

A detailed close-up photograph of industrial machinery, likely a testing rig. It features various metal components, bolts, and a prominent pressure gauge on the right side. A dark teal speech bubble is overlaid on the center of the image.

New edition  
available  
from spring 2024

***Coatema***

# Coatema Test Solution

05/12/2023

MEMBER OF ATH

# Agenda

1. Introduction
2. Test Solution 2<sup>nd</sup>  
Generation S2S
3. Test Solution 2<sup>nd</sup>  
Generation R2R
4. Options & specifications
5. Summery

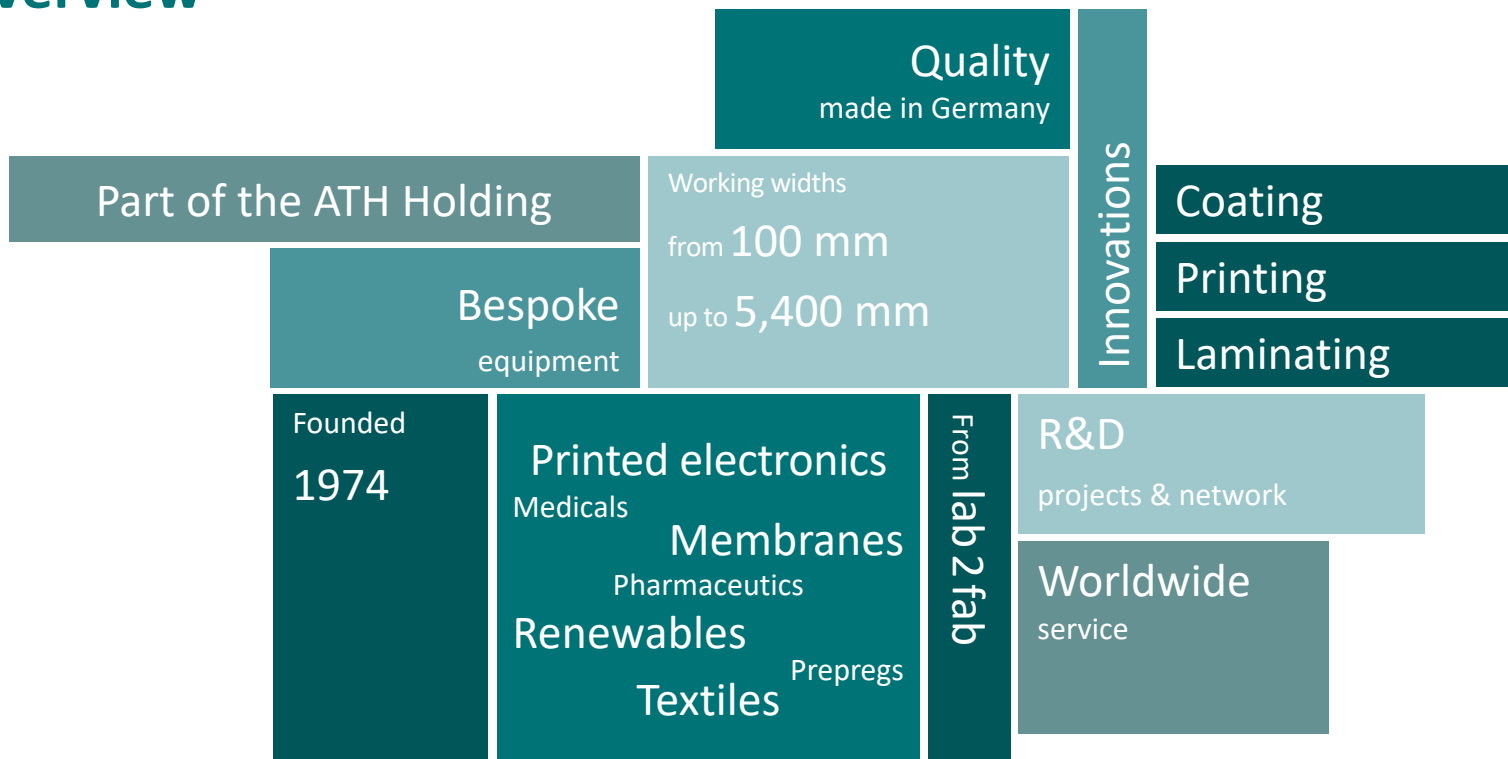


# 1.

## Introduction



## Overview



## Group of companies

**ATH** ALTONAER  
TECHNOLOGIE  
HOLDING



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

**DRY/TEC**

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



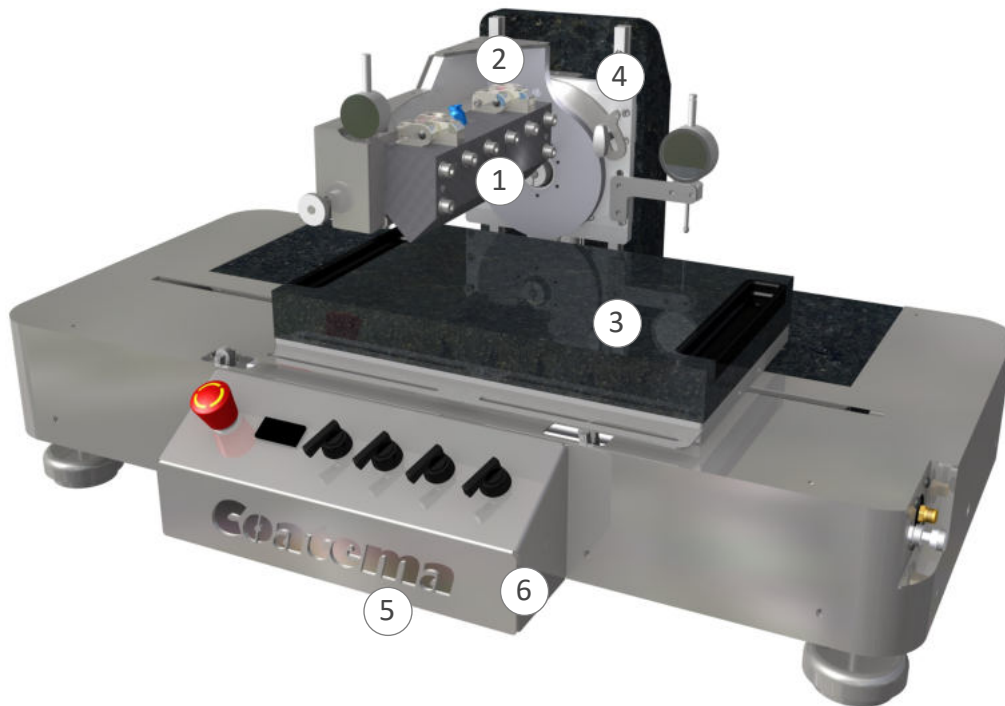
- ✓ Founded 1974
- ✓ Approx. 50 employees
- ✓ Located in Dormagen

# 2.

## Test Solution 2<sup>nd</sup> Generation S2S



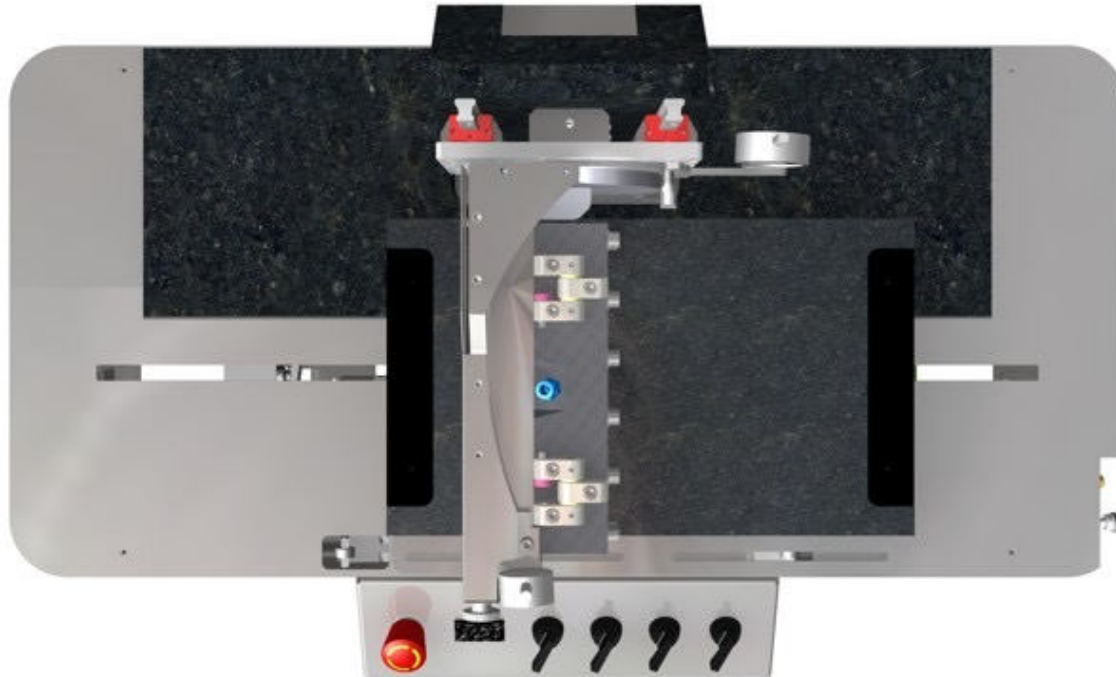
## Overview of product features & options



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

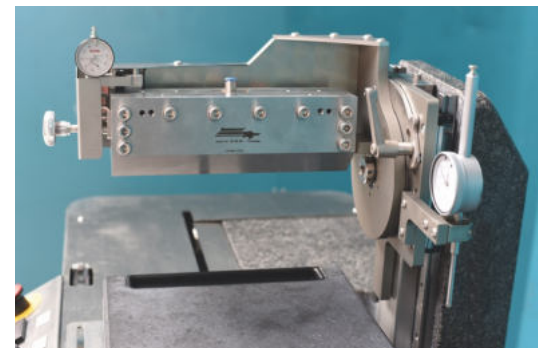
### Drive system

- ✓ 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

### Drying / Crosslinking

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

### Slot die

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

### Machine base

- ✓ Compact design
- ✓ Completely enclosed

### Operating system

- ✓ Speed control panel

### Dimensions for A4 table size

- ✓ 1000 x 450 x 462 mm (BxTxH)

## The customer benefits

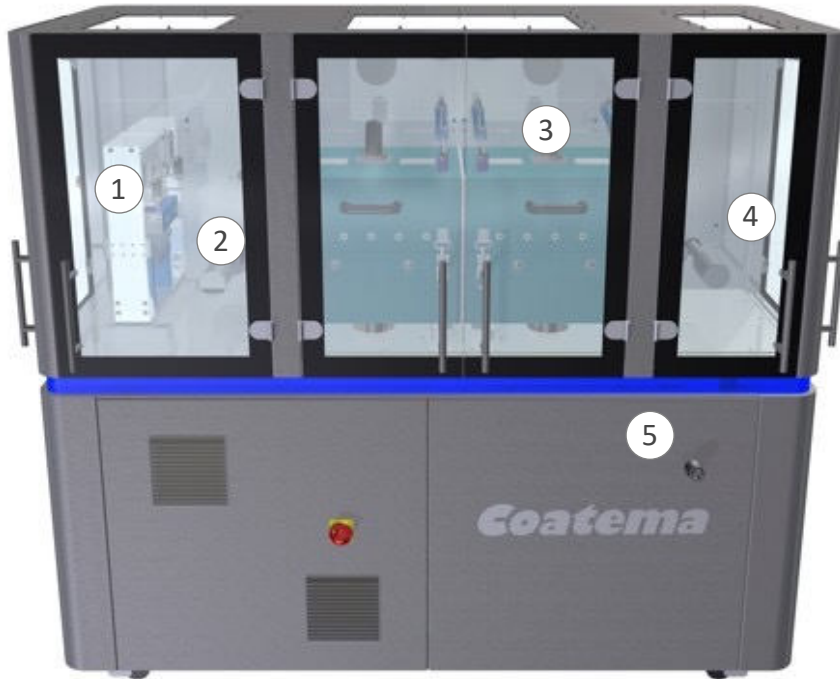
- ✓ Small scale R2R unit – easy to use
- ✓ Small amount of inks being used – less trial cost
- ✓ Reproducible results – scalable R&D
- ✓ Integrated drying
- ✓ Lamination station as option
- ✓ Slot die or doctor blade coating station
- ✓ Bespoke layouts available

# 3.

## Test Solution 2<sup>nd</sup> Generation R2R



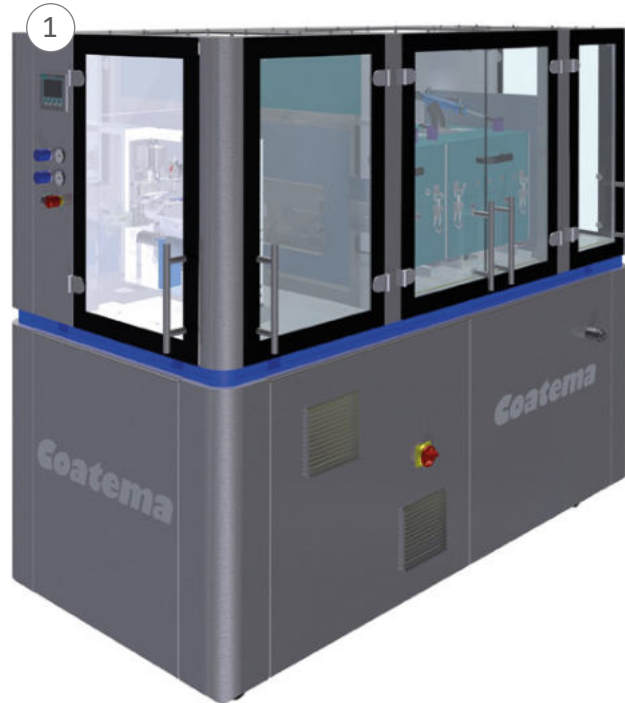
## Overview of product features & options



LAYOUT FEATURES (as shown in drawing above)

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

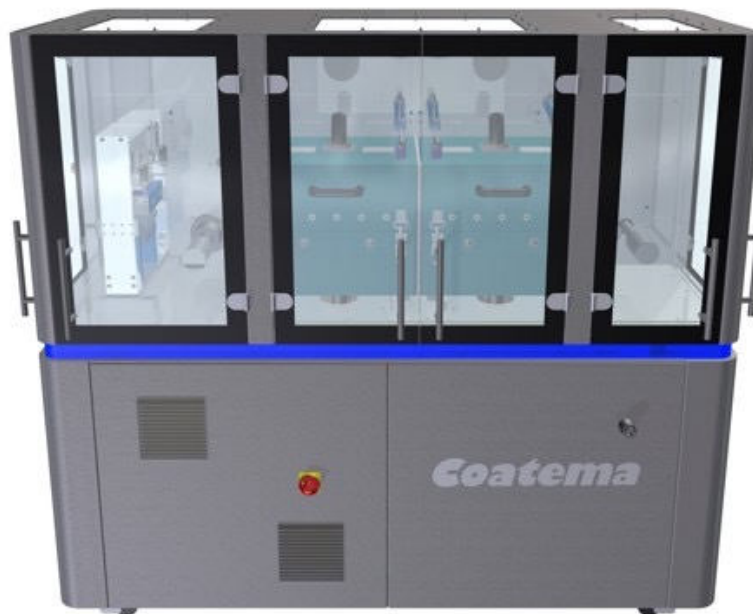
## Overview of product features & options



LAYOUT FEATURES (as shown in drawing above)

- |   |                           |
|---|---------------------------|
| 1 | Siemens S7 Control system |
|---|---------------------------|

## Overview



### Coating systems

- ✓ Slot die
- ✓ Doctor blade

### Dryer

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

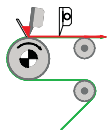
### Control system

- ✓ Siemens S7

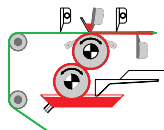
### Design features

- ✓ Complete enclosure
- ✓ Industrial design

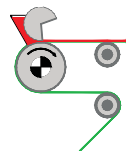
## Coating systems



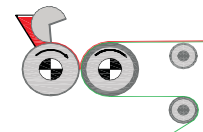
Knife system



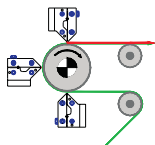
Double side coating system



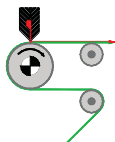
Commabar system



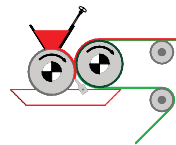
Reverse commabar system



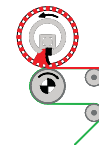
Slot die system



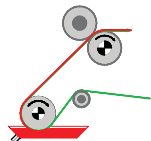
Curtain coating system



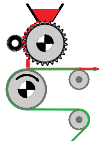
Case knife system



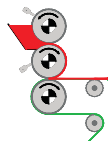
Rotary screen system



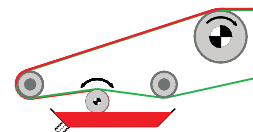
Dipping system (Foulard)



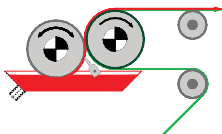
Powder scattering system



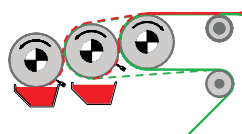
Reverse roll coating system



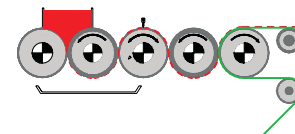
Micro roller coating system



2-roller coating system

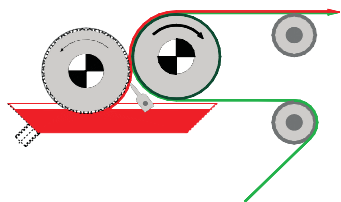


3-roller combi coating system

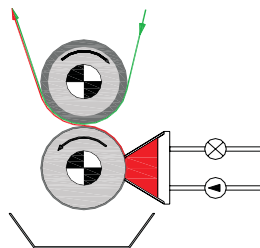


5-roller coating system

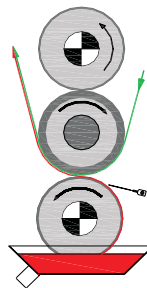
## Printing systems



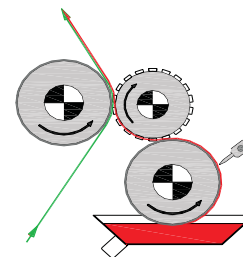
Engraved roller system



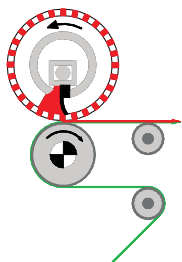
Gravure roller system



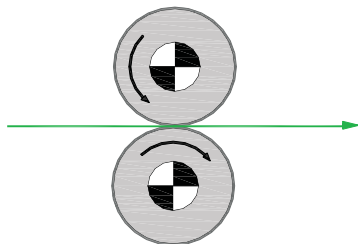
Gravure indirect system



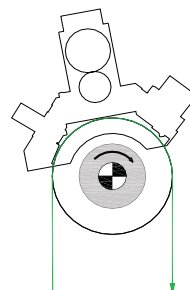
Flexography system



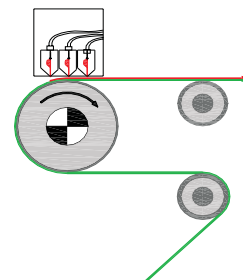
Rotary screen system



Hot embossing system

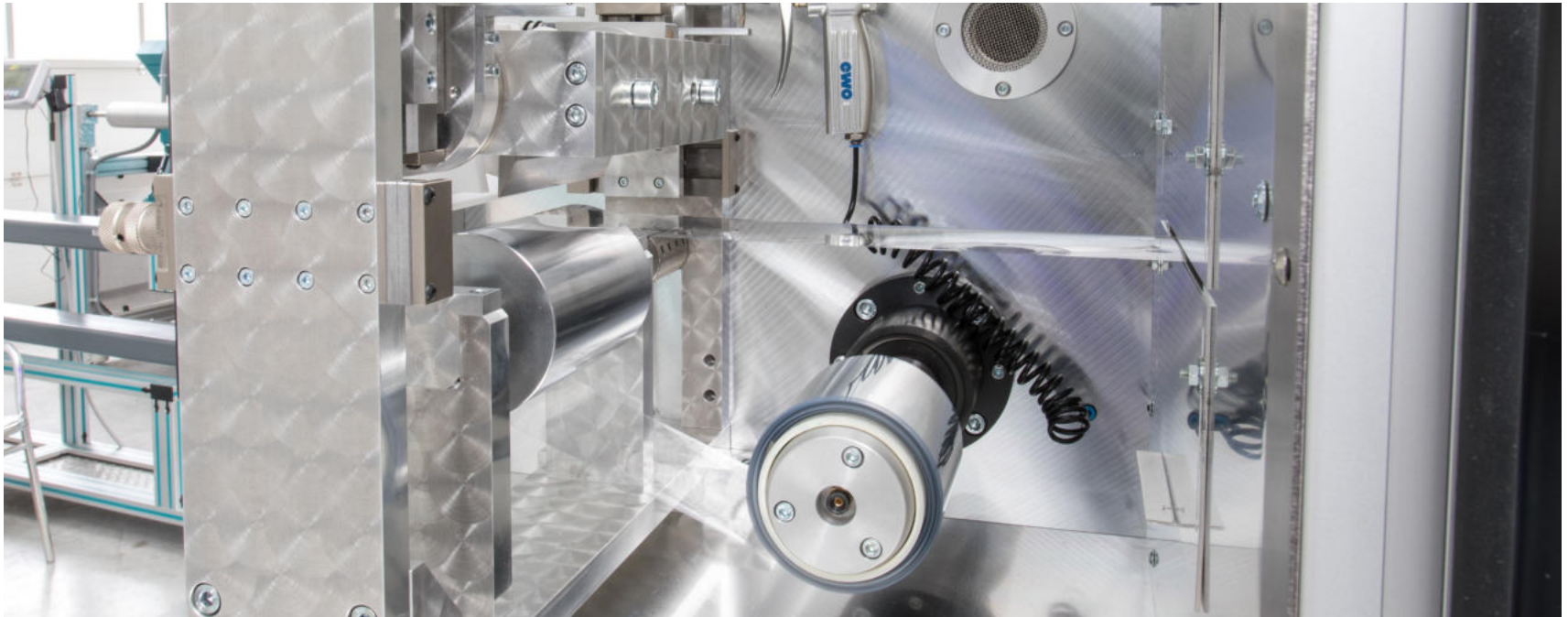


Nanoimprint system

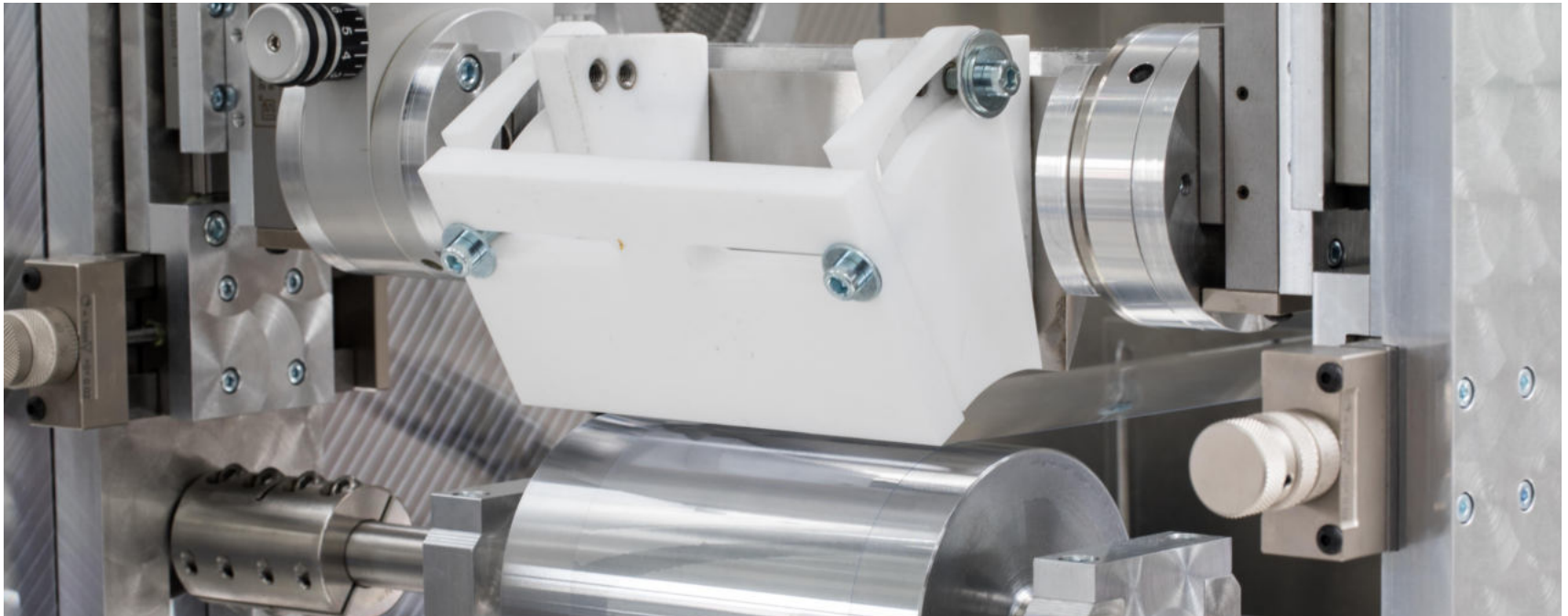


Inkjet system

## Coating chamber



## Doctor blade system



## 2x 500 mm heated air dryer



## Rewinder



## The Test Solution R2R generation



# 4.

## Options & specifications



## 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

## Test Solution 2<sup>nd</sup> Generation Roll to Roll (R2R)

### Test Solution



Press Button to  
show the video



# 5.

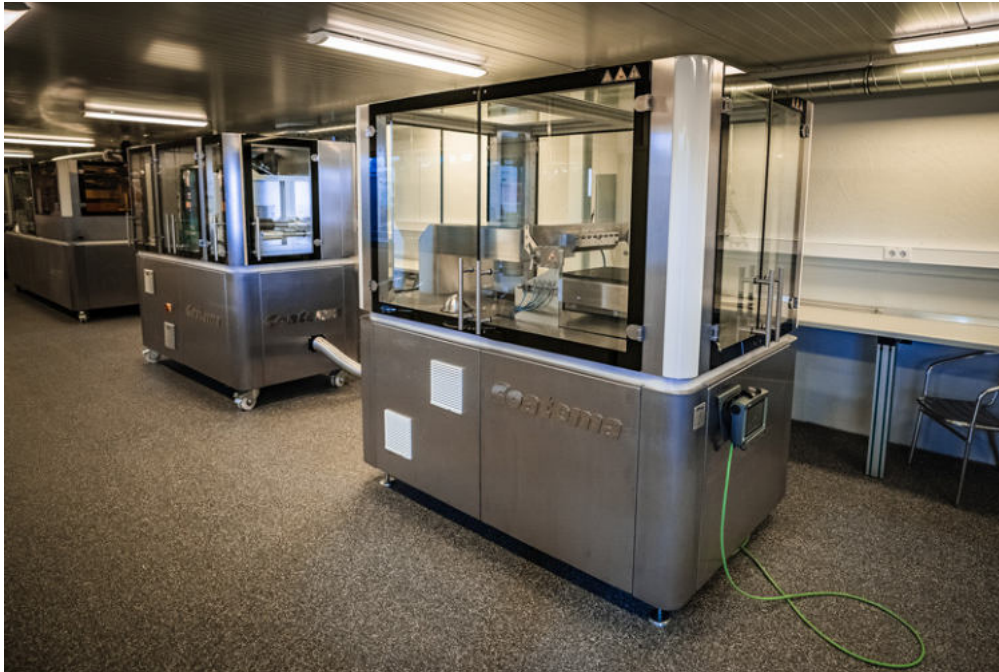
## Summery



### 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 S2S and R2R 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.

Anything missing?

Let us know and we will make it happen!

Sales department:  
[sales@coatema.de](mailto:sales@coatema.de)

## Download brochures & presentations



# *Coatema*

## Thank you

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