



Coatema – The Test Solution

Overview

Introduction

Test Solution
2nd Generation
S2S

Test Solution
2nd Generation
R2R

Options &
specifications

Summery

Summary

Introduction

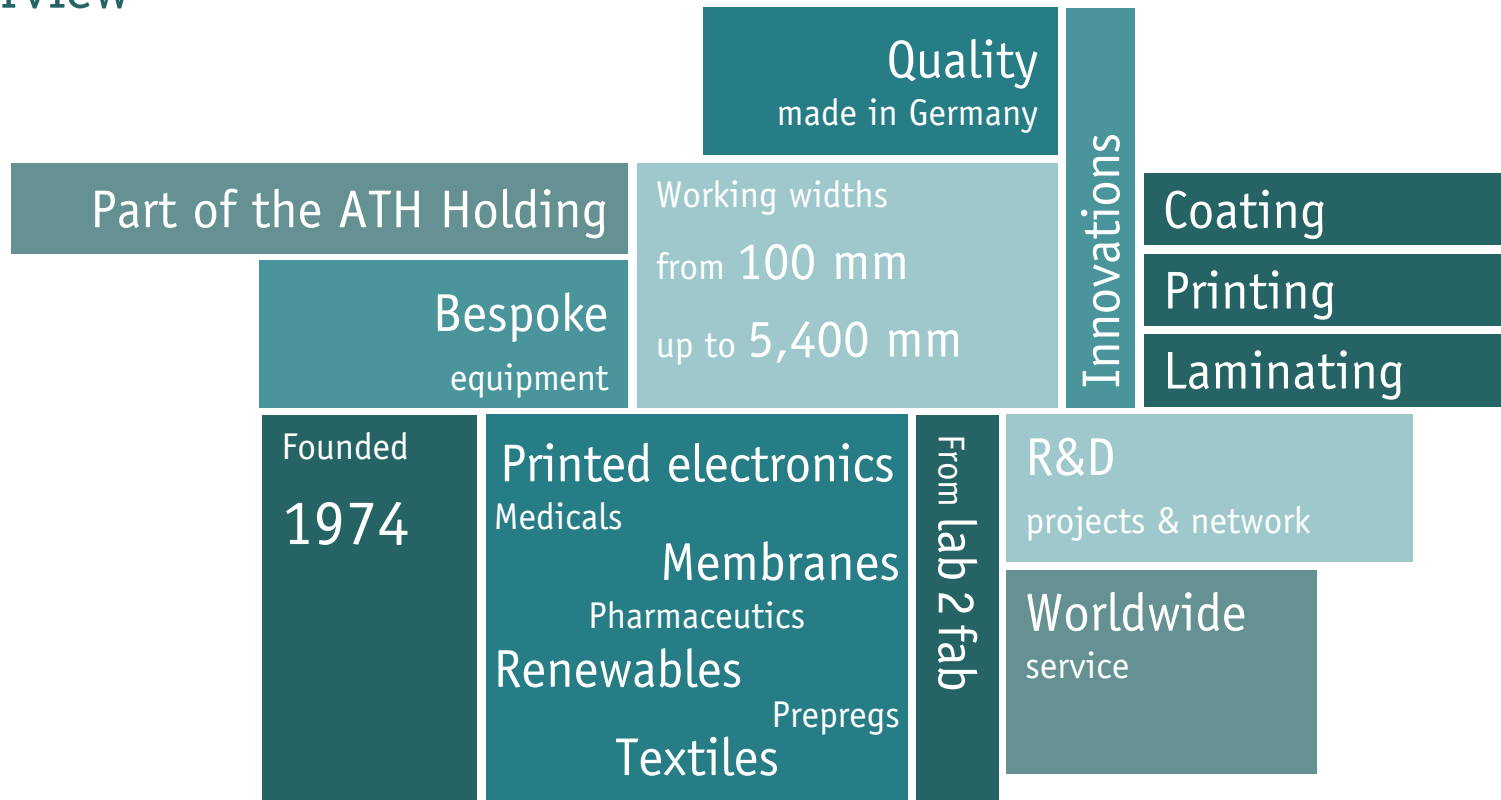
Test Solution
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S2S

Test Solution
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Options &
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Overview



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

Summary

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Test Solution
2nd Generation
S2S

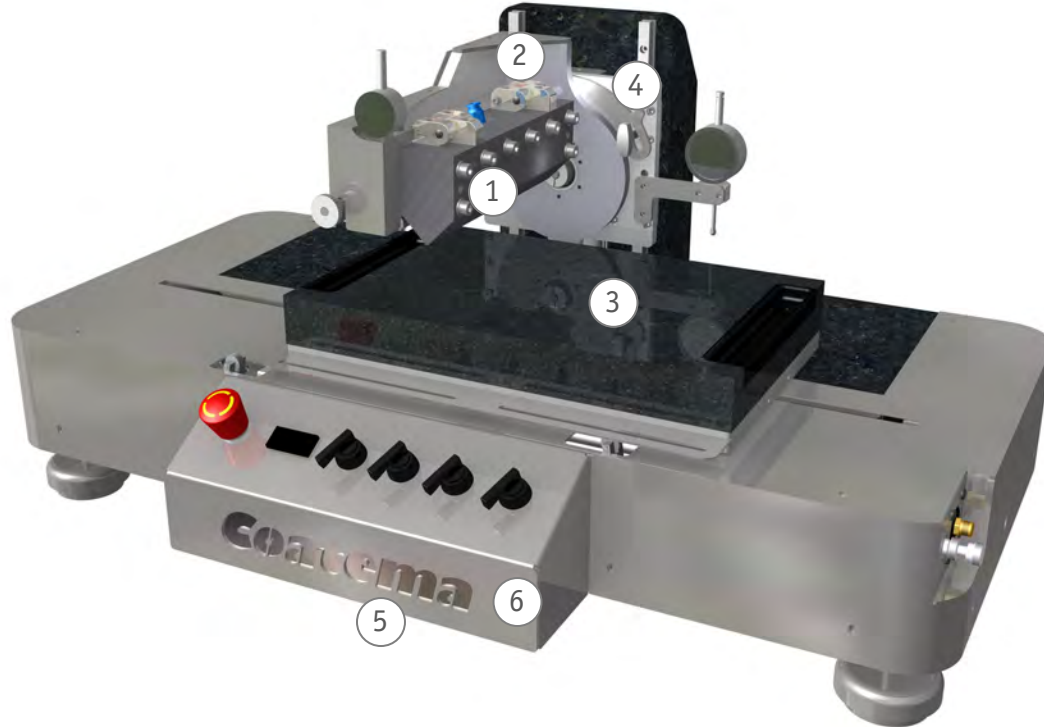
Test Solution
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252
2nd Generation
Test Solution

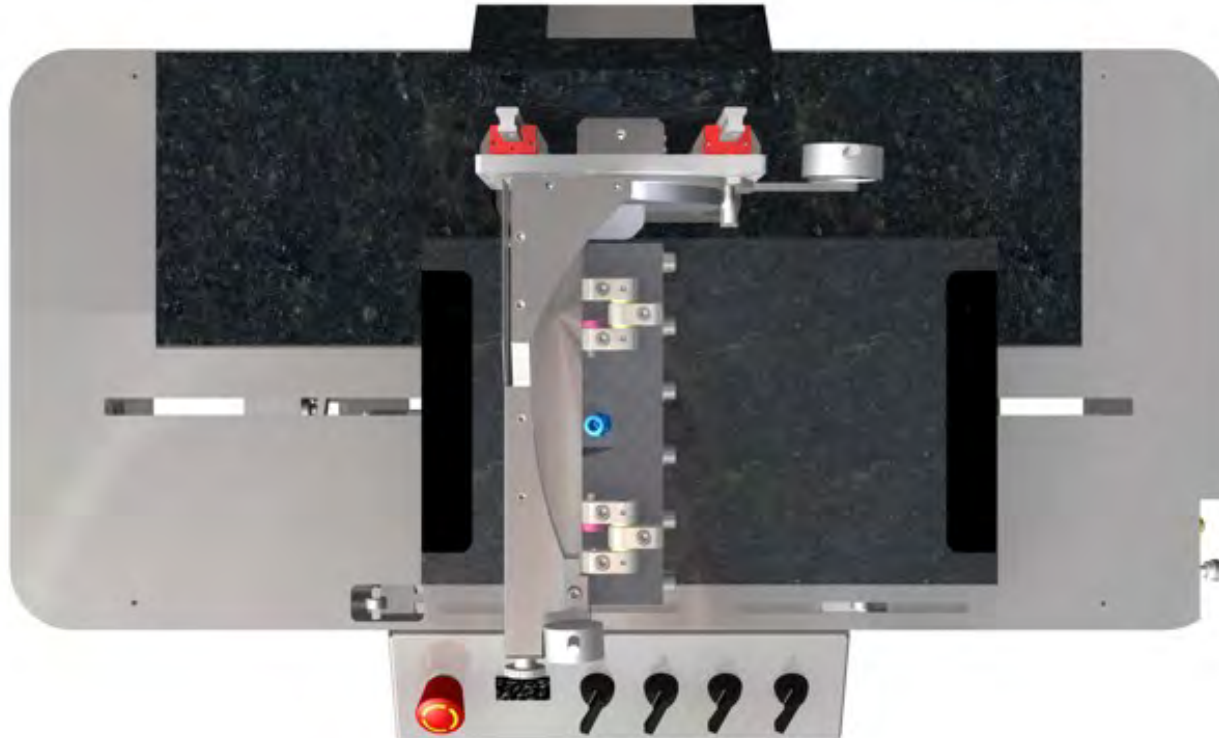
Overview of product features & options for the new Test Solution S2S



LAYOUT FEATURES (as shown in drawing)

1	Slot die
2	Doctor blade
3	Standard precision granite vacuum table
4	Cantilever design
5	Pressured air cylinder (no power requirement)
6	Alternative version with standard drive

Overview



Overview



Coating systems

- ✓ Slot die
- ✓ Doctor blade

Substrate fixation

- ✓ Standard precision granite vacuum table

Drive system

- ✓ Pressured air cylinder (no power requirement)
- ✓ Alternative version with standard drive

Design features

- ✓ Cantilever design
- ✓ Slot die parts

Options



Doctor
blade

Granit
table

Slot die

Technical specifications in detail

Coating Options

- ✓ Slot die and doctor blade

Operating options

- ✓ Pressured air
- ✓ Servo drive

Operating System

- ✓ Speed control panel

Dimensions for A4 table size

- ✓ 1000 x 450 x 462 mm
(BxTxH)

Slot die

- Slot accuracy from 2-4μ
- Hinged slot die system
- Slot die movable in Y-direction

Machine base

- ✓ Compact design
- ✓ Completely enclosed

Drying / Crosslinking

- ✓ Electrical heated dryer available
- ✓ UV LED as option

The customer benefits

- ✓ Small scale R2R unit – easy to use
- ✓ Small amount of inks being used – less trial cost
- ✓ Reproducible results – scalable R&D
- ✓ Integrated drying
- ✓ Lamination station as option
- ✓ Slot die or doctor blade coating station
- ✓ Bespoke layouts available

Summary

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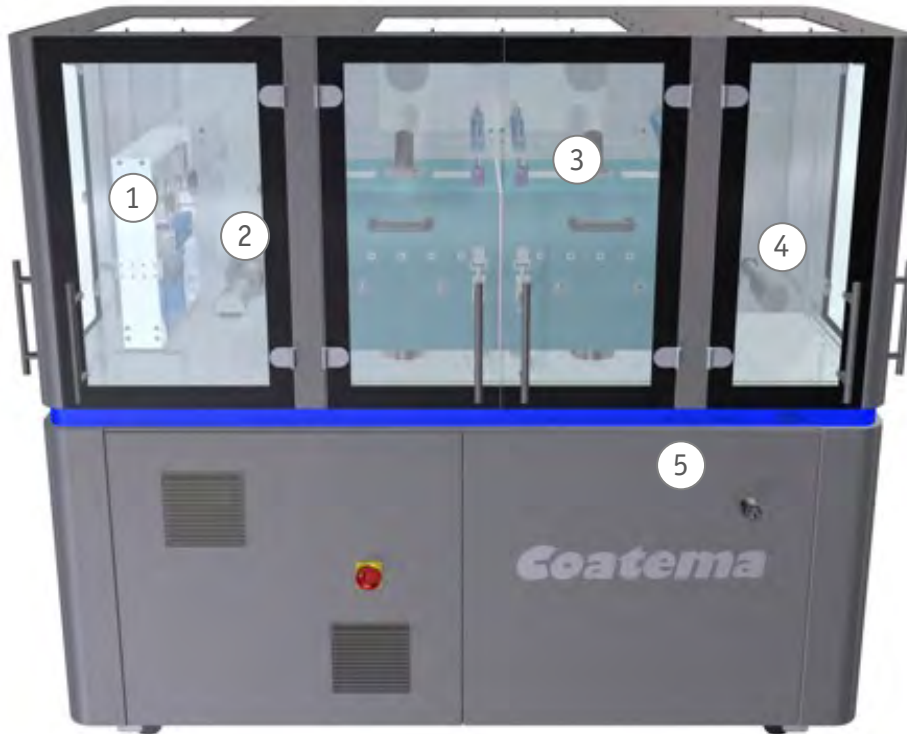
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BSB
3rd Generation
Test Solution

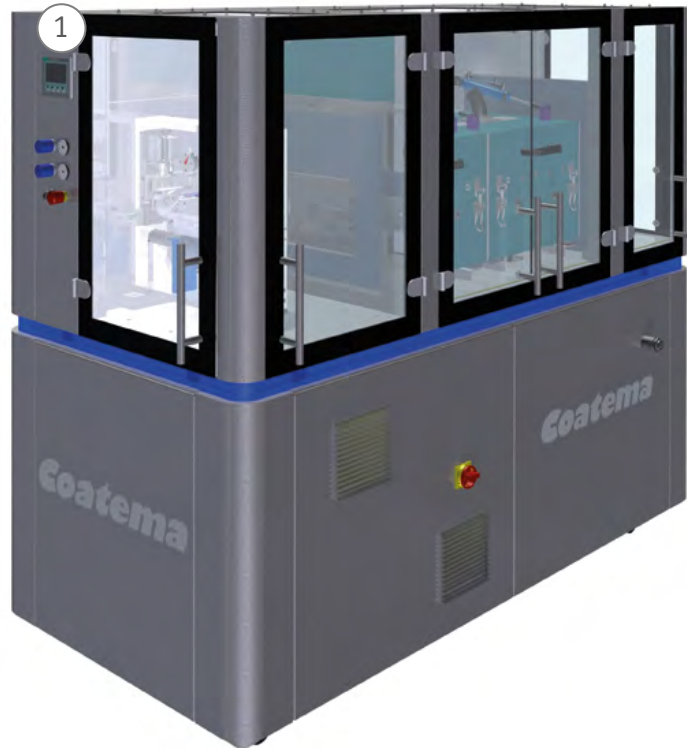
Overview of product features & options for the new Test Solution R2R



LAYOUT FEATURES (as shown in drawing above)

1	Coating system
2	Unwinder
3	Dryer
4	Rewinder
5	Stainless steel enclosure

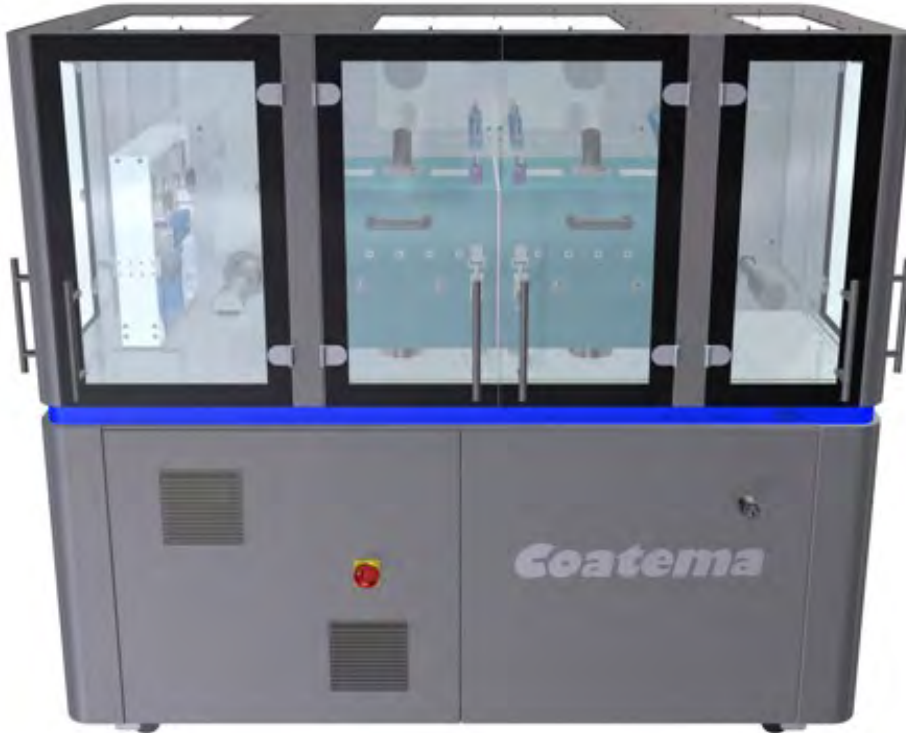
Overview of product features & options for the new Test Solution R2R



LAYOUT FEATURES (as shown in drawing above)

1	Siemens S7 Control system
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Overview



Coating systems

- ✓ Slot die
- ✓ Doctor blade

Dryer

- ✓ Electrical heated dryer
- ✓ 2 x 500 mm as standard

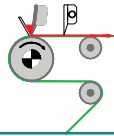
Control system

- ✓ Siemens S7

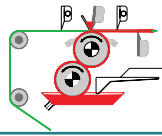
Design features

- ✓ Complete enclosure
- ✓ Industrial design

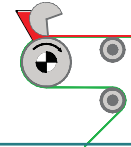
Coating systems



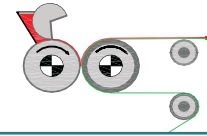
Knife system



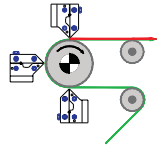
Double side system



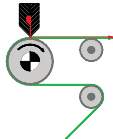
Commabar system



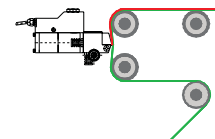
Reverse commabar system



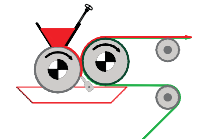
Slot die system



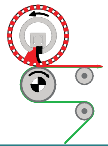
Curtain coating system



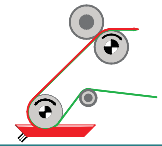
Hotmelt slot die system



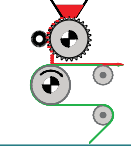
Case knife system



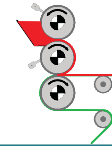
Rotary screen system



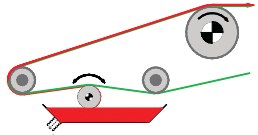
Dipping system (Foulard)



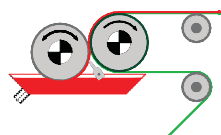
Powder scattering system



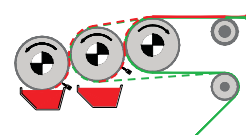
Reverse roll system



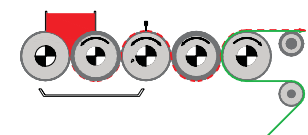
Micro roller system



2 Roller system

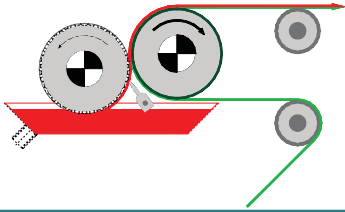


3 Roller combi system

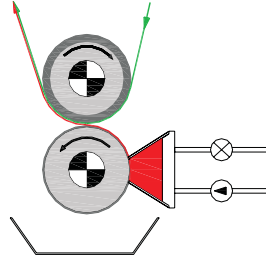


5 Roller system

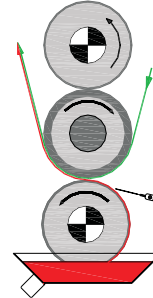
Printing systems



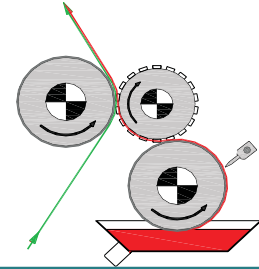
Engraved roller system



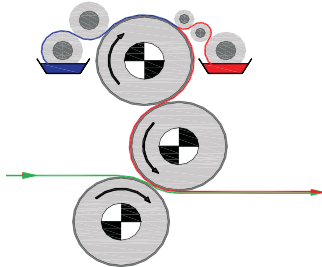
Gravure roller system



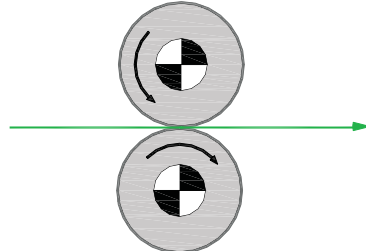
Gravure indirect system



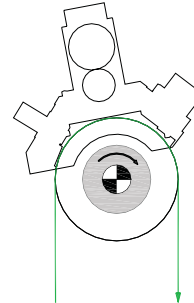
Flexography system



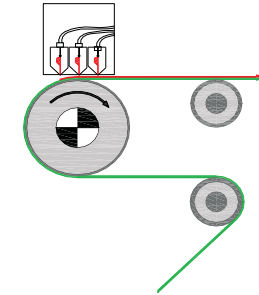
Offset lithography system



Hot embossing system



Nanoimprint system

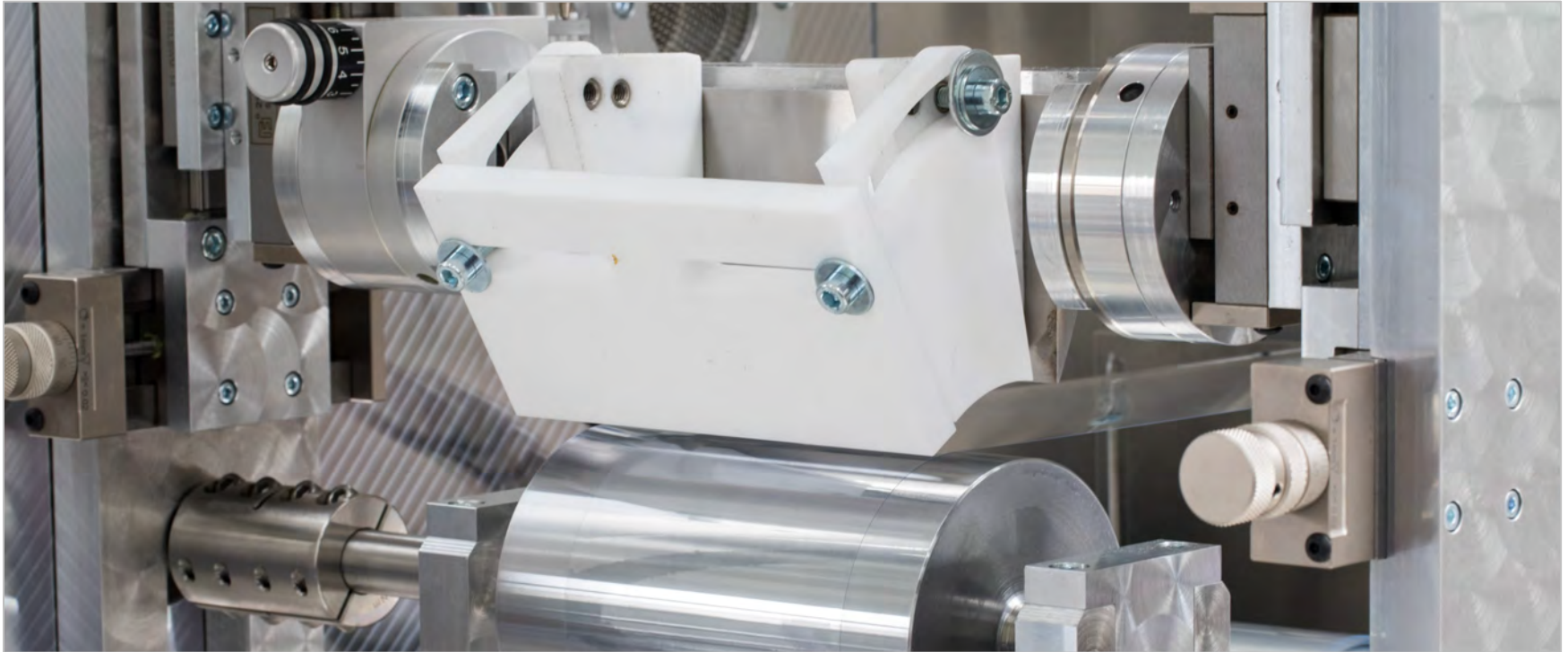


Inkjet system

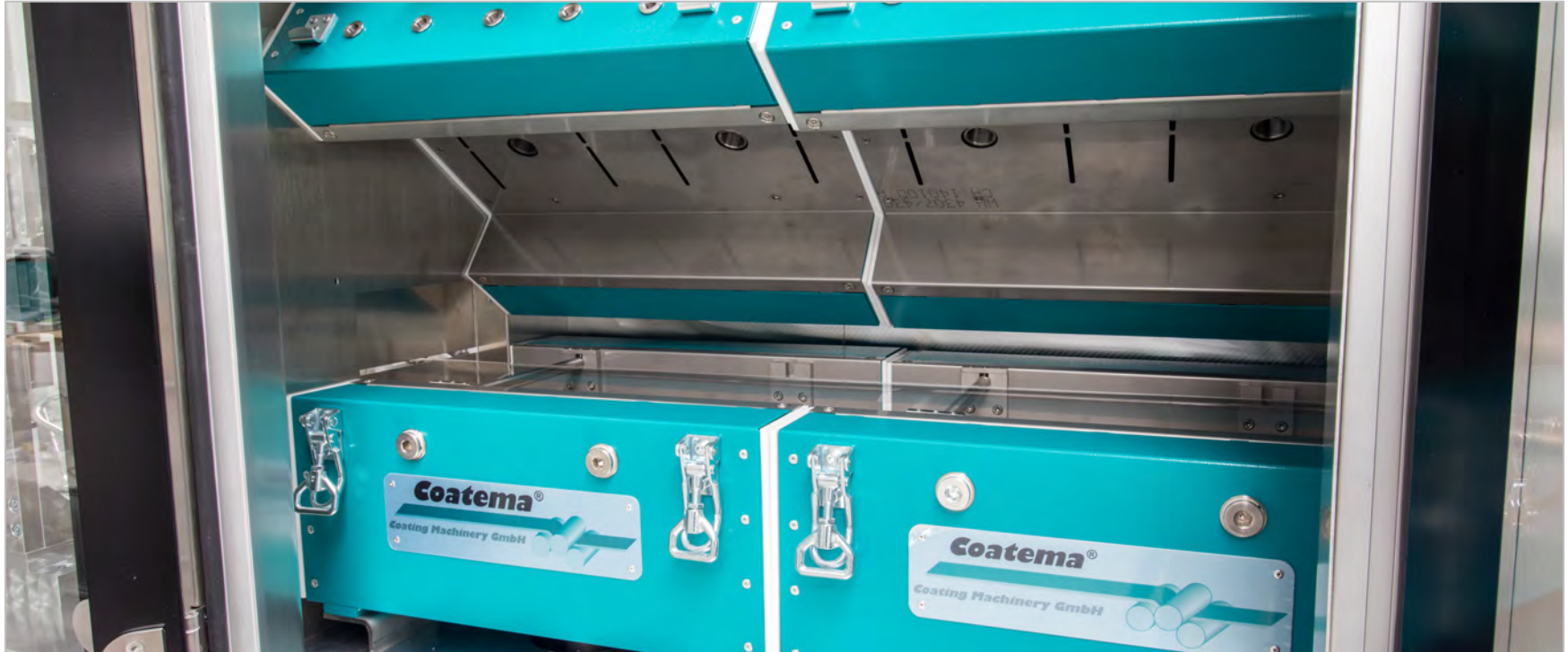
Coating chamber



Doctor blade system



2x 500 mm heated air dryer



Rewinder



The Test Solution R2R generation



Summary

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specifications
options &

Options specifications

The Test Solution facts:

- ✓ Continuous R2R coating & laminating in one unit
- ✓ Size 2,130 x 1,100 x 1,950 mm (LxWxH) / Basic version (100 mm version)
- ✓ Working width: 100 mm to 130 mm, V: 0,1 – 5 m/min, F: 10 – 250 N
- ✓ Knife / commabar / slot die
- ✓ IP54 layout and 2x 500 mm electrical heated air dryer, 15 kW max.
- ✓ Dryer temperature: max. 160°C
- ✓ Lamination can be added – easy to use for small test runs
- ✓ 400 V, 50 Hz AC, CEE-32 A, 5P, 6h

Standard and options



Doctor
blade

Dryer

Lamination

Slot die

Slitting

Technical specifications in detail

Coating options

- ✓ Slot die, doctor blade and commabar

Mechanical speed

- ✓ 0,1 – 5 m/min

Operating system

- ✓ Siemens S7

Dimensions for the unit (Standard layout)

- ✓ 2130 x 1100 x 1930 mm
(BxTxH)

Slot die

- ✓ Slot accuracy from 2 – 4μ

Winding diameter

- ✓ Max. 200 mm

Power consumption (Standard layout)

- ✓ Approx. 15KW

Power supply

- ✓ 400 V, 50 Hz AC, CEE-32 A,
5P, 6h

Working width

- ✓ Max 140 mm
- ✓ Slot die working width
5 – 100 mm
- ✓ Knife / commabar
5 – 130 mm
- ✓ Roller width 150 mm

Enclosure rating

- ✓ [DIN / EC]: IP 54

Compressed air supply

- ✓ 6 Bar

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The customer benefits

- ✓ The Test Solution R2R – for small R2R trials runs!
- ✓ Small scale R2R unit – easy to use
- ✓ Small amount of inks being used – less trial cost
- ✓ Reproducible results – scalable R&D
- ✓ UV, IR or other drying, curing or crosslinking methods as option
- ✓ Low cost R2R lab operation

Do not hesitate to contact us!



The Test Solution 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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