

Coatema – The Smartcoater

Overview

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Smartcoater

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overview

Application
system

Drying, curing
& crosslinking

Rewinding
area

Options &
specifications

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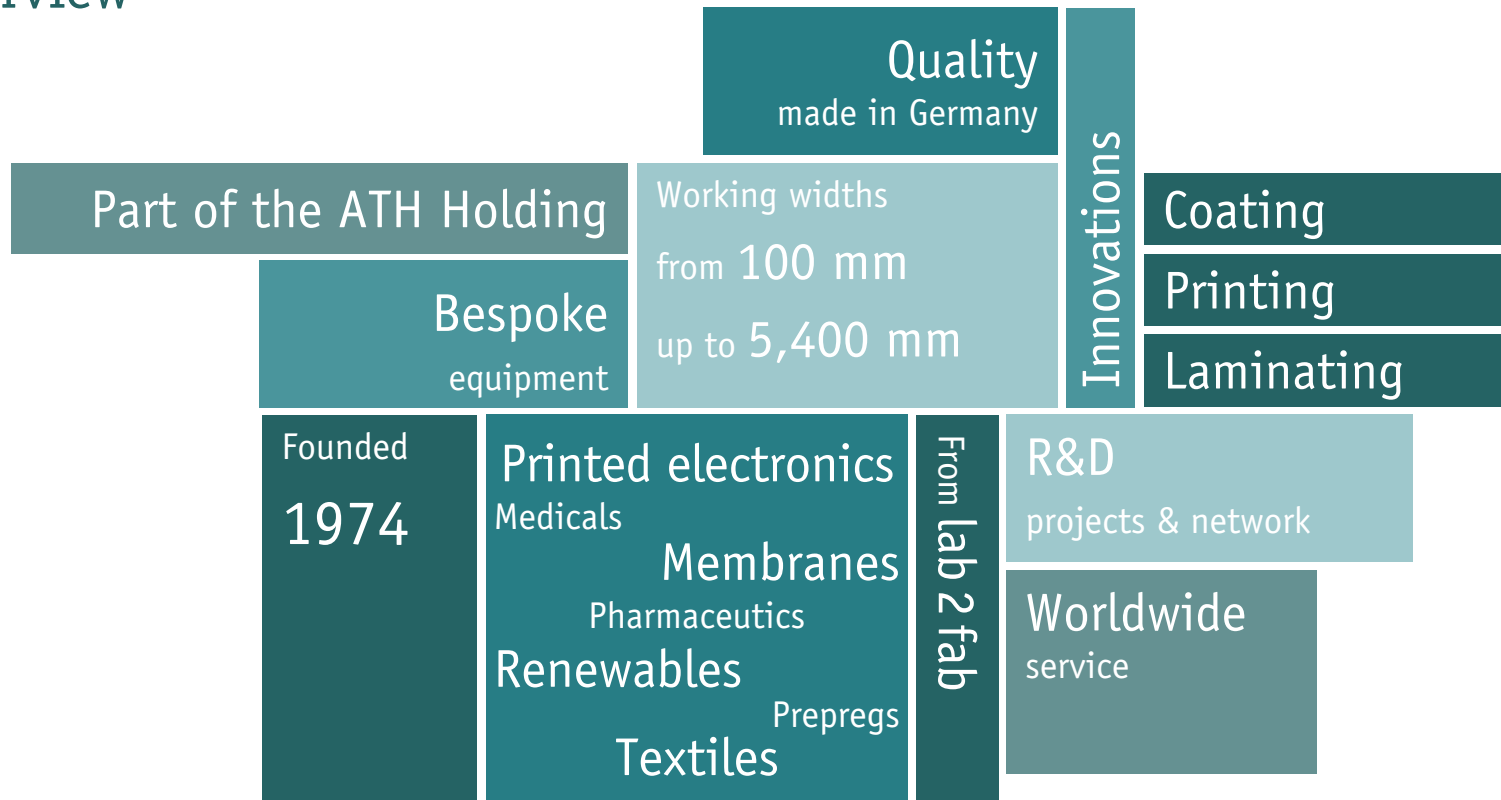
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Group of companies



- ✓ Founded 1903
- ✓ Approx. 200 employees
- ✓ Located in Hamburg



- ✓ Founded 1995
- ✓ Approx. 50 employees
- ✓ Located in Norderstedt



- ✓ Founded 1974
- ✓ Approx. 50 employees
- ✓ Located in Dormagen



- ✓ Founded 1919
- ✓ Approx. 140 employees
- ✓ Located in Hamburg

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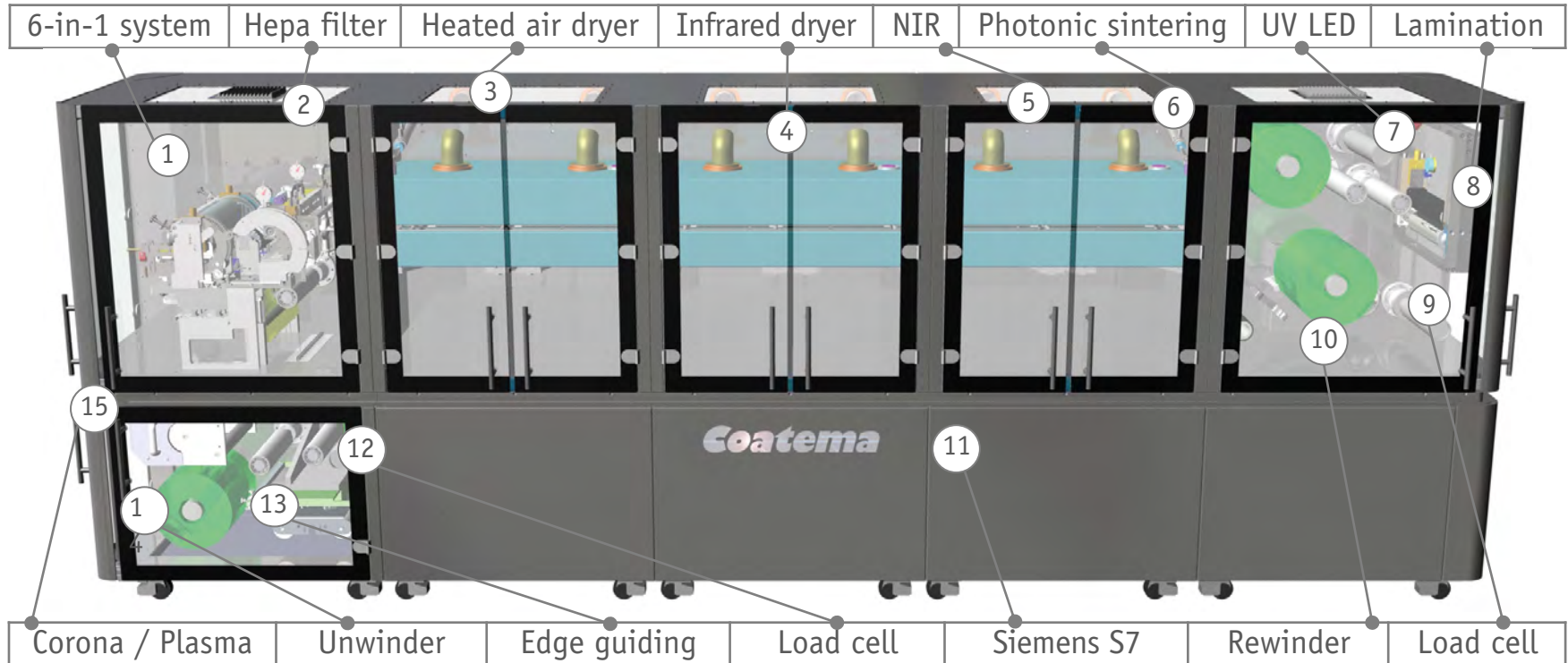
Summary



Membrane application



Overview of product features & options for the Smartcoater



Overview



Application systems

- ✓ Coating
- ✓ Printing
- ✓ Modular platform
- ✓ Over 32 technologies
- ✓ Interchangeable modules
- ✓ Inert atmosphere as option

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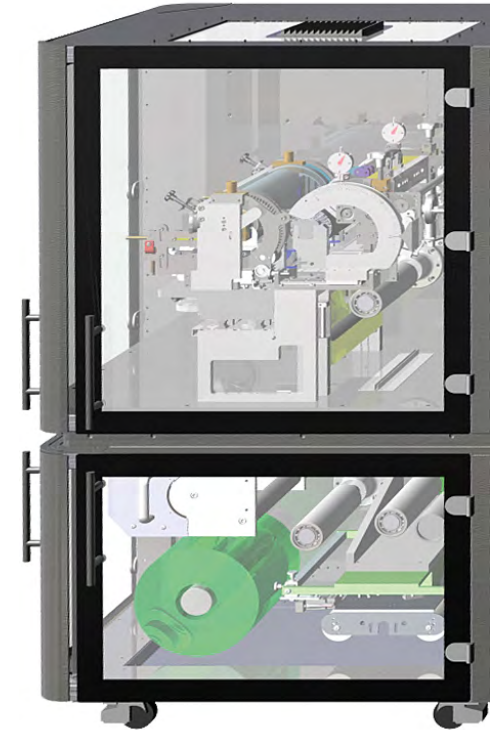
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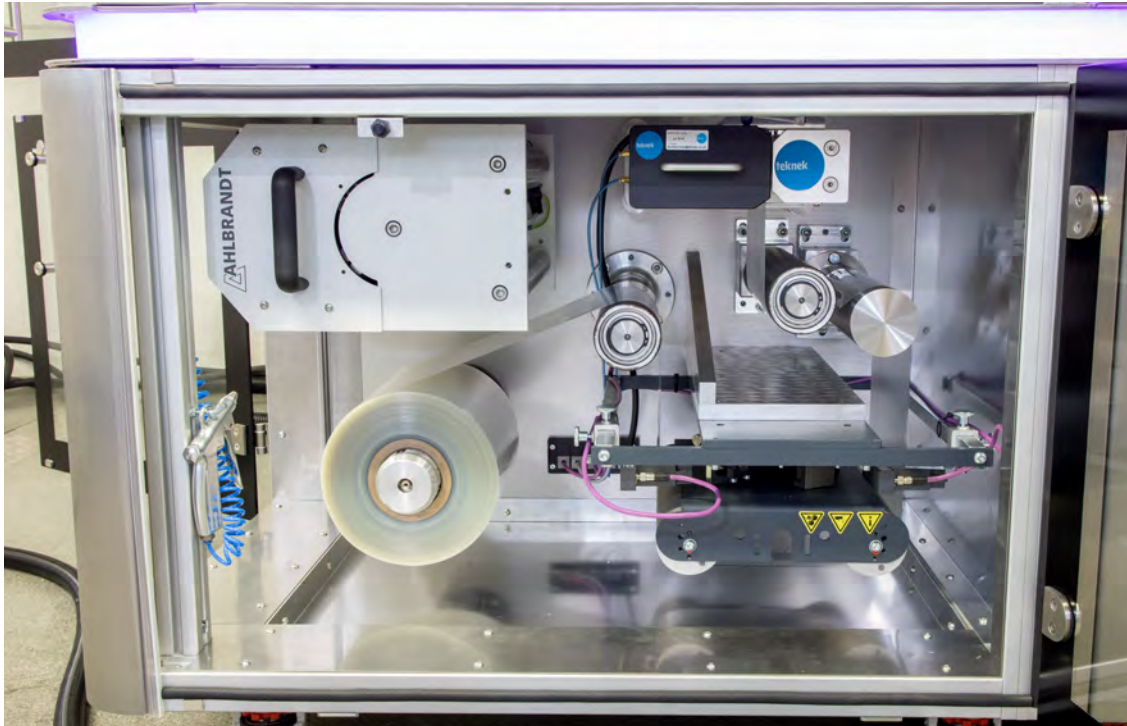
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Frontpart of Smartcoater



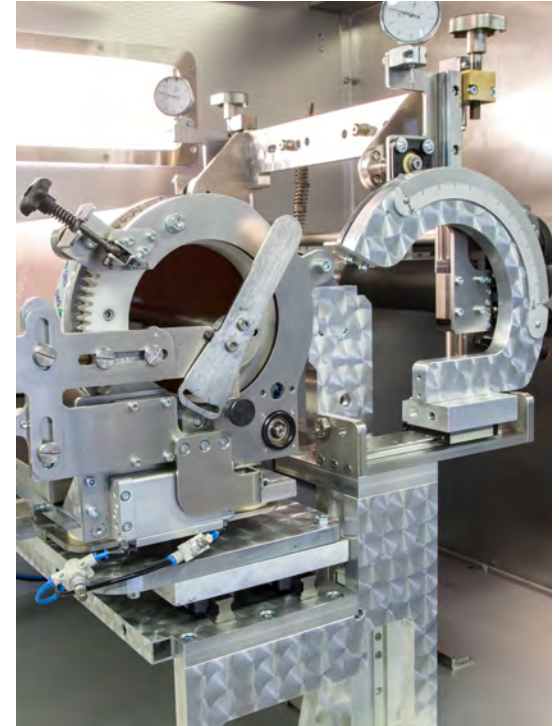
Unwinder module



Unwinder systems

- ✓ Unwinder
- ✓ Load cell
- ✓ Edge guide
- ✓ Web cleaning
- ✓ Corona plasma
- ✓ Anti static

Application area



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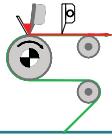
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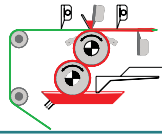
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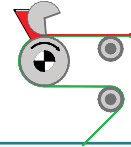
Coating systems



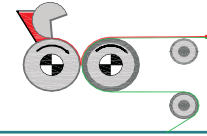
Knife system



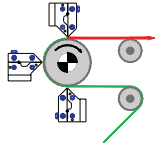
Double side system



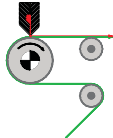
Commabar system



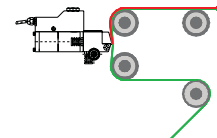
Reverse commabar system



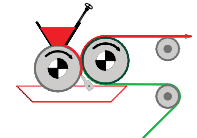
Slot die system



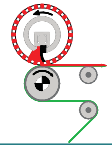
Curtain coating system



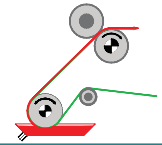
Hotmelt slot die system



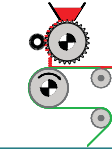
Case knife system



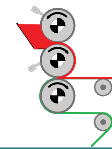
Rotary screen system



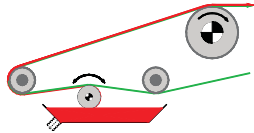
Dipping system (Fouard)



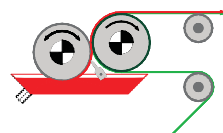
Powder scattering system



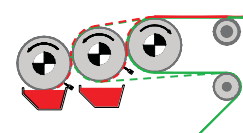
Reverse roll system



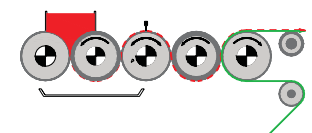
Micro roller system



2 Roller system

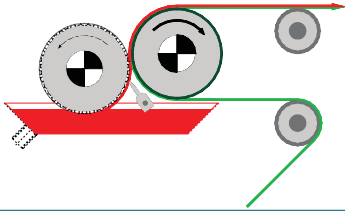


3 Roller combi system

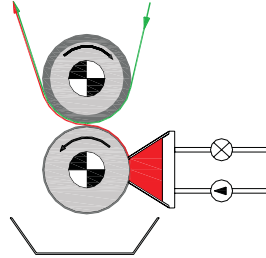


5 Roller system

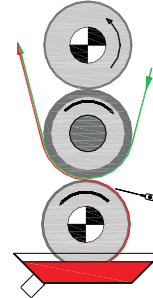
Printing systems



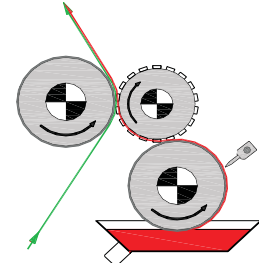
Engraved roller system



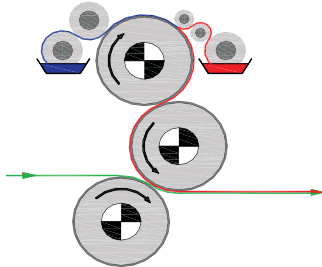
Gravure roller system



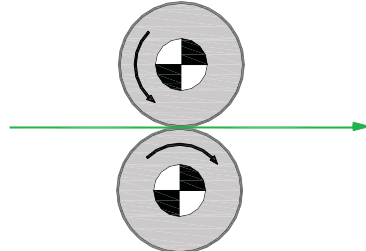
Gravure indirect system



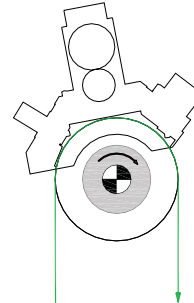
Flexography system



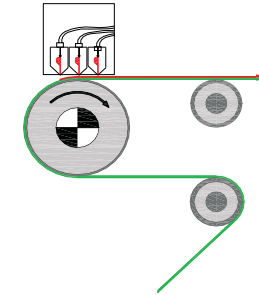
Offset lithography system



Hot embossing system

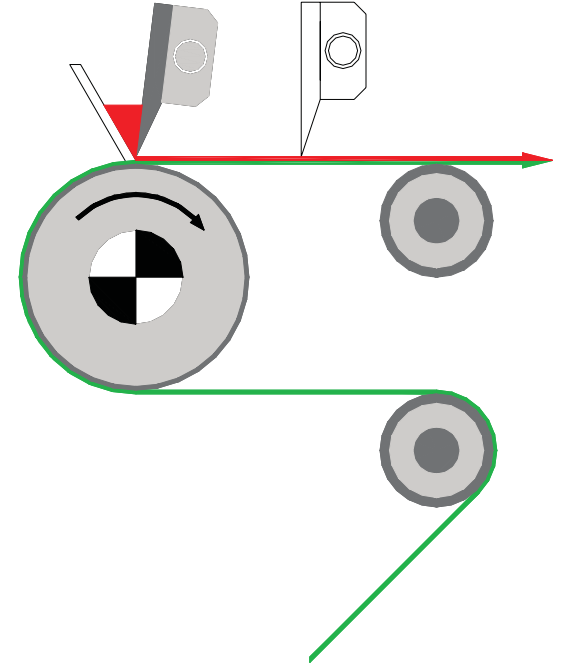
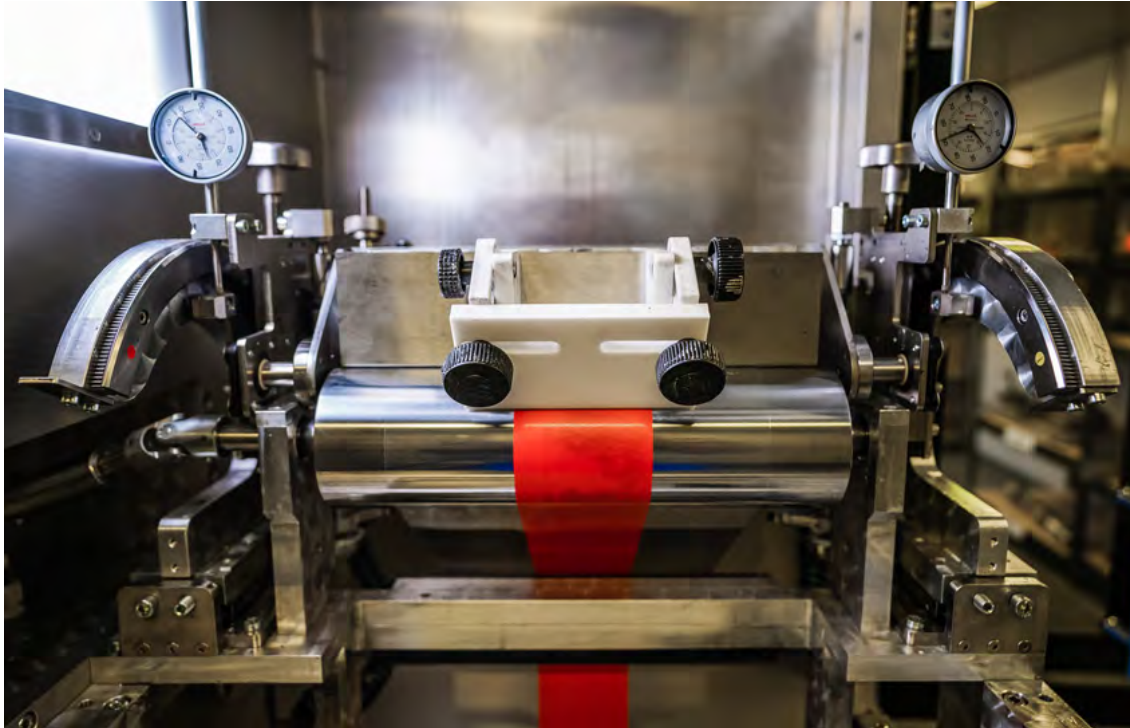


Nanoimprint system

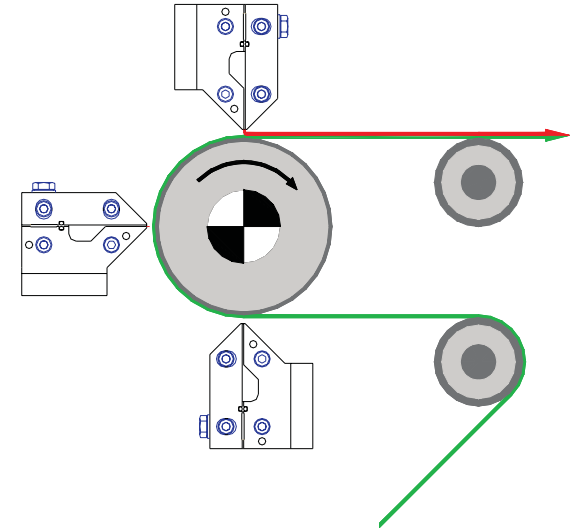


Inkjet system

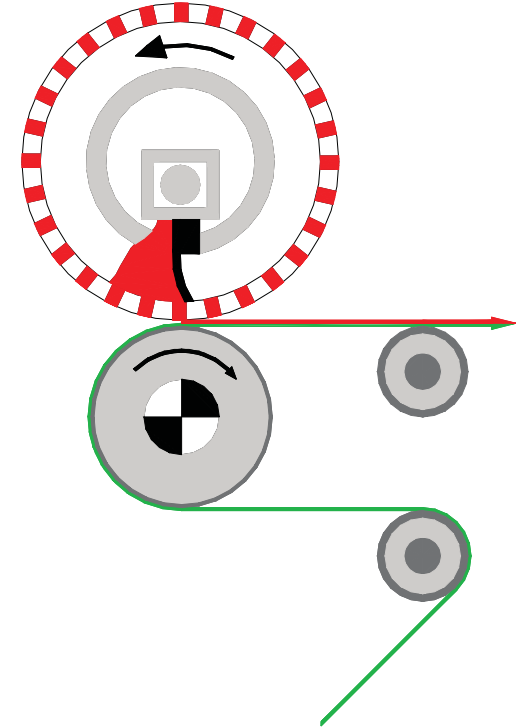
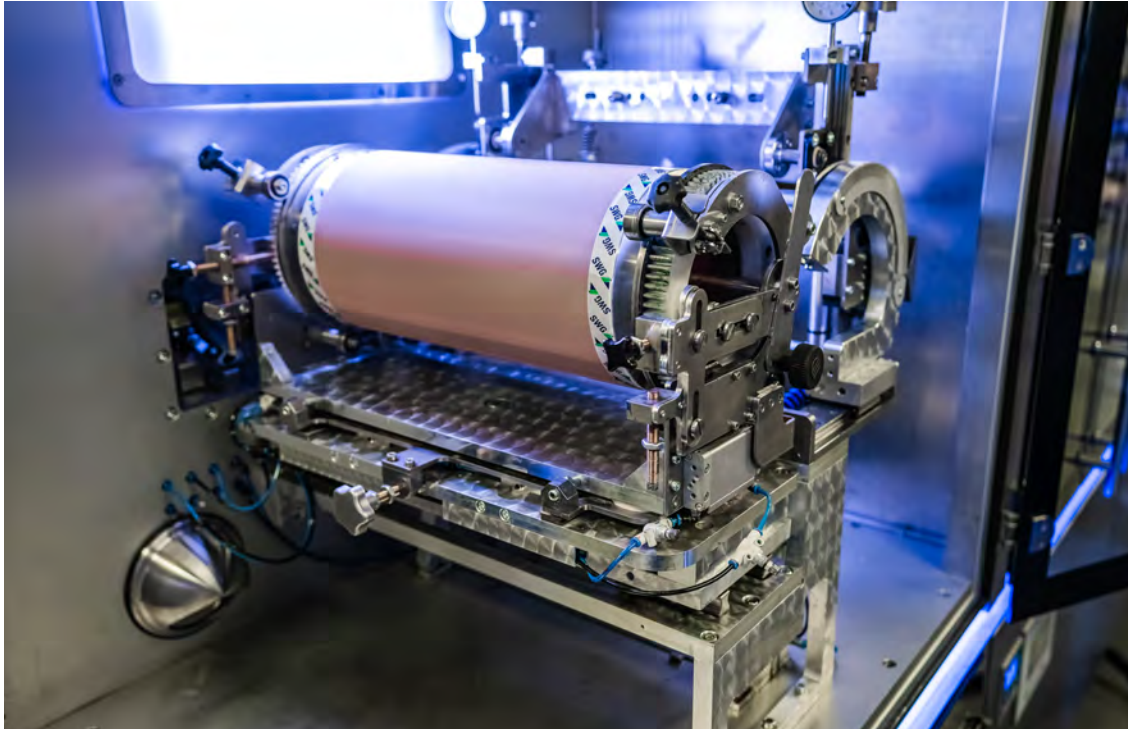
Doctor blade



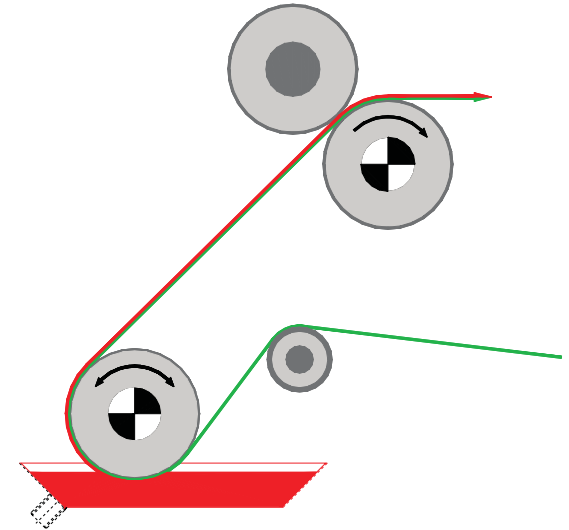
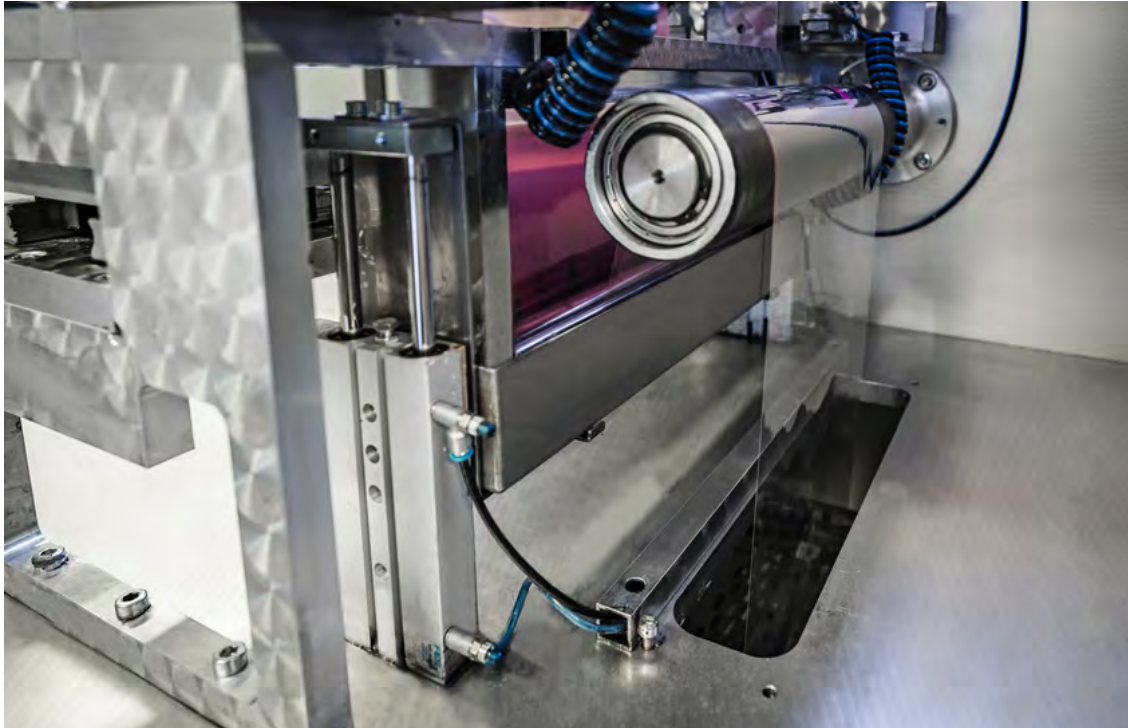
Application system



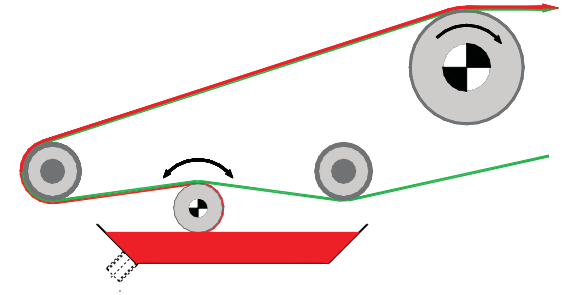
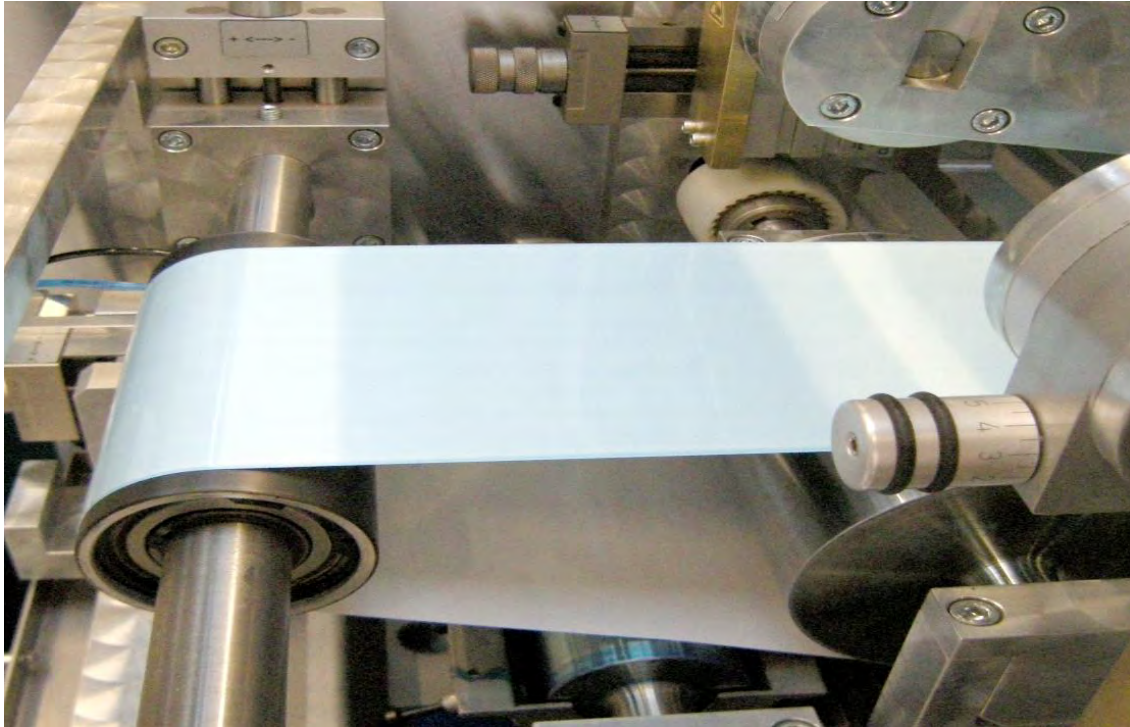
Rotary screen printing



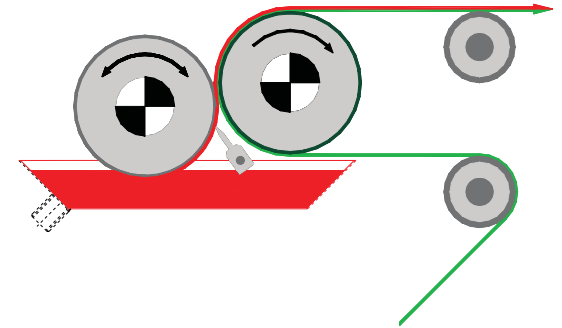
Dipping



Micro roller



Engraved roller system



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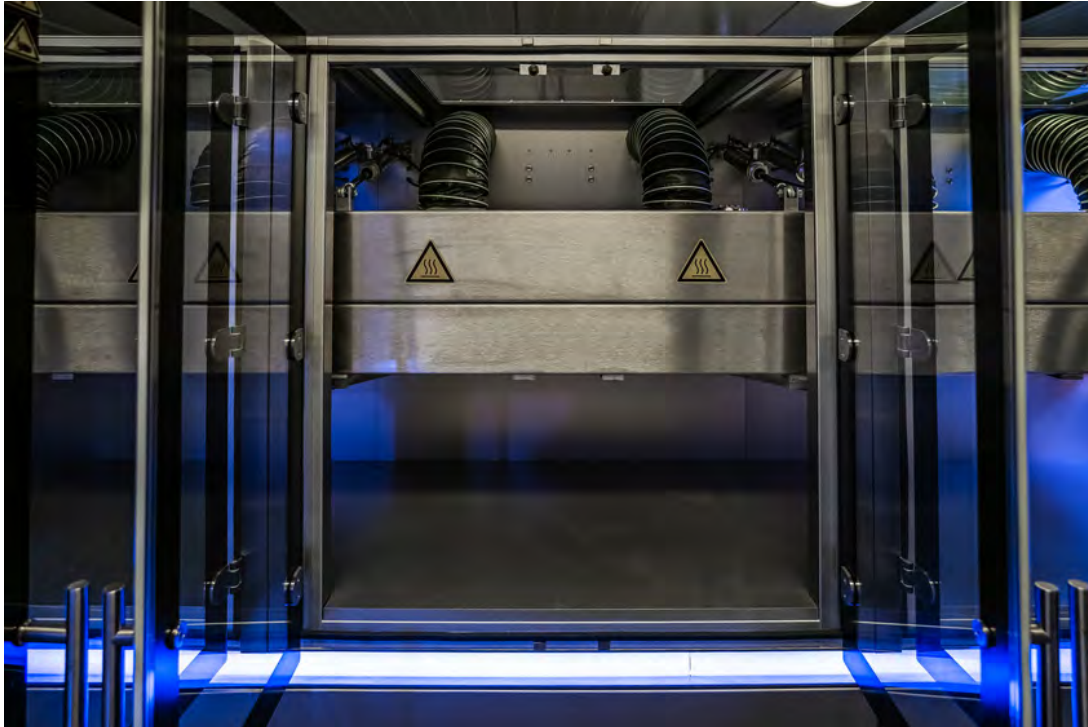
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Dryer modules



Dryer modules



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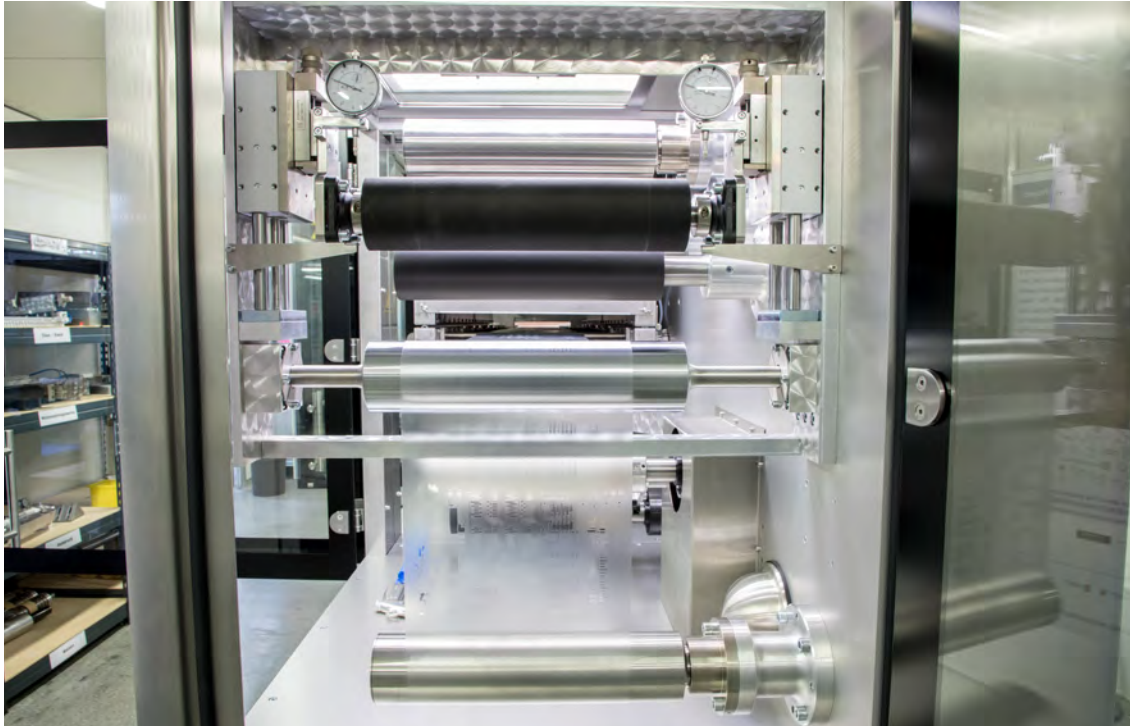
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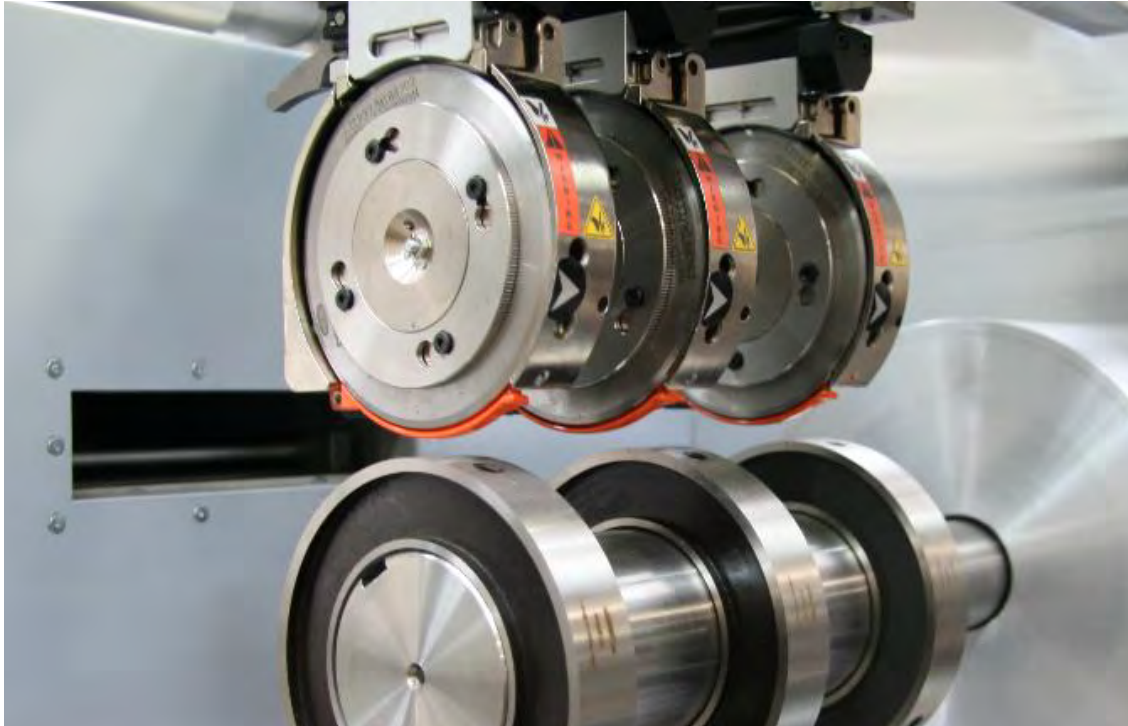
Rewinder module



Rewinder module



Cutting device as one of the options



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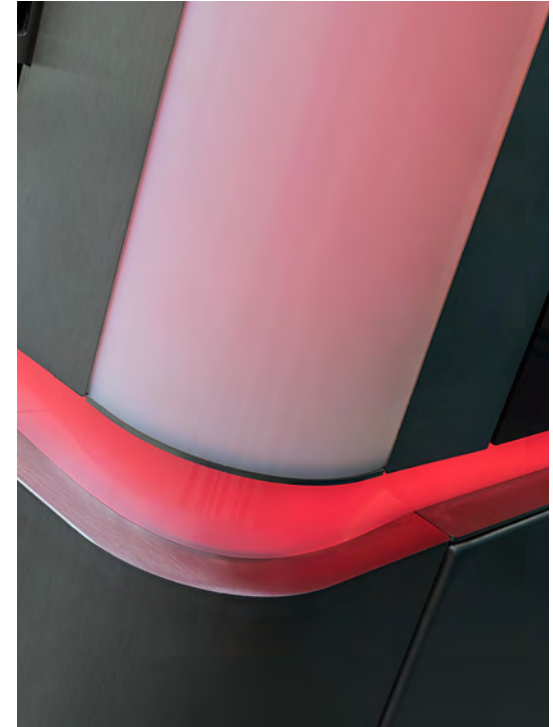
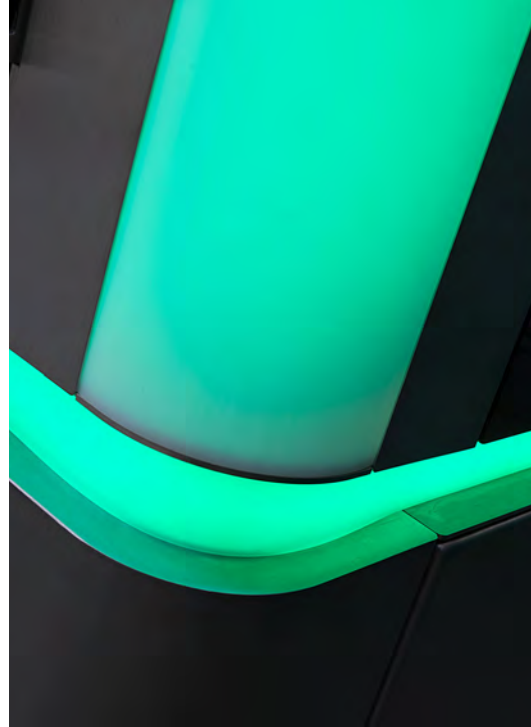
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Technical specifications



Technical specifications in detail

Coating + printing Options

- ✓ Continuous R2R coating
- ✓ Printing
- ✓ Laminating in one unit

Dimensions

- ✓ 1,260 x 850 x 1,750 mm (LxWxH), (for the shown unit)
- ✓ Working width: 100 mm / 300 mm, V: 0.1 – 10 m/min, F: 10 – 250 N
- ✓ Roller width: 350 mm

Dryer

- ✓ 1.000 mm electrical heated air dryer, 9 kW max.
- ✓ Dryer temperature: max. 235°C
- ✓ IR / NIR available
- ✓ UV LED available

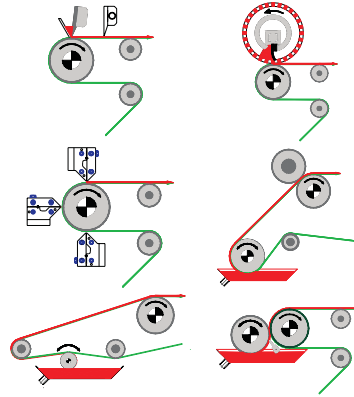
Operation options

- ✓ Tension control system with load cell and Siemens S7 system

Facts

- ✓ 6-in-1 application system (knife / dip / engraved / slot die / micro roller / screen) as starter option or 32 other systems
- ✓ Unit can run backwards as option
- ✓ Unwinding and rewinding motor driven and tension controlled
- ✓ Enclosure – glove box option
- ✓ Switch cabinet
- ✓ Power: 400 V / 50 Hz / 32 A

Standard and options – 6-in-1 starter application



Doctor
blade

Dipping

Engraves
roller

Slot die

Micro
roller

Rotary
screen

>30
application
systems

Design and layout of processes always optimized for the customer



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The customer benefits

- ✓ Small scale R2R unit – easy to use
- ✓ Small amount of inks being used – less trial cost
- ✓ Reproducible results – scalable R&D
- ✓ Can have the option to runs backwards – multilayer in a short time
- ✓ EEx operation on small scale
- ✓ New design features increase performance
- ✓ Inert atmosphere as option

Do not hesitate to contact us!



The Smartcoater is part of the Coatema lab and pilot line platform strategy.

Our R&D centre is worldwide the most versatile centre for coating, printing and laminating.

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Thank you



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