

spgprints®



# SPGPrints Global Pre-Press Portfolio

Discover our turn-key solutions for industrial applications.

Printing tomorrow.

# State of the art laser engraving and laser exposing technology

SPGPrints offers simplified, automated, digital and conventional pre-press workflows. Digital pre-press greatly improves throughput: not only are imaging cycles complete within fast time-frames; it is also possible to image multiple plates or screens at once. This means greatly improved handling and logistical efficiencies in your workflow. Use our direct laser engraving and direct laser exposing technology - many different applications can be supported with SPGPrints' pre-press systems:

- Dry offset
- Flexo printing
- Screen printing
- Intaglio
- Pad printing
- Letterpress
- Embossing
- Digital film

## Applications overview

### DRY OFFSET

In the dry offset industry (indirect printing (wet in wet) of seamless containers like cans, cups, tubes and aerosol cans) SPGPrints is a market and technology leader in prepress, especially for 2 piece beverage cans. Following devices can be use:

- TITANIUM - CTP
- THORIUM - DLE



### FLEXO PRINTING

Flexo plate & sleeve printing forms, commonly used for packaging materials (foil, paper and labels, tissues) can be imaged with a CTP technology according to the CTP = LAM principle + UV exposure or with the DLE technology devices:

- TITANIUM - CTP
- THORIUM - DLE
- PLATINUM - DLE



## SCREEN PRINTING

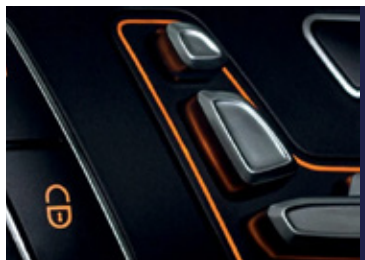
Rotary screen printing is commonly used with label, narrow web printing (for special effects and refining) and for the exacting demands of the printed electronics market. The RotaPlate® (plate material that is sealed to an in-the-round printing sleeve after exposing) and RotaMesh® (welded in-the-round screen) can be used for these applications. Units for engraving and exposing are:

- TITANIUM - CTP
- YTTTRIUM - Exposer
- IRIIDIUM - DLE
- RHODIUM - DLE

## INTAGLIO

Intaglio is a printing form where the image is deeper as the non-printing part of the printing form. Typically intaglio is used for security printing (banknotes, stamps, cheques, passports etc.) Intaglio printing forms can be imaged with:

- TITANIUM - CTP
- THORIUM - DLE
- PLATINUM - DLE



## PADPRINTING

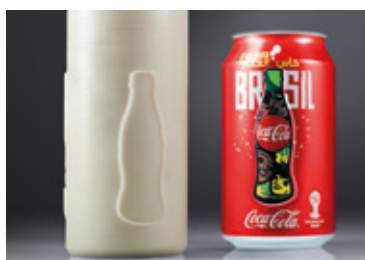
Pad-printing is used for printing on uneven surfaces indirect printing over pads (works like a cushion). Pad printing is used for imaging all kinds of products (toys, remote controls, car industry, promotional articles like lighters, pens, etc.).

- TITANIUM - CTP
- THORIUM - DLE

## LETTERPRESS

Letterpress is now only seldom used for printing narrow web and labels. Letterpress Plates are thin plates that either have a foil back or metal back. These plates are the same plates that are used for dry offset printing and are often mixed up. Systems for letterpress:

- TITANIUM - CTP
- THORIUM - DLE



## EMBOSSING

For embossing effects in (mainly) paper, hard 'printing' plates, sleeves or rollers are used. For sleeves and roller a DLE system is needed. The DLE technology offers the possibility to do special 3D- effects. Known products where embossing is used are book-covers and posters but also beverage cans can be embossed.

- THORIUM - DLE
- PLATINUM - DLE



## Direct laser exposing

SPGPrints takes direct laser exposing to the next level:

High quality and high productivity are finally combined with an attractive level of investment.

SPGPrints has drawn more than 37 years of experience in imaging systems to create a solution which really answers all the market needs. The system ablates material directly (as with screen printing) or ablates a LAMs-layer (CTP).

All pre-press solutions from SPGPrints are equipped with a digital database which stores different calibrated material specifications. This reduces the chance of human errors and increases the efficiency in the whole workflow.



**TITANIUM**

**CTP / max. plate size 25" x 30"**



**TITANIUM**

**CTP / max. plate size 48" x 35"**



**YTTRIUM**

**Direct laser exposer**

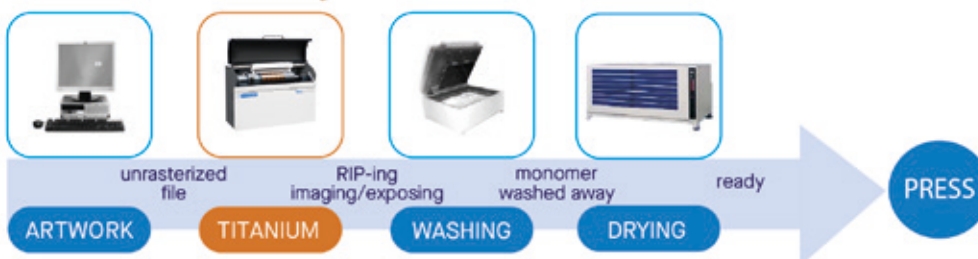
# Computer to plate - CTP

Fibre Diode lasers are used to image the printing form by ablating a black mask or by UV-curing directly (with the use of UV-lasers) a photosensitive lacquer. Depending on your requirements, the laser head can be delivered in several configurations to match your productivity and flexibility demand. The laser diodes are combined with our high definition optics which can meet even your highest quality requirements. The system also comes with an integrated inline UV LED exposure system. It substantially increases quality by creating steep shoulders and flat-top dots. This allows cleaner printing results and larger tonal ranges compared to other UV-techniques on the market. Along with the quality aspect, our inline UV eliminates process steps, improves the reproducibility and reduces the amount of labour. The only thing needed besides our CTP system is a power socket and a plate washer.

## „TRADITIONAL“ CTP



## TITANIUM - CTP





Scan & watch



## TITANIUM

### CTP - Computer to plate / max. plate size 25" x 30"

The TITANIUM, formerly variLEX, is SPGPrints' answer to the need of a multifunctional CTP solution.

The dynamic market and the ongoing technological developments force the printing industry to increase the quality and improve the flexibility in file formats, materials and printing technologies. The TITANIUM can be equipped with a multi-beam fibre diode laser system for ablating the black mask and/or a multi-beam diode UV-laser system to directly expose UV-sensitive materials like rotary screens. The integrated inline UV LED exposure system is unique. Ablation and exposing are carried out in a single step, eliminating the offline main exposure. The machine can also be equipped with different mounting cylinders to handle different materials:

- black anodized vacuum cylinder to handle flexo plates
- magnetic cylinder to handle dry offset/letterpress plates and screens
- hybrid cylinder (vacuum and magnetic) to handle all materials



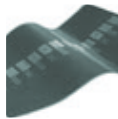
The laser engraver comes with SPGPrints' unique software solution including our database driven on-the-fly RIP system. This allows the use of all common file formats in the graphics industry. **The TITANIUM is therefore the most flexible, high quality pre-press solution for the label and packaging industry.**

## FEATURES

- **Multifunctional system**  
for multiple printing applications  
„open system“ - all common file formats supported
- **High productivity**  
due to reduced process steps  
fastest, adjustable inline UV in market
- **Easy reproducibility**  
database driven software



Dry offset



RotaPlate®



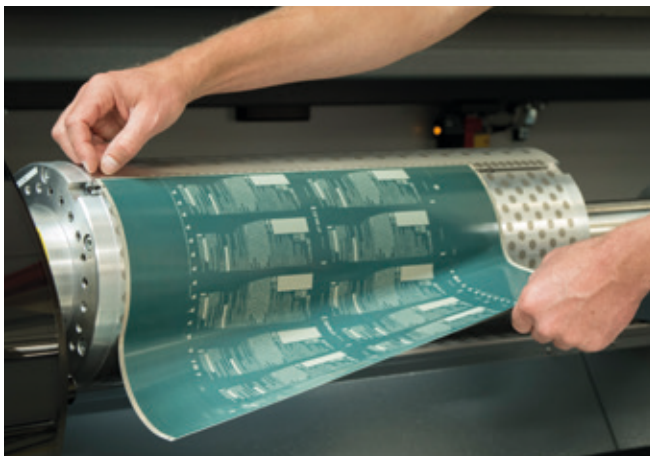
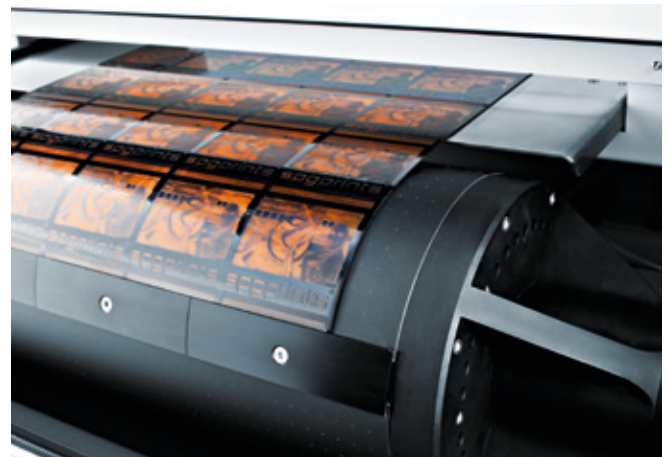
Flexo plate



Letterpress



Digital film



## TECHNICAL SPECIFICATIONS

Laser	FD / UV multibeam
Max. plate size	635 x 762 mm / 25" x 30"
Max. number of plates	08 / size 185 x 310 mm
Rotaplate size	10"-25" x 555 mm
Resolution variable up to	5080 dpi



Scan & watch



## TITANIUM

### CTP - Computer to plate / max. plate size 48" x 35"

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- black anodized vacuum cylinder to handle flexo plates
- magnetic cylinder to handle dry offset/letterpress plates
- hybrid cylinder (vacuum and magnetic) to handle all materials



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fastest, adjustable inline UV in market
- **Easy reproducibility**  
database driven software



Dry offset



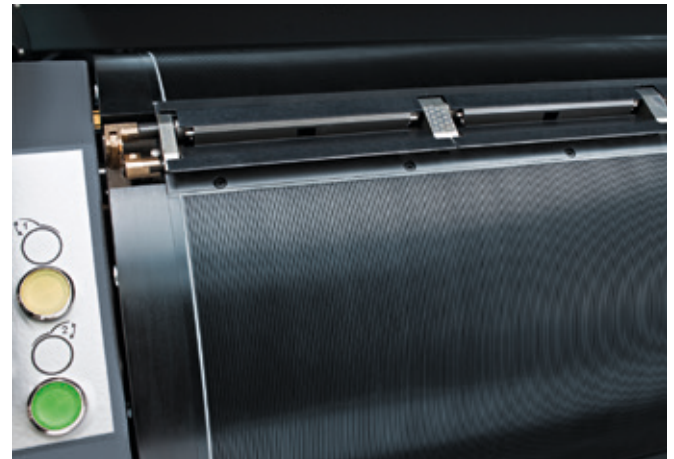
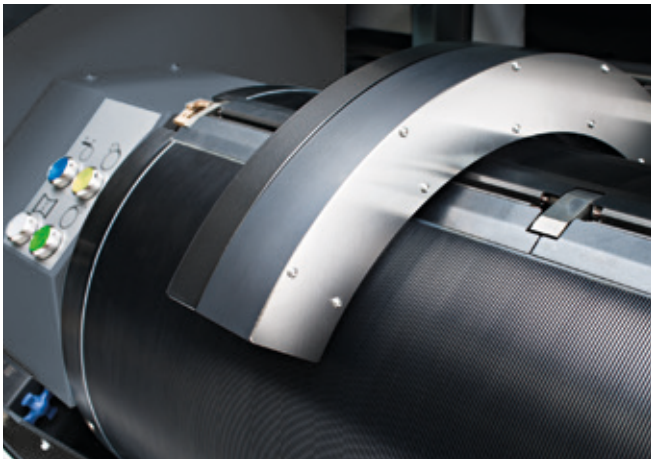
Flexo plate



Letterpress



Digital film



## TECHNICAL SPECIFICATIONS

Laser	FD multibeam
Max. plate size	1200 x 900 mm / 48" x 35"
Max. number of plates	12 / size 185 x 310 mm
Resolution variable up to	5080 dpi

# YTTRIUM



## YTTRIUM

### Direct laser exposer

**The YTTRIUM Laser exposing system is the ideal solution for the exacting demands of the printed electronics market and high precision label customers.**

The laser exposer delivers precise and consistent patterning of screens for functional inks on flexible substrates, enabling the production of advanced circuits crucial for sensors and antennas as well as for any application that requires high accuracy.

Featuring a high resolution up to 5080dpi, YTTRIUM ensures unwavering accuracy through advanced control mechanisms, optics and laser technology. The in-house developed software with user-friendly job file preparation and digital database establish perfect reproducibility and increasing efficiency in the whole workflow. YTTRIUM's maximum flexibility extends to seamless integration with SPGPrints' RotaMesh® and RotaPlate® screens.



## FEATURES

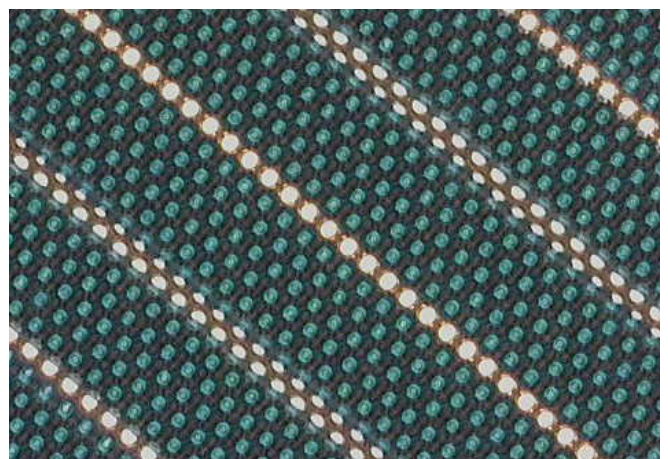
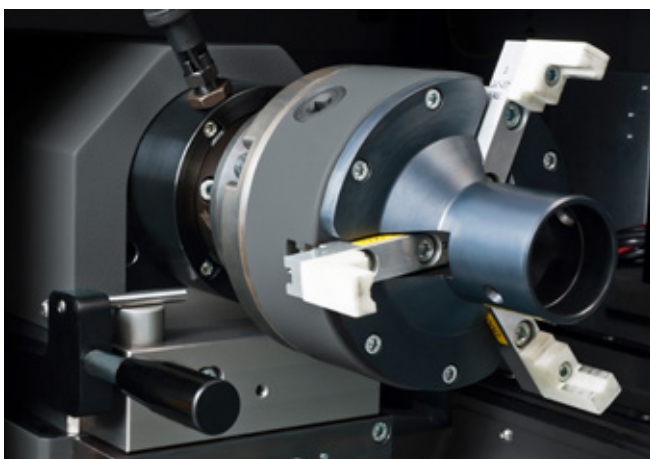
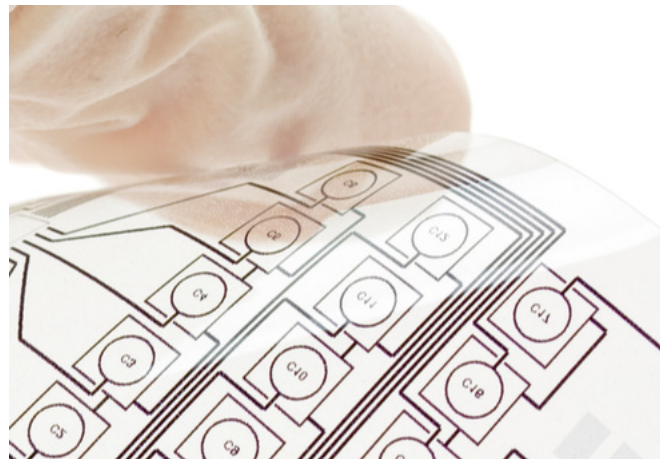
- **High precision patterning**  
due to high quality UV laser technology  
due to HD resolution up to 5080 dpi
- **High flexibility**  
from sheets to seamless round screens - full portfolio with RotaMesh® and RotaPlate®  
“open system“ - all common file formats supported
- **Easy reproducibility**  
user friendly and databased driven software



RotaMesh®



RotaPlate®



## TECHNICAL SPECIFICATIONS

<b>Laser</b>	UV laser diode
<b>RotaMesh® size</b>	10" - 36" x 1100 mm
<b>RotaPlate® size</b>	10" - 36" x 565 mm
<b>Resolution variable up to</b>	5080 dpi



# Direct laser engraving - DLE

SPGPrints' direct laser engraving solutions are unique in regards to the quality of engraving. For more than 37 years we have been developing systems, allowing the engraving of plates and seamless printing forms for several applications. Various materials like polymer, elastomer and lacquer can be engraved, independent of its colour.

All prepress solutions from SPGPrints are equipped with a digital database which stores different calibrated material specifications. This reduces the chance of human errors and increases the efficiency in the whole workflow.



**THORIUM**



**PLATINUM**



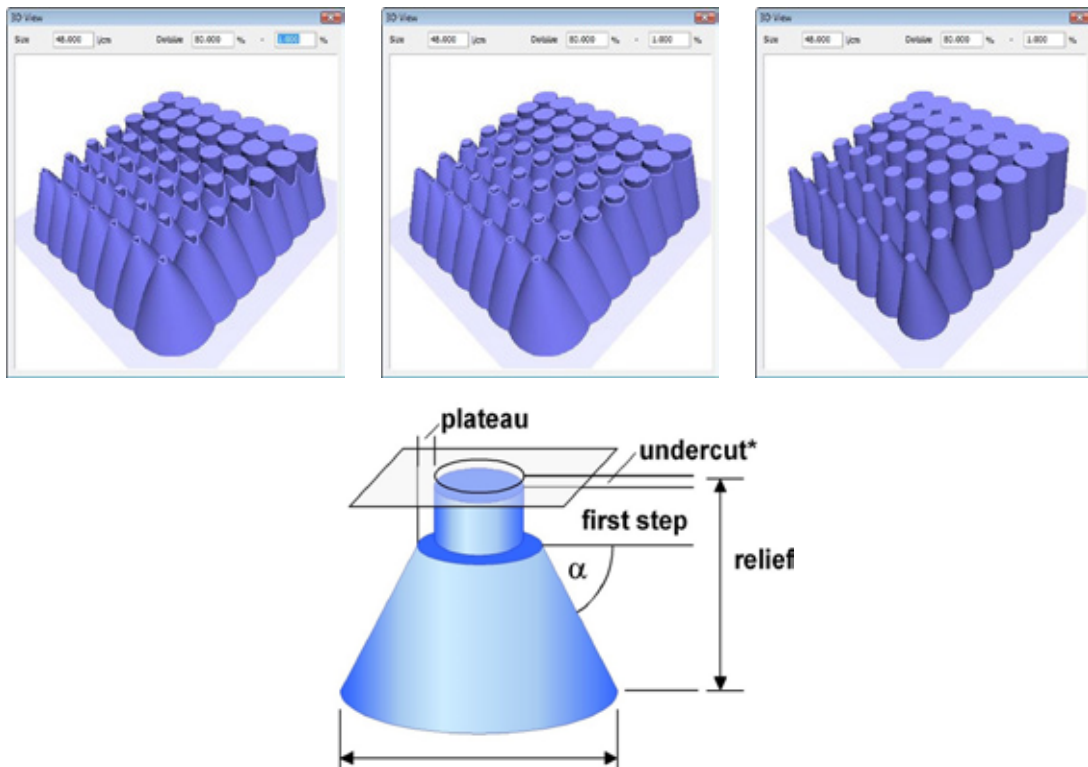
**IRIDIUM**



**RHODIUM**

# Active 3D®-RIP system

Our unique Active 3D®-RIP system, developed in-house, allows 3-dimensional dot shaping of the printing forms. This is used to prevent over-impression of smaller elements. Smaller elements are set below the printing surface, so they print equal to larger elements.

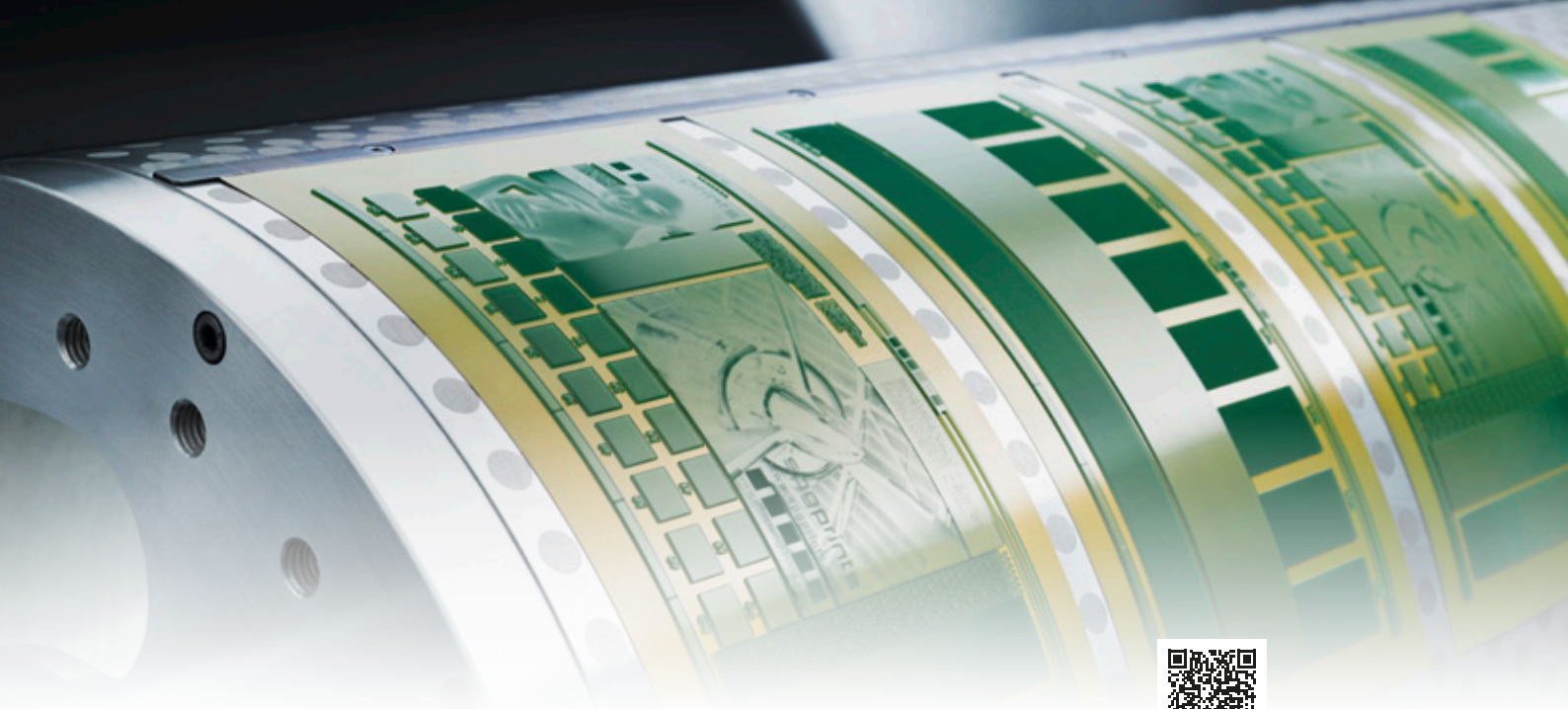


## „TRADITIONAL“ CTP



## THORIUM - DLE





Scan & watch



## THORIUM

### DLE - Direct laser engraving

**The THORIUM direct laser engraving system, replacing our successful HELIOS, is a proven solution for producing high quality printing forms for multiple applications.** Different materials can be imaged, like polymer, elastomer, POM, etc., regardless of its colour.

Like every direct laser engraving system of SPGPrints, it uses our database controlled Active 3D®-RIP system for relief printing forms in order to produce the optimal dot shape of the image. This results in excellent quality without special software tricks.

The THORIUM works with well-established sealed CO<sub>2</sub> laser source, without the need of process gas. No solvent processing, no chemicals to be handled and stored.

It is equipped with the latest, state-of-the-art-hardware, software and safety components.

With the THORIUM, printers can now produce the highest quality print with a shorter, solvent-free process, by longer runs and multiple cost saving potentials in the printing process.



## FEATURES

- **Multiapplicative system**  
for printing plates, sleeves and rollers
- **No gas consumption**  
sealed CO<sub>2</sub> laser generator
- **Eco-friendly process**  
single step dry process, solvent-free



Dry offset



Sleeves



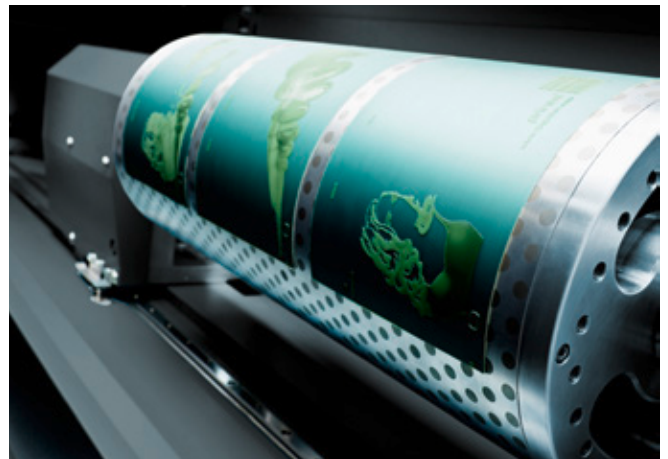
Blankets



Screen

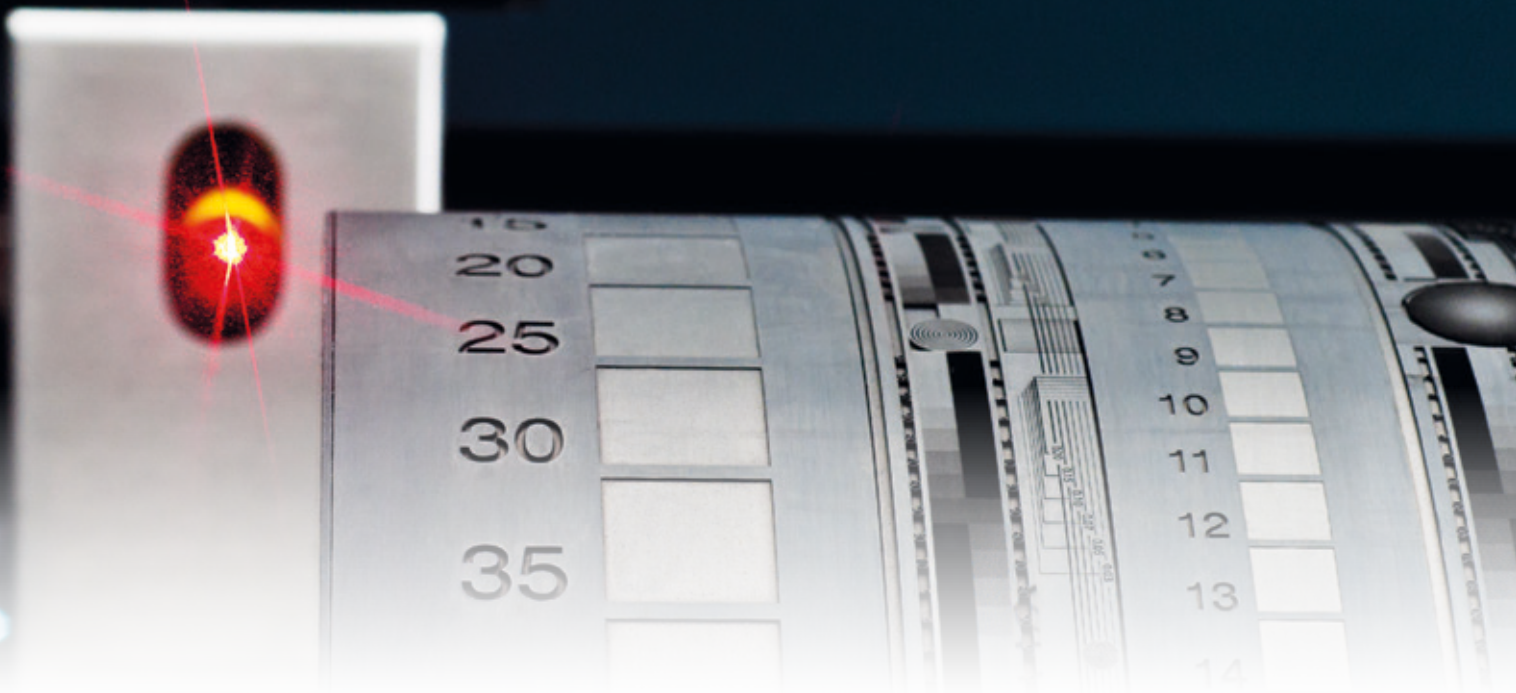


Embossing



## TECHNICAL SPECIFICATIONS

Laser	Sealed CO <sub>2</sub> laser source
Max. number of plates	09 / size 185 x 310 mm
Sleeve engraving width	< 900 mm / 35.43"
Sleeve repeat size	267 - 1210 mm / 10.51" - 47.48"
Resolution variable up to	10.160 dpi



## PLATINUM

### DLE - Direct laser engraving

The **PLATINUM**, previous **KRONOS**, is **SPGPrints'** answer for companies who need **seamless, endless sleeves and rollers**. The unique laser system, developed in-house, allows top quality, even at higher relief depths, in order to meet today's and future requirements for elastomer sleeve making.

The system is equipped with our own Active 3D®-RIP software, which allows the direct imaging of various file formats. Like all pre-press solutions from SPGPrints, the PLATINUM is equipped with a digital database to store different calibrated material specifications. This reduces the chance of human errors and increases the efficiency in the whole workflow.

The system is designed to work with air cylinders in between 3-jaw chuck and center point or optional with a precision quick exchange system. The optional available feature „Auto Milling“ increases the productivity by milling non-printing areas. „Scan & Calibrate“ allows sleeve surface measuring for advanced quality through semi-automated material calibration.





## FEATURES

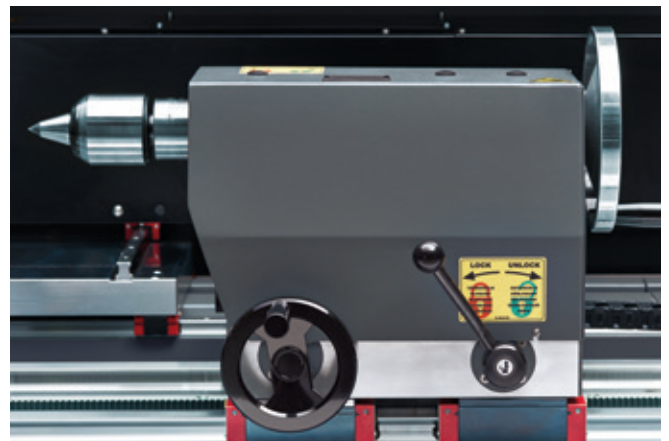
- **Highest quality with longer runs**  
due to Active 3D® dot shaping and below surface dot
- **Shorter workflow**  
single step dry process - „on the fly“ Active 3D®-RIP
- **High quality workhorse**  
for heavy cylinder & plates - deep seamless relief engraving



Sleeves



Plates



## TECHNICAL SPECIFICATIONS

Laser

Sealed CO<sub>2</sub> or fibre laser

Sleeve engraving width

< 2.000 mm / 79" or  
< 3.200 mm / 126"

Sleeve repeat size

125 - 1.250 mm / 4.95" - 49.45"

Resolution variable up to

5080 dpi

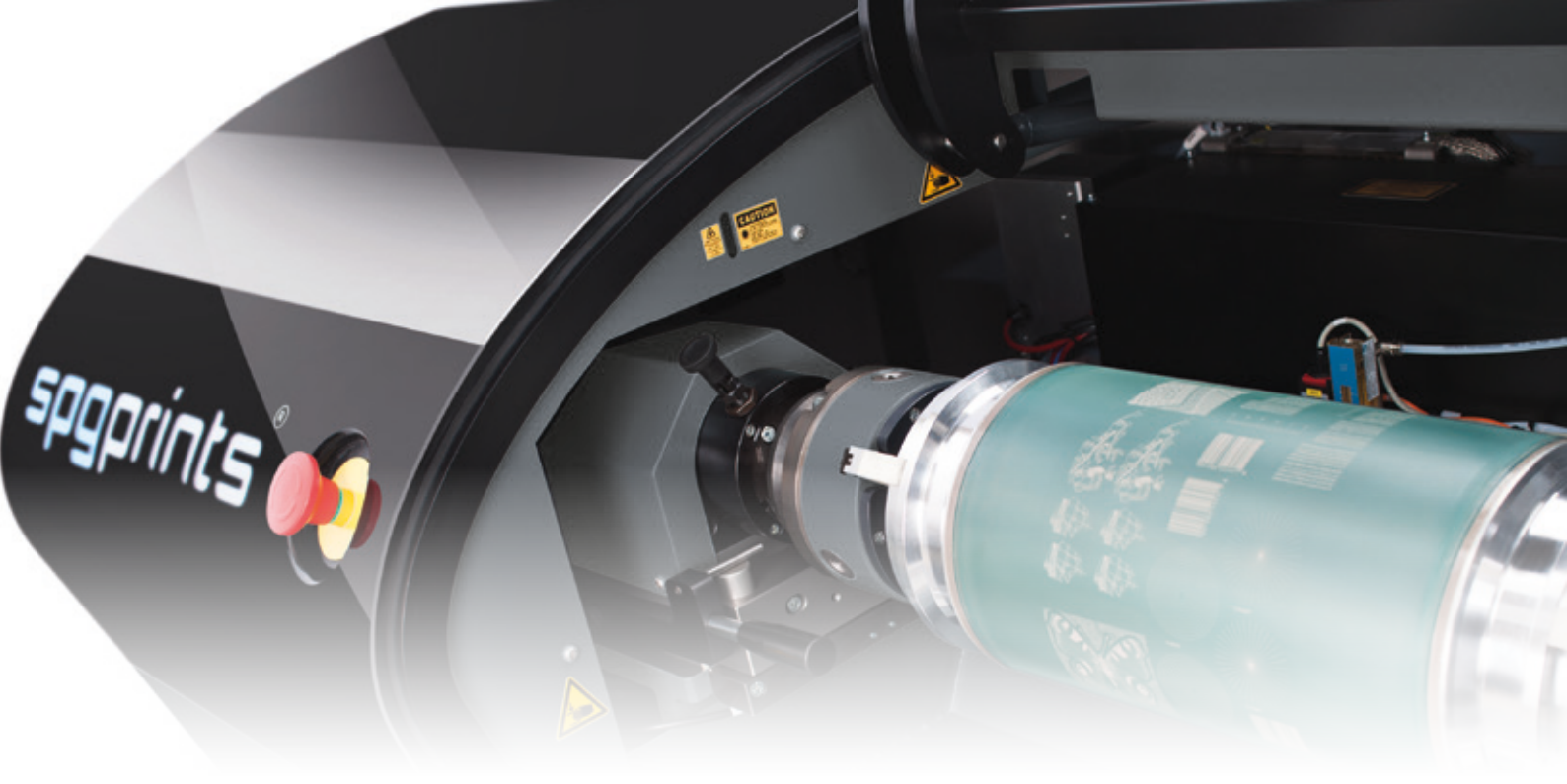
Load weight up to

1.000 kg

Option

Auto milling / scan & calibrate

Precision quick exchange system



**IRIDIUM**



**RHODIUM**

### **DLE - Direct laser engraving**

**Direct laser engraver systems IRIDIUM and RHODIUM are specially designed to serve printers in the label, security printing, bio sensors and electronic printing market.**

The IRIDIUM concept, formerly rotaLEN, is based on SPGPrints' technical excellence and applicational know-how of more than 37 years in direct laser engraving of rotary screens. The IRIDIUM can easily be integrated into the existing workflow and engraves images onto RotaMesh® and RotaPlate® screen material, in a single-step dry and fully digital process. With the shortest possible time-to-press and perfect reproducibility, no remakes due to film or wash out issues, the IRIDIUM allows an economical and cost effective screen making workflow.

The RHODIUM, previous secuLEN, is available with a customized SecuScreen® & SecuPlate® mounting system for security printing applications.

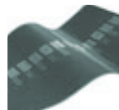


## FEATURES

- **Sustainable working process**  
single step dry process - no water consumption
- **High flexibility**  
use with RotaMesh® and RotaPlate®  
use with SecuScreen® and SecuPlate®
- **Perfect reproducibility**  
due to reduced process steps and auto-calibration



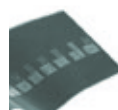
RotaMesh®



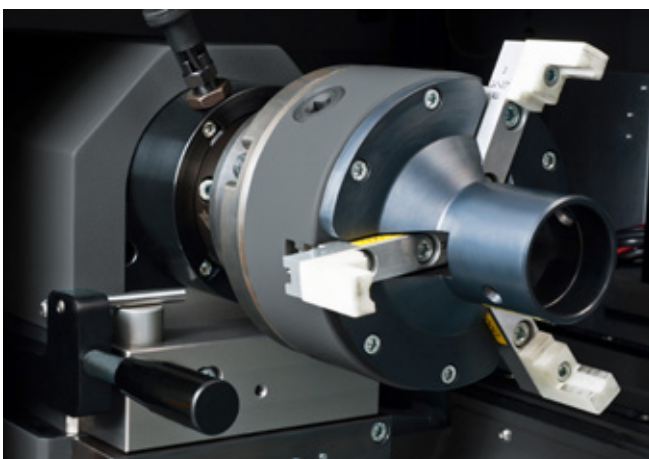
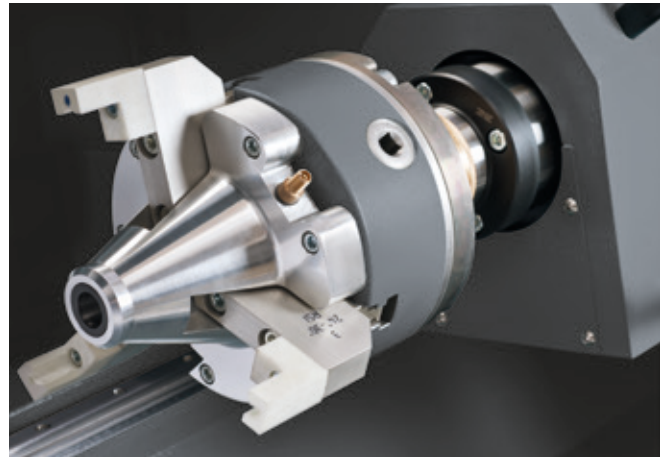
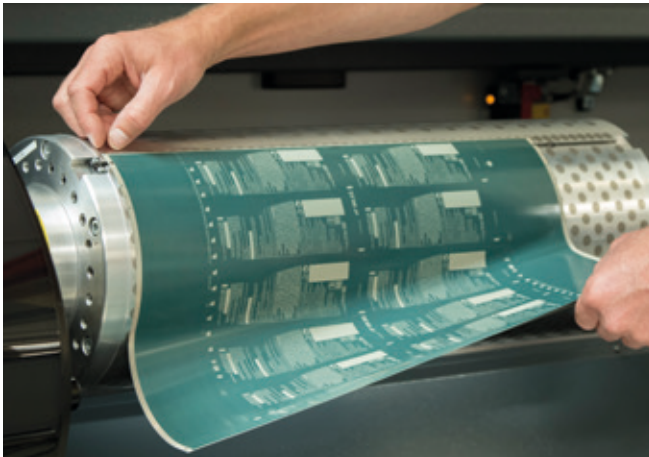
RotaPlate®



SecuScreen®



SecuPlate®



## TECHNICAL SPECIFICATIONS

<b>Laser</b>	Sealed CO <sub>2</sub> laser source
<b>RotaMesh size / SecuScreen size</b>	10" - 36" x 1200 mm / R640 - R1200 x 1000 mm
<b>RotaPlate size / SecuPlate size</b>	10" - 25" x 555 mm / <900 x 880 mm
<b>Resolution variable up to</b>	5080 dpi



## CAD/CAM Software bestIMAGE

SPGPrints own software **bestIMAGE** is the optimal CAD/CAM solution for your workflow.

Every SPGPrints' pre-press system comes with a built-in "on the fly" Active 3D®-RIP, which reduces the file preparation time. Images can also be rasterized offline on the CAD station.

The software includes unique features like, "Remove Overlay", "Optimized dots" and "Job Editor" which are supported with a preview. These tools make it possible to optimize your file for perfect final print results.

All SPGPrints' pre-press systems contain modul "FLEXO POWER" - job files can be fully prepared offline, including all options and settings for engraving. Job tickets can be created with the "Job Editor" in order to increase the up-time on the pre-press machine and avoid mistakes. Just open the job ticket and press start.

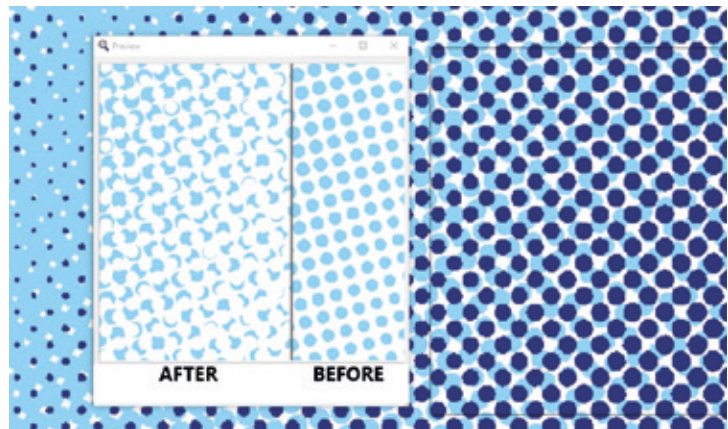
The total system is database driven via its "Production Calibration" which reduces the chances of human errors, increases productivity and ensures the highest possible quality.



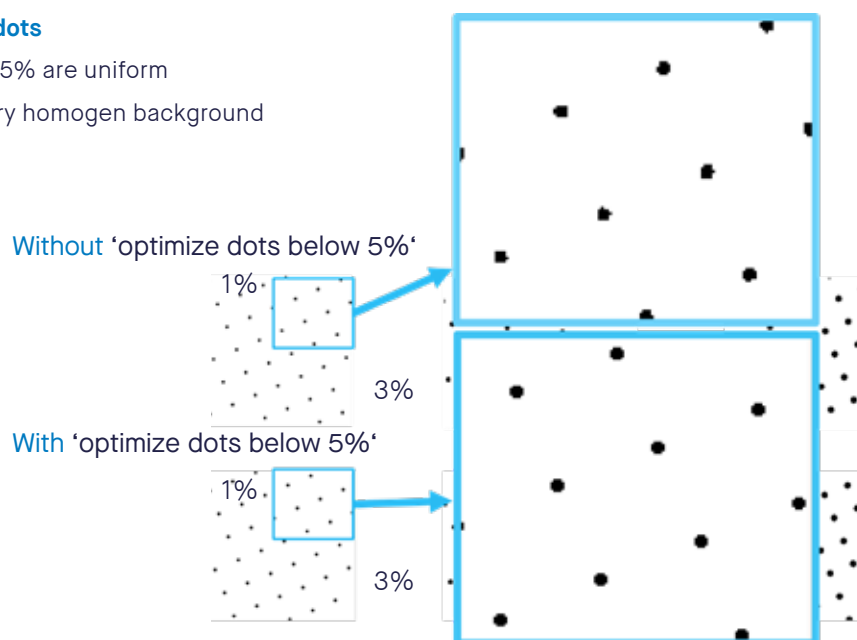
## FEATURES

- **Highest run-time on pre-press**  
due to optimal CAD/CAM solution
- **Best versatility**  
all common file formats supported
- **Efficient printform improvement**  
due to supplied functions like remove overlay

- **Remove overlay**  
no ink contamination  
save ink



- **Optimized dots**  
dots below 5% are uniform  
allowing very homogen background





# 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

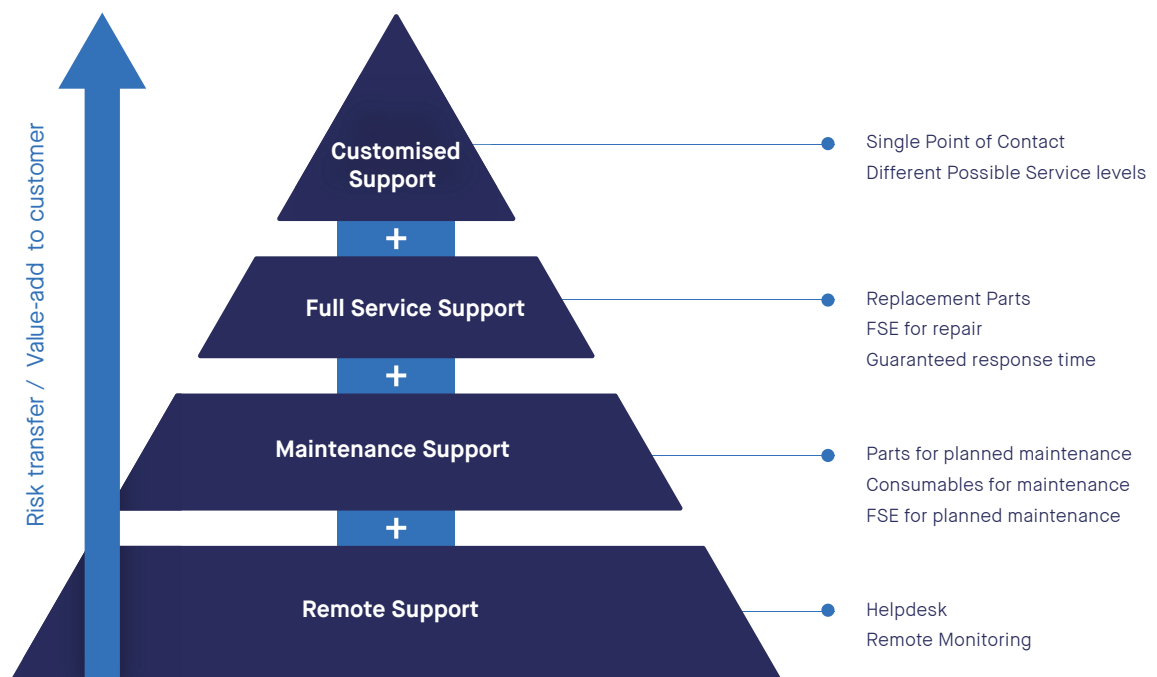
In addition to the standard Maintenance Support agreement, the Full Service Support option also covers the costs of repairs. That is including labour costs of the Field Service Engineer and any replacement parts that are required to resolve the problem. Most importantly, the Full Service Support agreement 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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