

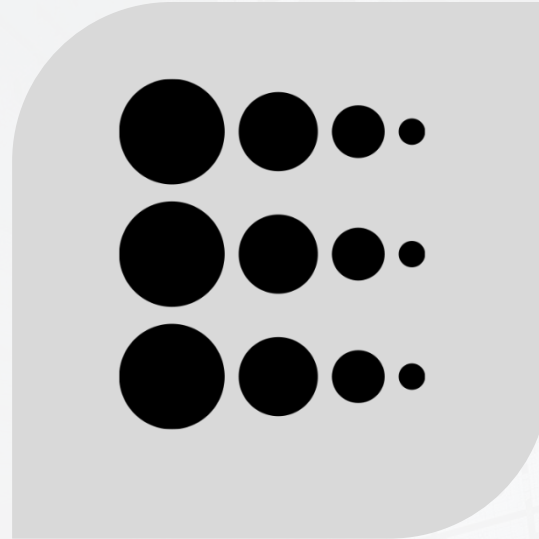
High-Rise 2023

René Beinke | LPKF Laser & Electronics SE





Technology



Applications



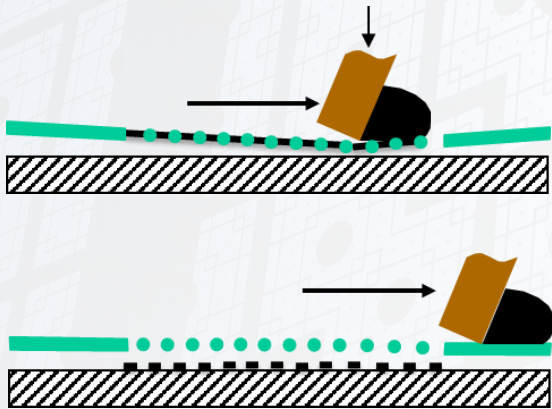
Product



STATE OF THE ART

LASER TRANSFER PRINTING – AN INNOVATIVE PRINTING TECHNOLOGY

Screen Printing



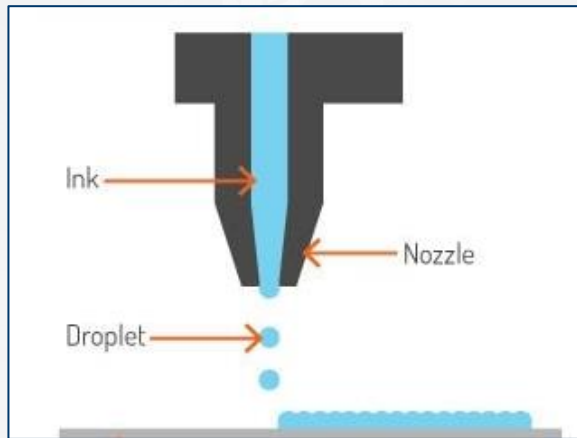
Pros

- speed is independent of glass size
- good print quality
- well established

Cons

- only one layer thickness
- thickness typ. 15-30 μm
- one screen per window model

Inkjet



Pros

- High resolution
- CYMK Photorealistic print
- Digital

Cons

- Slow printing speed at high film thickness
- Special inks
- High Maintenance cost

LTP

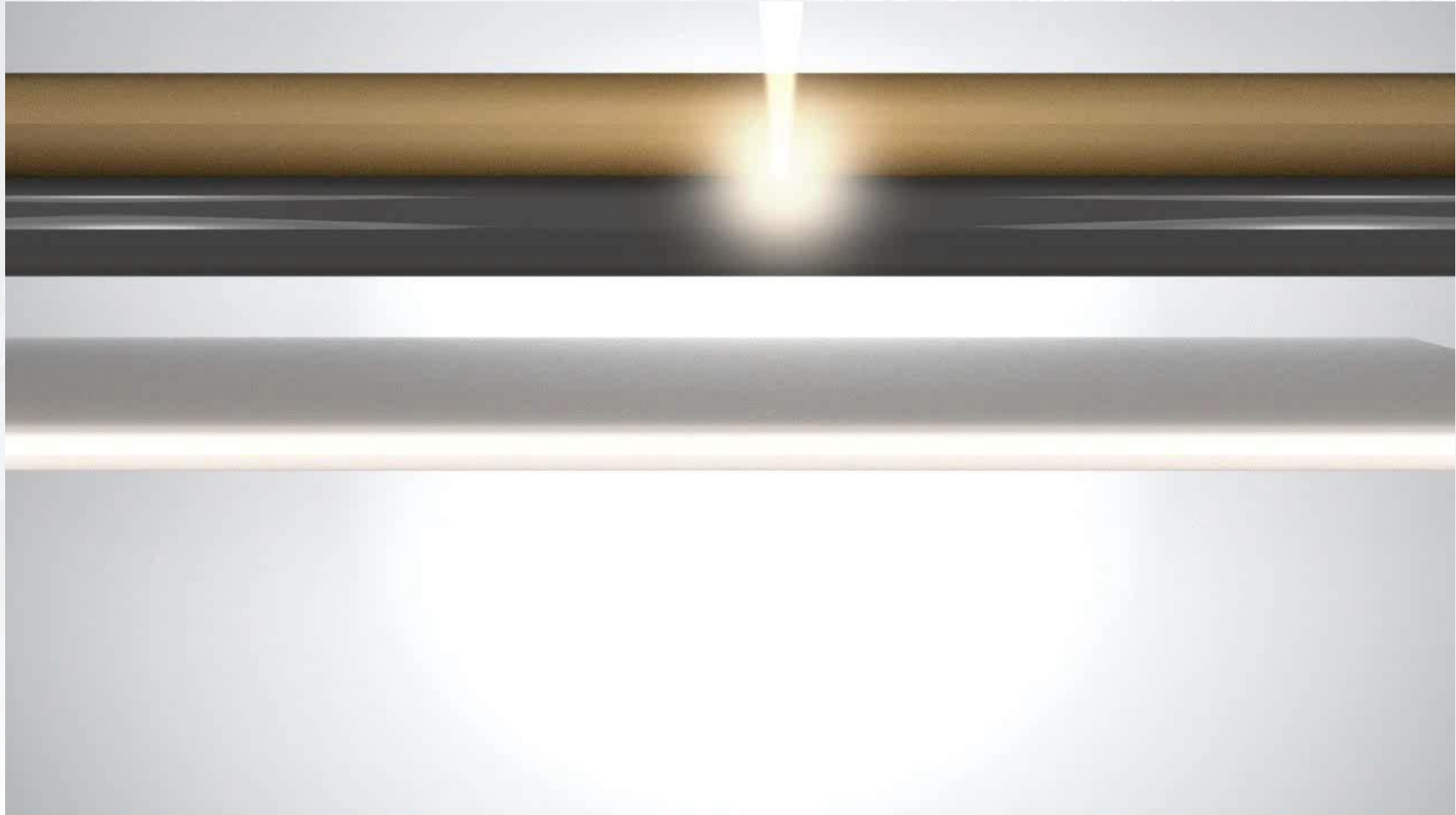


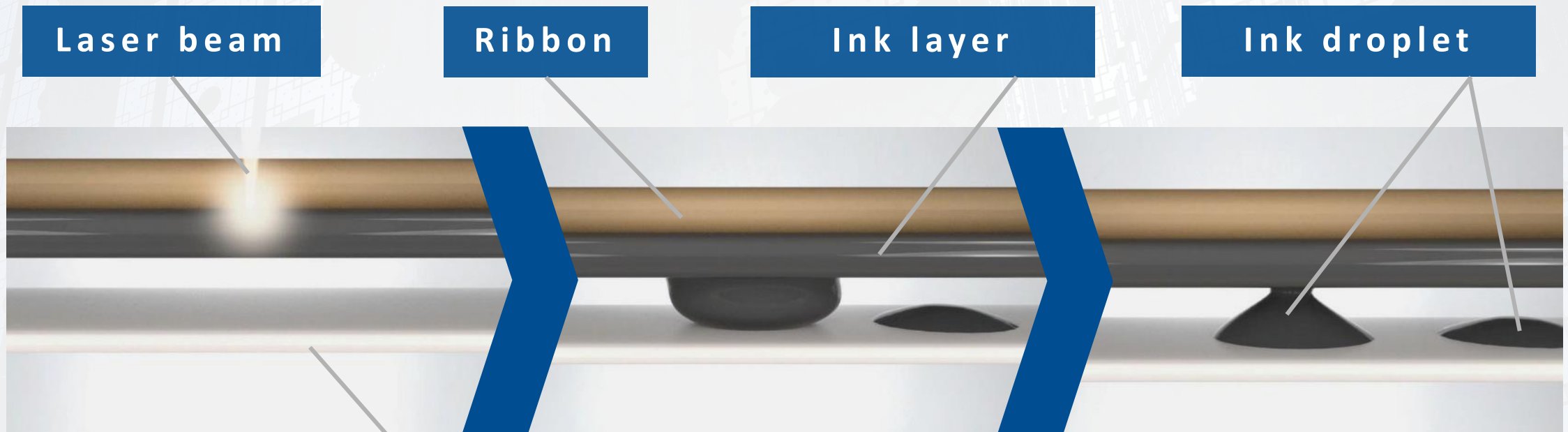
Pros

- Original inks
- Variable film thickness
- Productive at Batch size 1

Cons

- No multicolor printhead
- slow at high number of batches
- New technology





- transparent target (ribbon) is continuously coated
- laser heat up the ink solvent

- vapour bubble expands and pushes ink away towards substrate

- ink droplet is released
- transfer to substrate is finalized

glass substrate

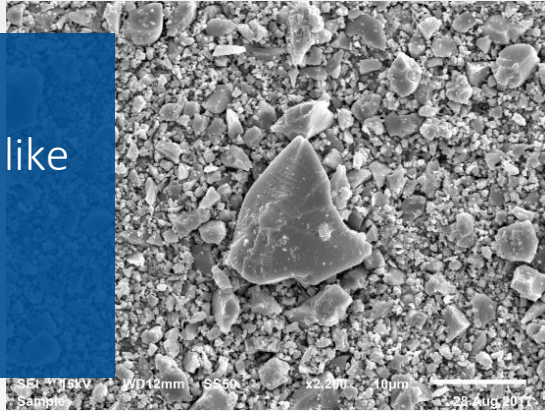


CHARACTERISTICS

LASER TRANSFER PRINTING – AN INNOVATIVE PRINTING TECHNOLOGY

Large particles

Printing of large particles like ceramic, glass fritts, etc.



Certified inks

Original qualified pastes and inks adapted to the LTP process



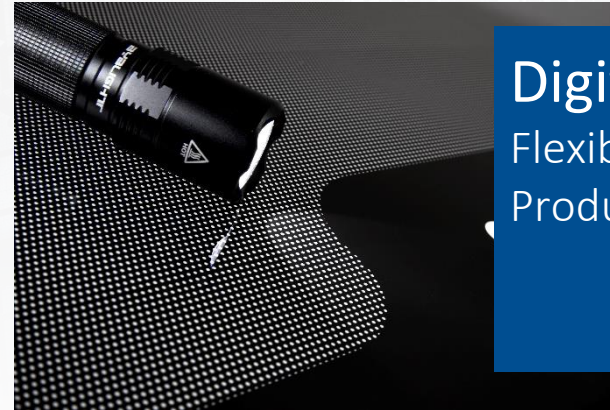
Contactless

Non-contact printing with identical properties to screen printing



Digital

Flexible, Individual, Productive

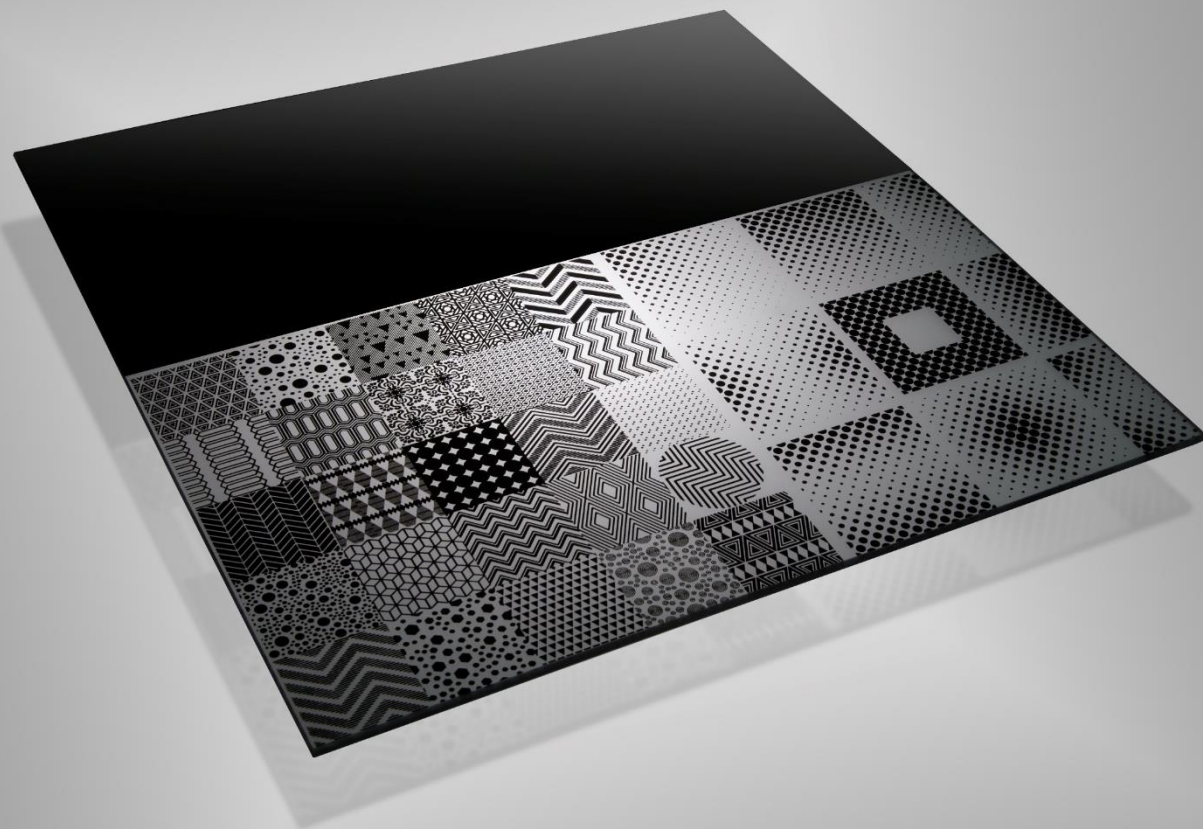






Exterior glass design

- Facade
- Windows
- Doors
- Balustrades
- High Opacity solid areas
- structural glazing certification (SIKA)



Interior glass design

- shower cabins (customized)
- partition walls
- doors
- stairways

- High resolution patterns and textures
- customized layouts and glass shapes

PRODUCT — LPKF NOVAPRINT

LASER TRANSFER PRINTING — AN INNOVATIVE PRINTING TECHNOLOGY

LPKF
Laser & Electronics



» PRODUCT – LPKF NOVAPRINT

LASER TRANSFER PRINTING – AN INNOVATIVE PRINTING TECHNOLOGY





OVERVIEW BENEFITS

LASER TRANSFER PRINTING – AN INNOVATIVE PRINTING TECHNOLOGY

FLEXIBLE

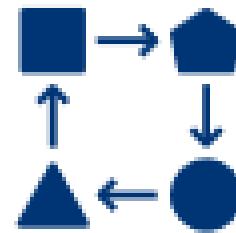


- Quick reaction to market changes
- Flexible and adaptable technology

PRODUCTIVE



INDIVIDUAL



- Fast integration of new design
- Implementation of special projects at any time

COMPETITIVE



Certified
Inks
usable



Exact printing
without
ink splatters

- Qualifying ink resist for bird protection glass
- Finalization of development Full RAL color spectrum
- Development of an Integration modul

More to come next year...



Transfer your ideas to glass

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