



# Coatema research & development centre

## Overview

Introduction

The Coatema  
R&D centre

R&D centre  
equipment

## Summary

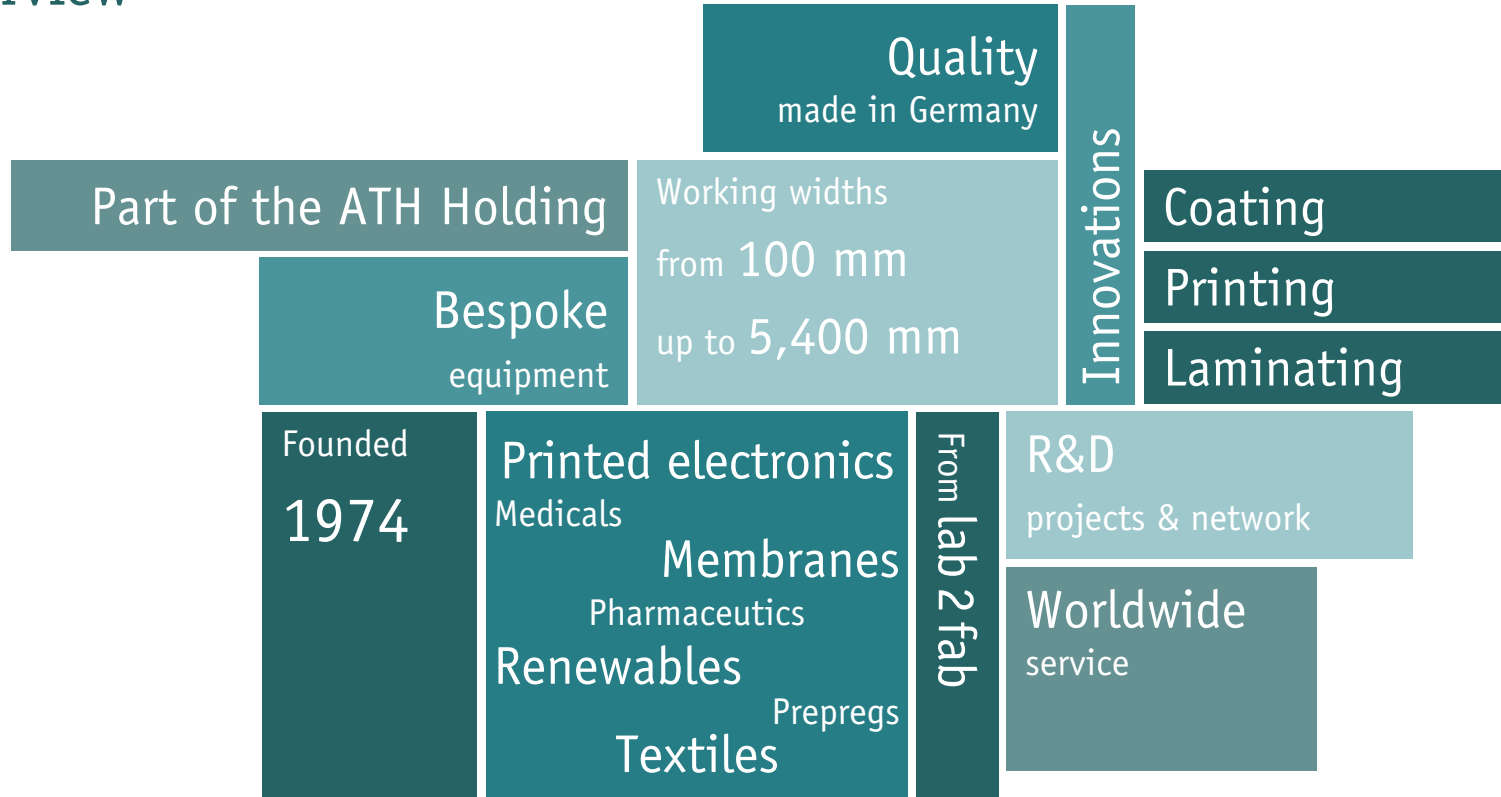
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## Overview



## Group of companies

**ATH** ALTONAER  
TECHNOLOGIE  
HOLDING



- ✓ 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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R&D centre  
The Coatema

## Want to save resources, money and time

- ✓ We offer access to a wide variety of lab, pilot and production tools
- ✓ We offer immediate exposure to process development and machine operation without long training periods
- ✓ We offer our experience and skills to cut down lead times for your product development
- ✓ We offer the full support and participation in funded R&D projects for process and machine related challenges

## Want to save resources, money and time

### Process development

- ✓ Feasibility study
- ✓ Ink – process study
- ✓ Process analysis
- ✓ Proof of concept
- ✓ Small scale prototype

### Test production

- ✓ Prototyping
- ✓ Near to market testing
- ✓ TRL evaluation
- ✓ Training of staff

### Education

- ✓ Coatema conference
- ✓ Training of customers
- ✓ Education of students

### After sales service and ramp up of processes

- ✓ of Coatema units

### Development of custom made design for equipment

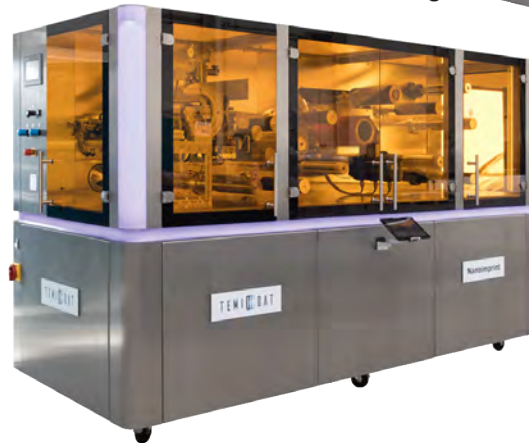
- ✓ Prototyping
- ✓ Proof of concept

### Funded research projects

- ✓ German funded
- ✓ Horizon 2020
- ✓ Global 2+2 projects
- ✓ B2B projects



## Process technologies



### Technologies

Coating, printing, laminating, imprinting, pretreatment, drying, curing, cross linking, cutting

### Number of units available

10 – 12 units on 1 200 sqm

### Sheet-to-Sheet – S2S

up to 300 mm x 500 mm

### Roll-to-Roll – R2R

up to 500 mm width

### Operation speed

0.1 to 100 m/min

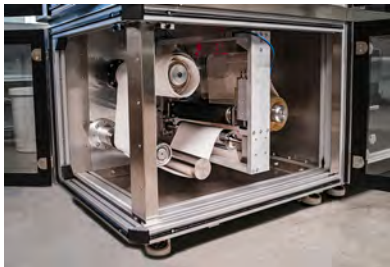
## Benefits



With Coatema application experts and interdisciplinary expertise.

### You will be able to:

- ✓ Validate your process
- ✓ Check your line layout
- ✓ Run your R&D trials in lab2fab environment
- ✓ Scale up your process
- ✓ Run your products



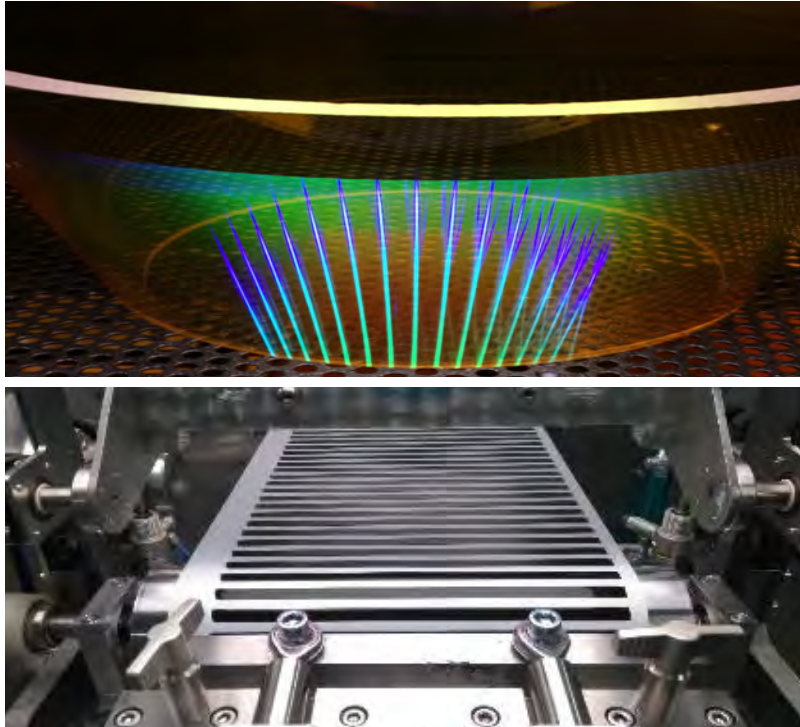
## Round the clock support



### Services include:

- ✓ Technical briefing & brainstorming
- ✓ Trial planning & preparation
- ✓ Choice of unit & layout
- ✓ Support in logistics
- ✓ Training programs for staff

## Cutting edge technology



### Services:

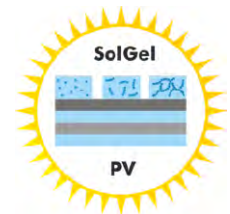
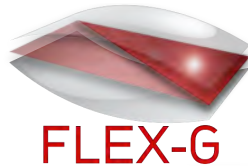
- ✓ Print freeform pattern R2R with industrial inkjet
- ✓ Structure the surface with micro/nano imprint lithography in R2R and R2P
- ✓ Coat intermittent low viscous media with patented Coatema piezo controlled slot die
- ✓ Cure & crosslink your coating & printing with NIR, photonic sintering and LED UV
- ✓ Coat, print & laminate under nitrogen atmosphere



## R&D customers



## R&D projects overview 2020





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Equipment  
R&D centre

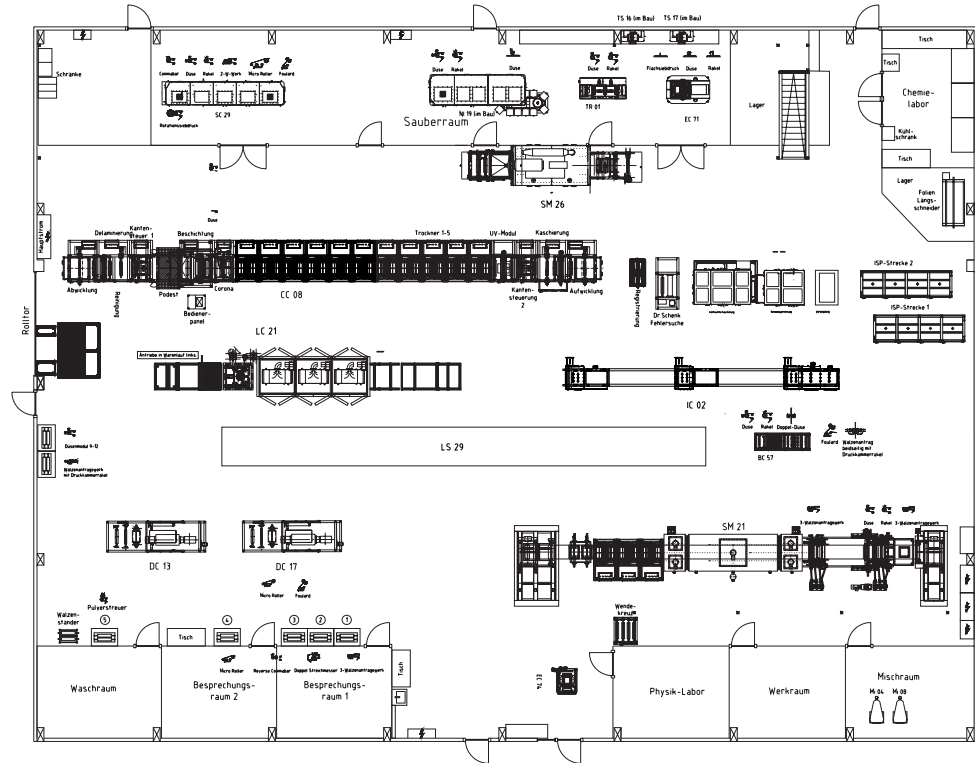


## R&D centre equipment

Roll to Roll	Max. working width	Line speed	Tension
LS 21 – Linecoater	400 mm	3 – 30 m/min	45 – 450 N
IC 02 – Inertcoater	400 mm	1 – 20 m/min	25 – 250 N
SM 26 – Multifunctional Coating Line	400 mm	0,3 – 3 m/min	25 – 250 N
SM 21 – Multifunctional Coating Line	500 mm	1 – 30 m/min	75 – 3.500 N
DC 13 – Deskcoater	500 mm	0.1 – 15 m/min	10 – 250 N
DC 17 – Deskcoater	500 mm	0.1 – 10 m/min	50 – 250 N
NI 19 – Nanoimprint R2P	300 mm	0.1 – 10 m/min	10 – 250 N
TR 01 – Test Solution R2R	100 mm	0.1 – 10 m/min	10 – 250 N
BC 57 – Basecoater	300 mm	0.1 – 2 m/min	25 – 250 N
SC 29 – Smartcoater	300 mm	0.1 – 10 m/min	10 – 250 N
CC 08 – Click&Coat™	500 mm	0.1 – 10 m/min	10 – 250 N

Sheet to Sheet	Table size	Line speed
EC68 – Easycoater	300 x 400 mm (A4)	0.1 – 10 m/min
EC74 – Easycoater	297 x 420 mm (A3)	0.4 – 4 m/min
TS27 – Test Solution S2S	275 x 450 mm (A4)	0.1 – 4 m/min

## R&D centre layout equipment



## Systems in the R&D centre

### Coating

Doctor blade

Slot die

Double side

Micro roller

3 Roller

Engraved roller

Powder scattering

Reverse roll coater

### Curing

Hot air

Infrared

UV

UV LED

NIR

Photonic sintering

### Processes

Lamination / delamination

Cross cutting

Web direction cutting

In line rinsing / reaction containers

In line reaction zones

Corona

Nitrogen environment

Quality control systems

### Printing

Rotary and flat screen

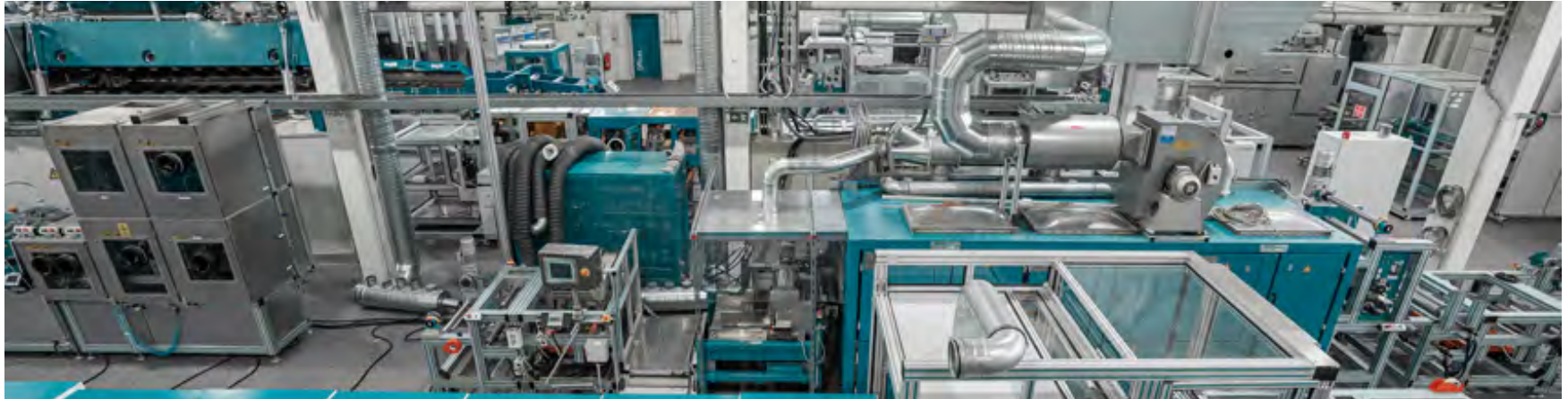
Gravure / engraved roller

Flexo roller

Inkjet







Do not hesitate to contact us!



Anything missing?

Let us know and we will make it happen!

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

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

Thank you



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