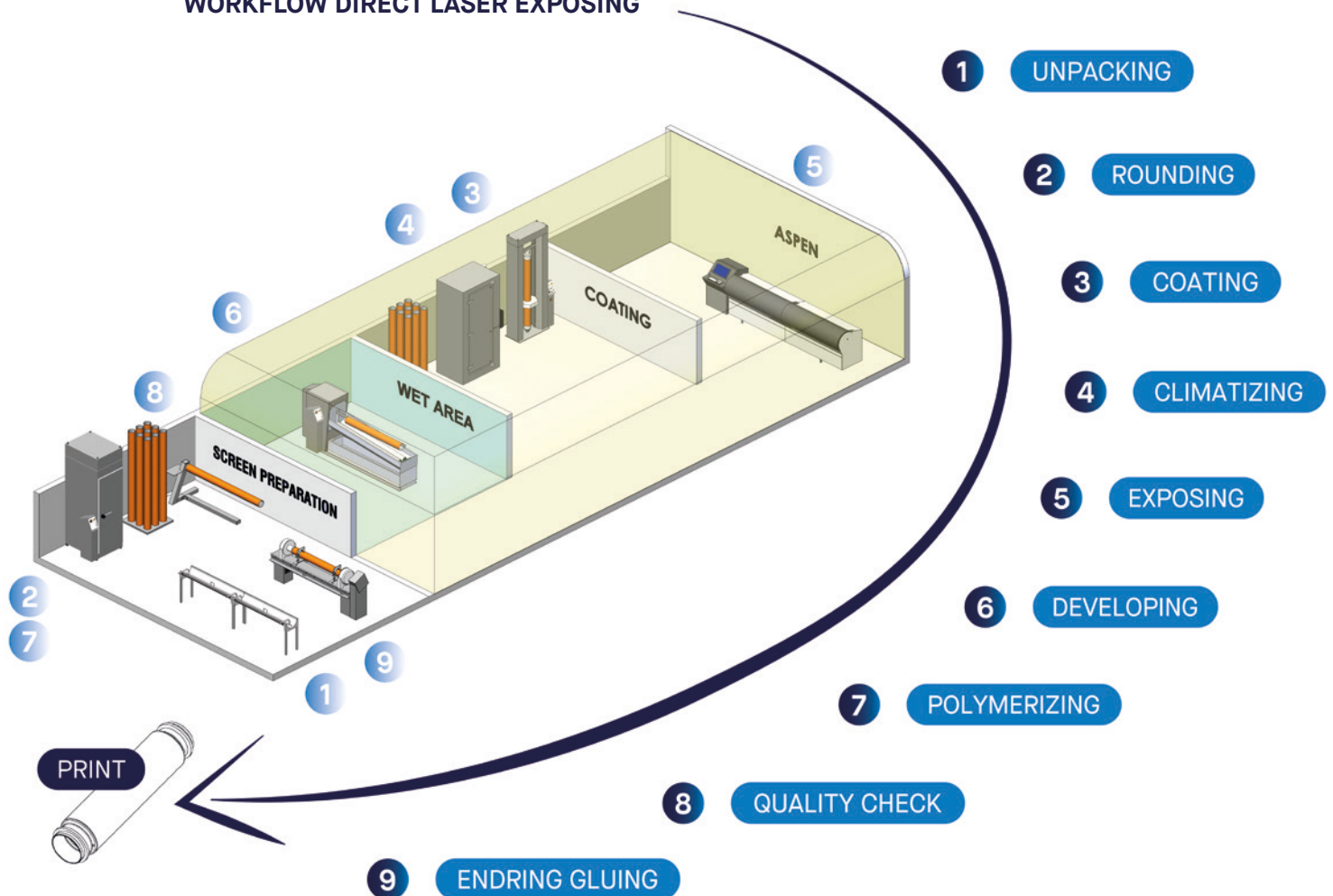
## Direct laser exposing

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 40 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.

## WORKFLOW DIRECT LASER EXPOSING





## ASPEN

### Direct laser exposer

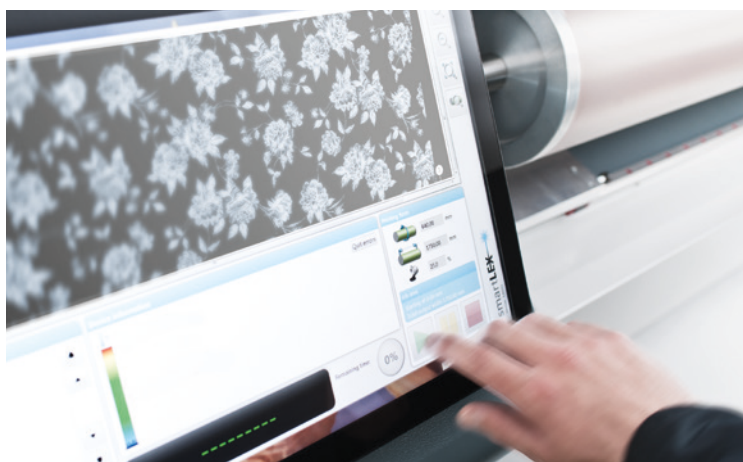
**SPGPrints' ASPEN is the recently released and improved model of our successful smartLEX.**

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 software **bestIMAGE** / **bestFLOW** 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 software **bestIMAGE** / **bestFLOW**



## 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 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



## MANDARIN

### 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



## ORANGE

### 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



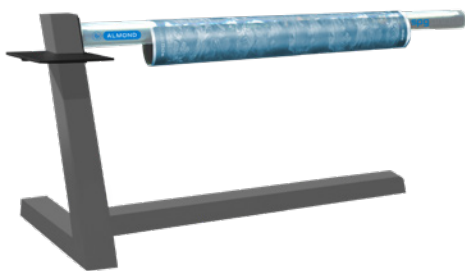
## APRICOT

### 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

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



## ALMOND

### 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.



## OLIVE

### 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.



**PEAR**

### **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



**CHERRY**

### **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





# bestIMAGE

## CAD Software for textile market

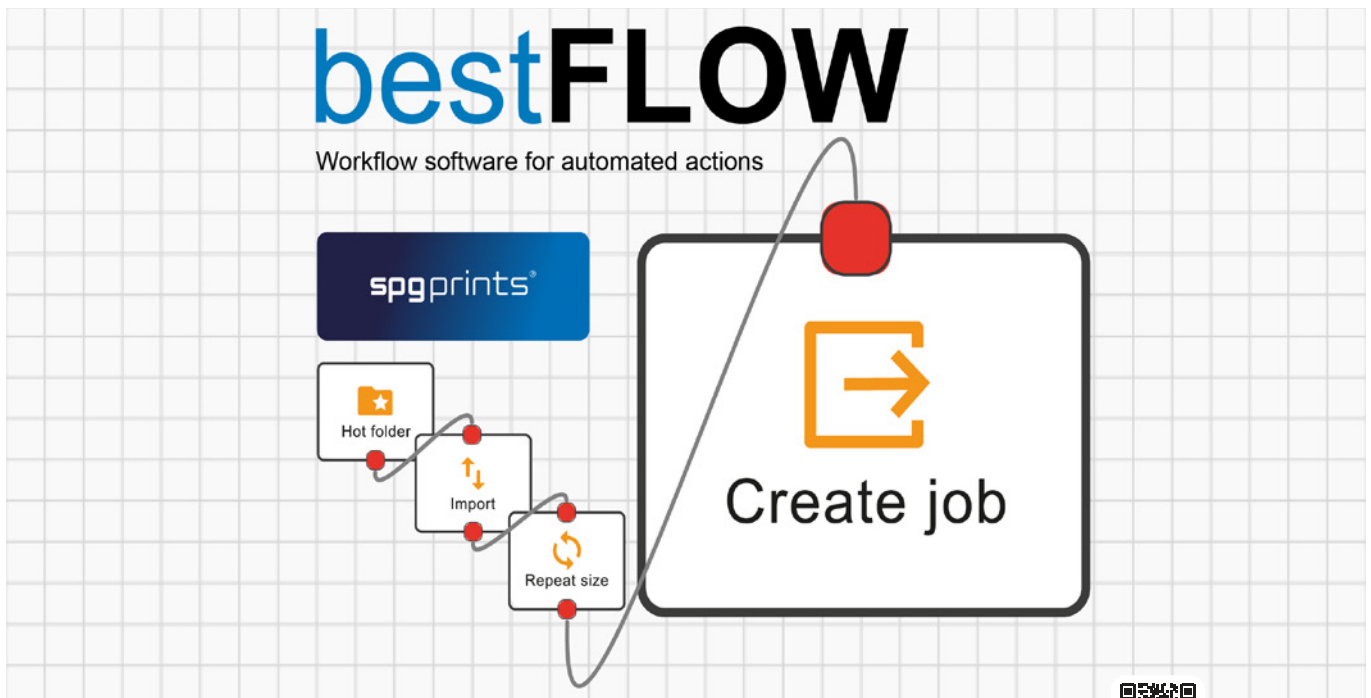
Defining and editing designs are simpler than ever using our **bestIMAGE** software.

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





# bestFLOW

## Automated workflow software

With SPGPrints **bestFLOW**, you boost your entire job preparation – from design to engraving. The software automates all essential actions and ensures a seamless, process-driven workflow.

### bestFLOW FACTS

- Individually configurable workflows
- Fully automated engraving job creation
- Automated transfer to the engraving machine from design to engraving file
- Permanent knowledge preservation

### BENEFITS

- **Time and cost savings**

automated processes speed up job preparation, reduce manual work to ensure a higher productivity

- **Process reliability**

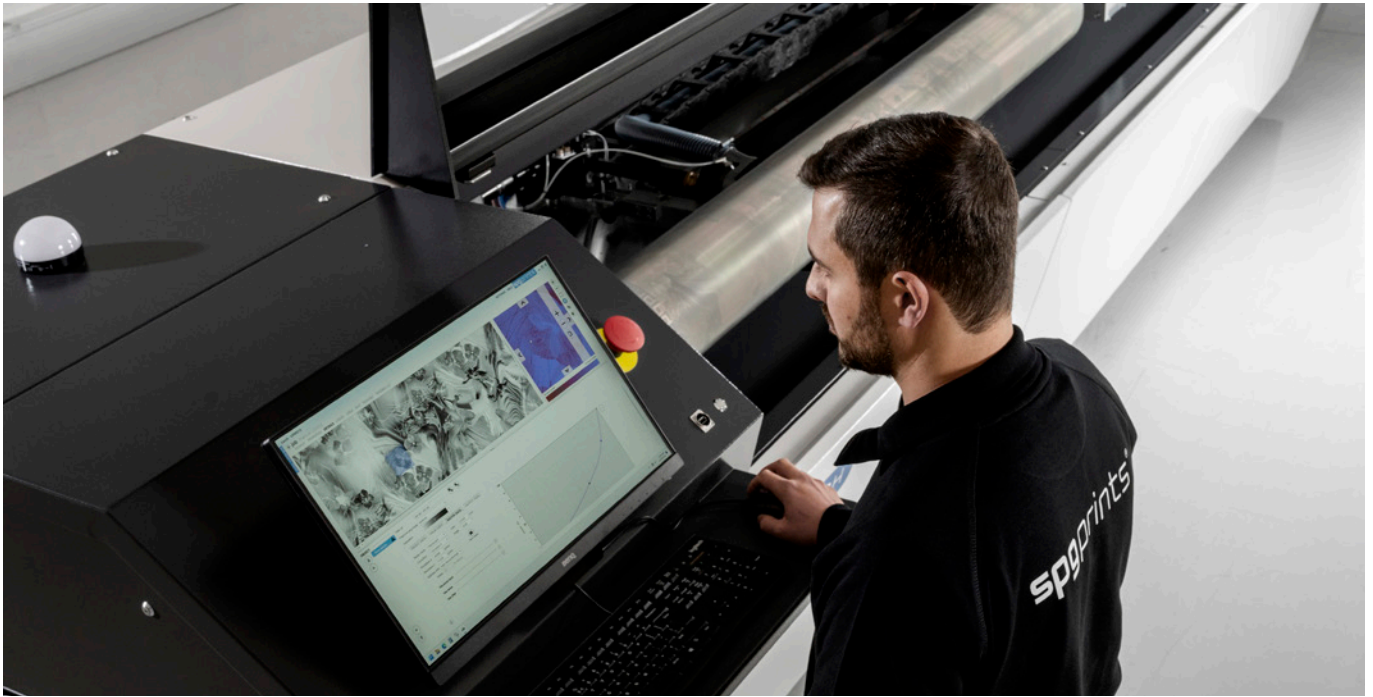
standardized workflows minimize sources of error and ensure reproducible results

- **Knowledge preservation**

**bestFLOW** permanently preserves process knowledge (database), even with personnel changes

- **Sustainable process documentation**

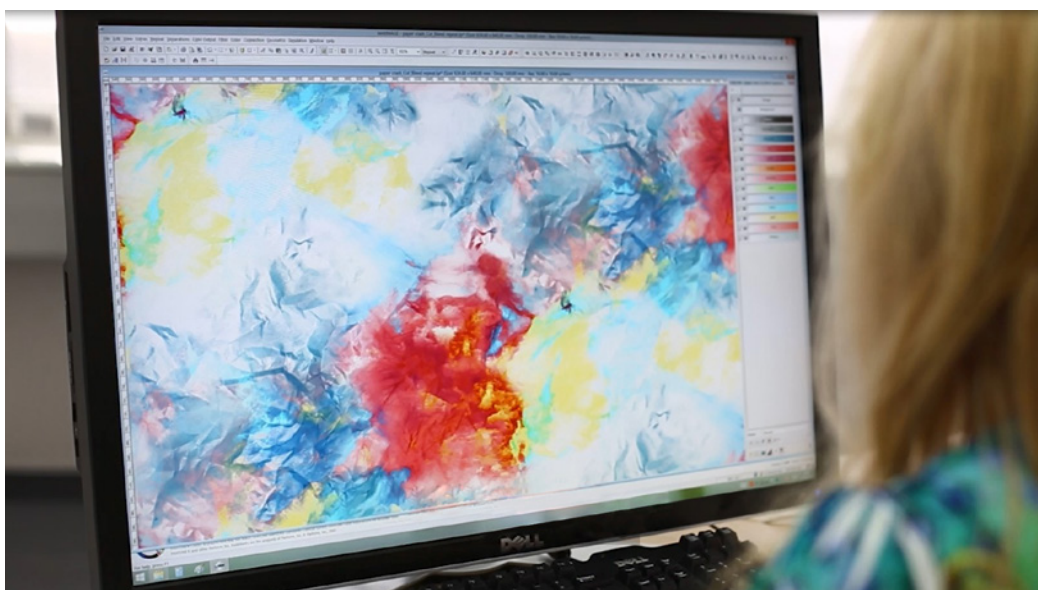
all relevant process information is centrally and permanently available



## Engraving service

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

Our experienced design studio works out the repro using **bestIMAGE** / **bestFLOW** software. Screens are prepared for engraving with the help of **bestFLOW**. 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.





## Pleased to be at your SERVICE!

At SPGPrints, we are happy to offer our customers not only the benefits of installation and training, but also long-term partnership throughout the entire lifetime of your system.

To support you, we offer a wide spectrum of service products tailored to your specific needs.

In addition to preventive maintenance and consumables to keep your system performing at its best, we also provide various packages to support you during the more challenging times in your system's lifecycle.

When issues arise—often at the most inconvenient moments—our remote support system ensures fast and effective assistance. Our team of experts will personally take care of the situation. If possible, they'll get things running again immediately or determine the next steps to secure your production.

Our globally distributed team of experts is here to make even unpleasant experiences as smooth and convenient as possible.

To ensure the level of service you require, we offer service and maintenance contracts in various packages, and we're happy to customize them to your needs. Such contracts ensure a quick response, plannable financials and keep the surprises at bay.

**All with one goal: ensuring your satisfaction with SPGPrints products.**

## 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.

The data in this brochure is based on the information available at the time of publishing and are subject to change without notice. SPGPrints does not warrant that any prices or specifications mentioned will be error-free. SPGPrints reserves the right to modify its products at any time without further obligation. All brand and product names may be registered trademarks or trademarks of their respective holders and are hereby acknowledged.

