DROP®

by Hans Lüscher

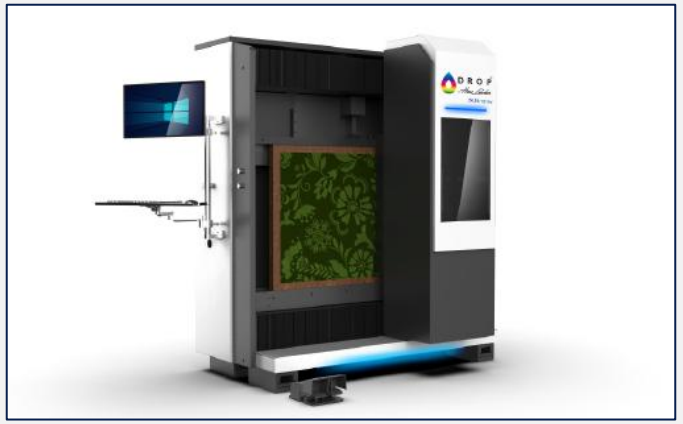
Advanced Computer to Screen & Computer to Plate Solution

DROP® by Hans Lüscher

Phoenix DLES

Direct Laser Exposing System

Advanced Computer to Screen & Computer to Plate Solution



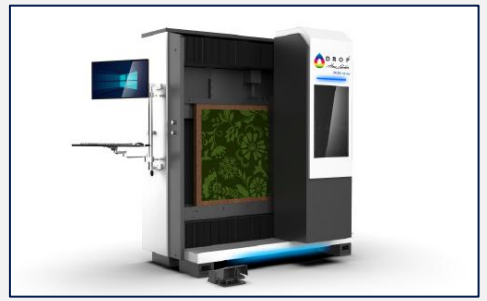
DROP® by Hans Lüscher

Phoenix DLES

Direct Laser Exposing System

Advanced Computer to Screen & Computer to Plate Solution

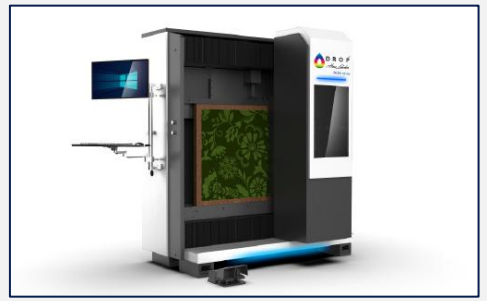
- Screen printing
- Rotary screen printing
- Offset / Dry offset printing
- Pad printing
- Letterpress
- Security Printing
- Magnesium



DROP® by Hans Lüscher

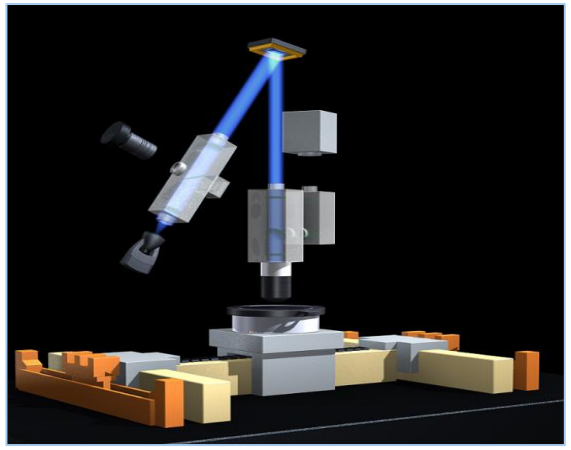
The Phoenix DLES digital imaging system offers the following highlights

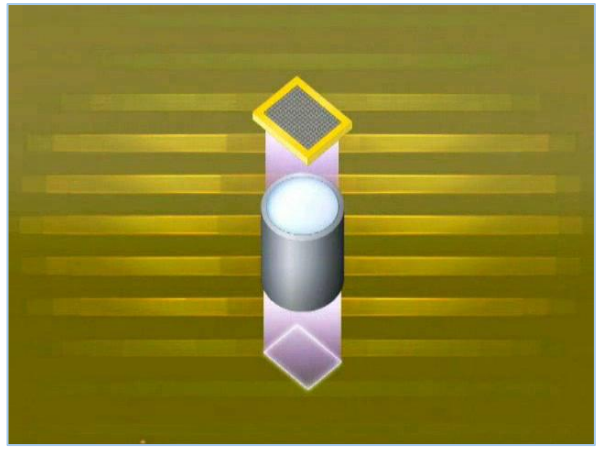
- Resolution 1 Bit Tiff data 1.270 / 2.540 / 3.600 / 5.080 / 11.000 or 12.000 dpi
- Resolution PDF Vector or Gerber data 12.700 or 25.400 dpi
- High-quality special optics
- Texas Instruments DMD technology with TILT software
- 375 nm, 405 nm and 830 nm wavelengths
- Powerful Japanese laser
- Automatic autofocus for optimal depth of field
- Vacuum plate for mounting of rotary screens and printing plates
- Support for flat screens
- Machine accuracy of 1 micron
- Marble machine bed
- Inline option
- Fast exposing speed
- Outstanding depth of focus of the laser

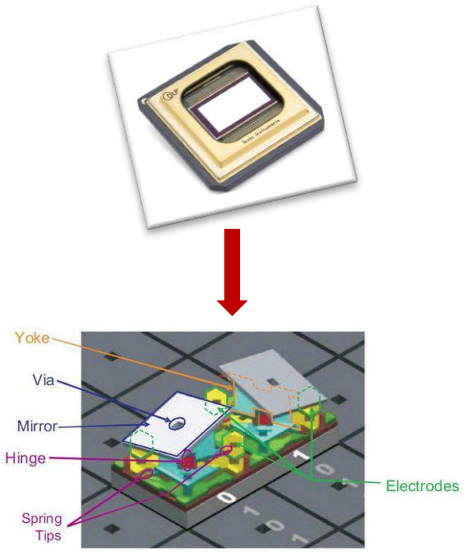


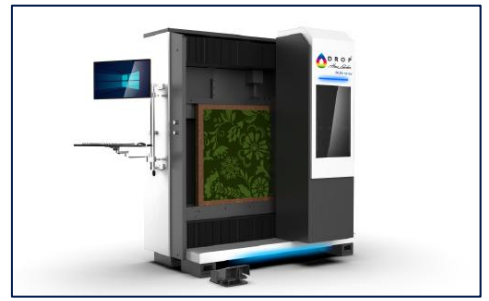
Digital Imaging Technology

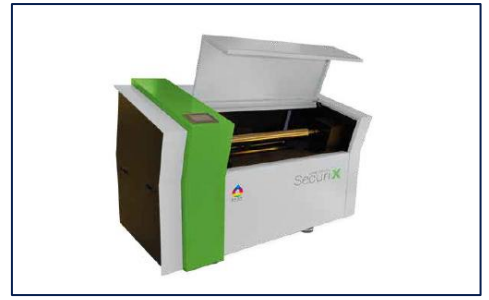
Digital images are produced with a DMD (Digital Micro-Mirror Device) that has more than 2 million micrometers of mirrors that produce clear and sharp square dots. This advanced digital exposure system has become the new standard in the printing, PCB and security industry.









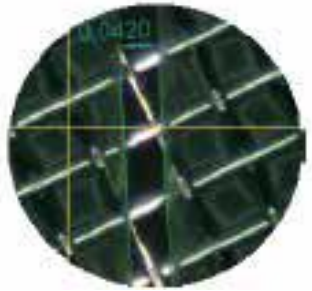


DROP® by Hans Lüscher

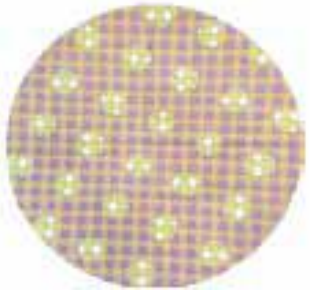
High Resolution

A 1.270 dpi optical resolution enables quick and easy creation of high-quality 133 LPI raster and halftone dots, while a 2.540 dpi optical resolution delivers high-resolution curve lines and perfect FM halftone dots. Other resolutions are available (3.600 dpi, 5.080 dpi, 12.700 dpi, 25.400 dpi).

2540 dpi

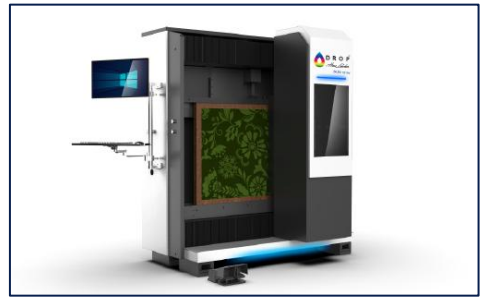


40 micron line
120 l / inch



5% halftone

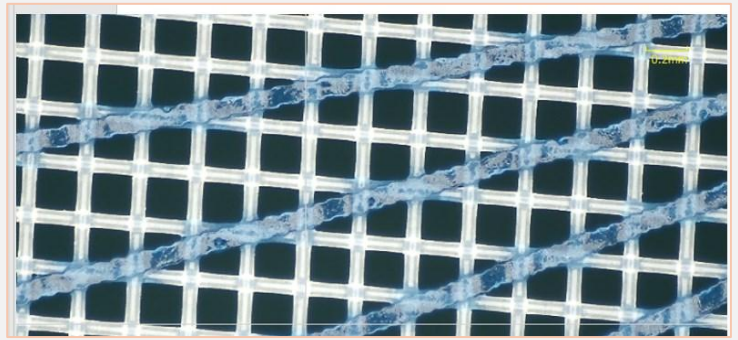
4 colour picture



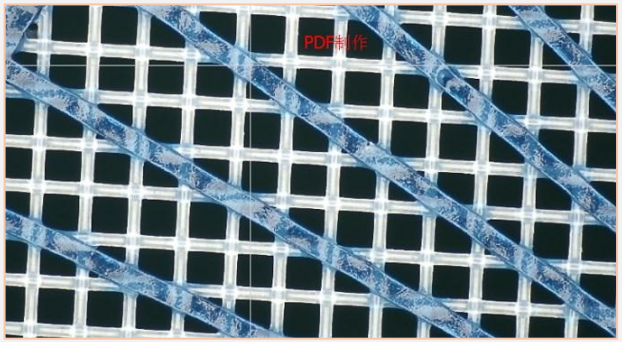
DROP® by Hans Lüscher

PDF Vector Algorithm up to 25.400 dpi

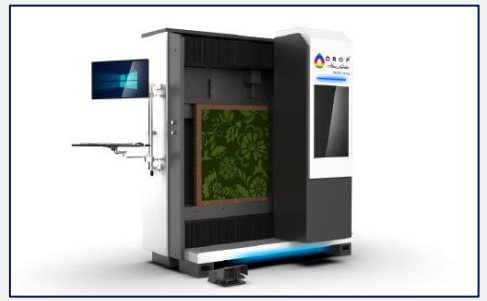
The advanced PDF segmentation algorithm enables high-quality PDF files with a resolution of 12.700 or 25.400 dpi. This method effectively eliminates the problem of jagged lines that can occur when converting vector files, resulting in improved accuracy and smoother, more cohesive images.



1 bit Tiff format （100X magnification）



PDF format（100X magnification）

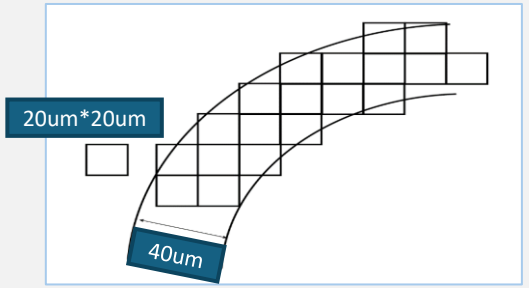


DROP® by Hans Lüscher

Core Technology
PDF vector algorithm process (simplify process)

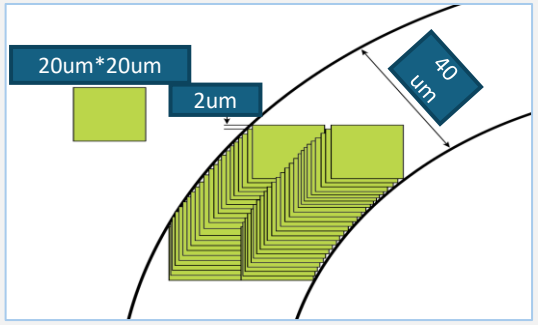
Original process

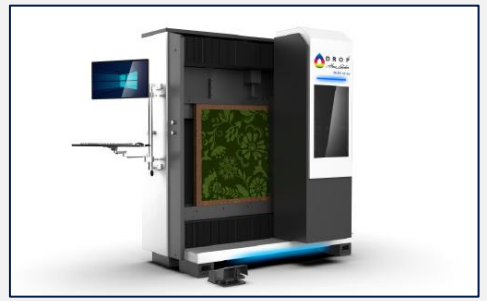
AI / Cdr → PDF → HQ RIP → 1 bit tiff → DLES CTS



PDF vector algorithm process

AI / Cdr → PDF → DLES CTS





DROP® by Hans Lüscher

AI Scanner solution

AI's latest stretch and shrink function (scanner) can first measure the degree of paper stretching and shrinkage, calculate the deformation, and then automatically adjust the TIFF file to the deformation with high precision.

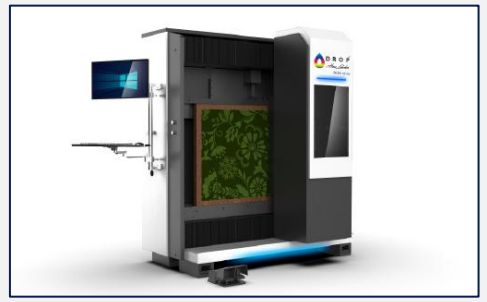
1. Step
Offset Printing

The 2nd step
Screen Printing
Finishing

Paper expansion
or shrinkage DLES
CtS automatic
adjusting

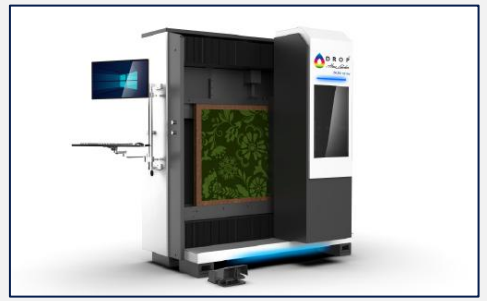
Expanded Paper

Shrinked Paper



DROP® by Hans Lüscher

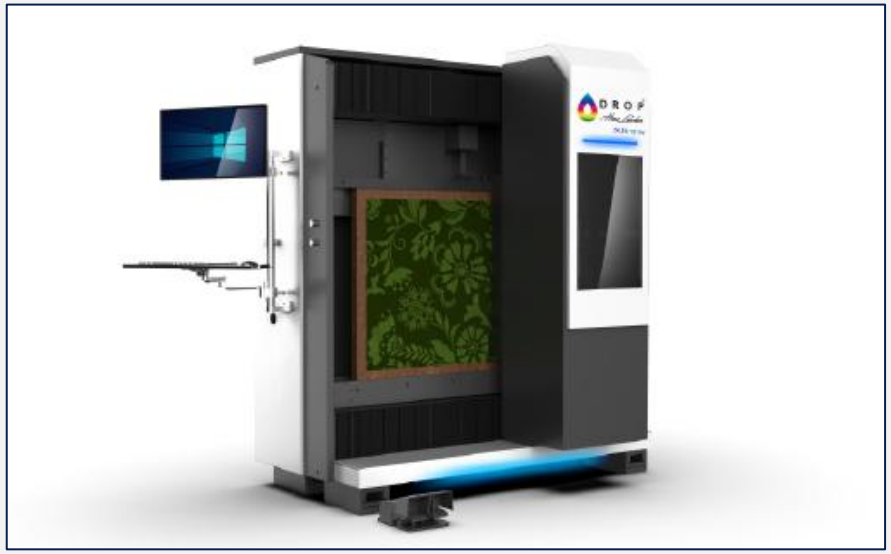
Phoenix DLES Horizontal



- Minimum machine size 400 x 500 mm
- Maximum machine size 2600 x 3600 mm
- 375 nm, 405 nm and 830 nm wavelengths
- Marble machine base

DROP® by Hans Lüscher

Phoenix DLES Vertical



- Minimum machine size 1000 x 1000 mm
- Maximum machine size 3500 x 6000 mm
- 405 nm wavelengths
- Marble / steel machine base
- Inline option

Thank You!

DROP®
by Hans Lüscher