

Coatema

Coatema Easycoater

03/06/25

MEMBER OF ATH

Agenda

- 1. Introduction
- 2. Coatema Easycoater
- 3. Easycoater custom made
- 4. Options & specifications
- 5. Summary



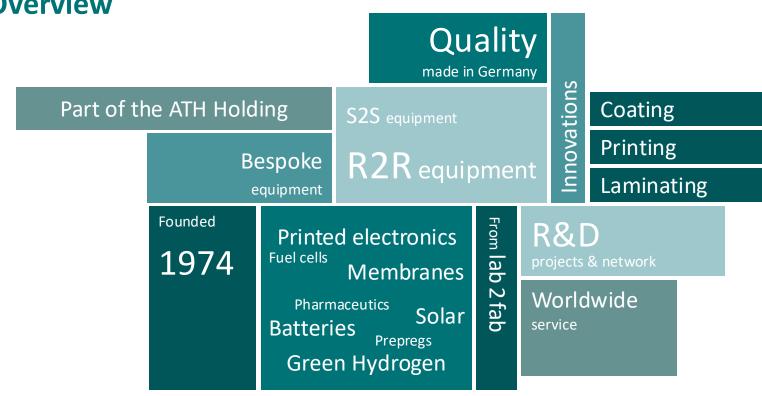
1.

Introduction





Overview





Group of companies



ALTONAER TECHNOLOGIE HOLDING



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

DRYTEC

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



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

Introduction

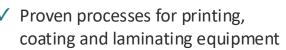


Coatema equipment platform strategy for lab2fab



- ✓ State-of-the-art research and development equipment
- ✓ Sheet-to-sheet to roll-to-roll systems on smale scale & footprint





- ✓ Highest-quality pilot lines enable stable pilot production and reduce cost of operation
- Scaling laboratory equipment to enable pilot production

✓ Full-scale production lines

Production

✓ Optimize the manufacturing process, including streamlining assembly, reducing material waste, and optimizing the carbon footprint



Our markets – Coatema focus areas

Green Hydrogen

Fuel cells

Batteries

Solar



Sustainability

Digital fabrication

Printed electronics

The next thing



R&D centre USP









Process development

- ✓ Feasibility study
- ✓ Ink process study
- ✓ Process analysis
- ✓ Slot die coating simulations
- ✓ Proof of concept
- ✓ Small scale prototype



Test production

Prototyping

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



Education

- ✓ Coating conference
- ✓ Education of students
- ✓ Partner trainings
- ✓ Workforce training



Development of custom-made design for equipment

Prototyping

✓ Proof of concept



Public funded research projects know-how

- ✓ German funded
- ✓ Global 2+2 projects

✓ Horizon 2020

/ B2B projects



Coatema services as an overview

The Coatema R&D centre



Accelerate your innovation in our dedicated pilot facility with advanced lab & pilot lines and expert guidance — bridging the gap from #lab2fab.

The Coatema Coating Symposium



Join the global network of coating experts at our annual event, where cutting-edge developments meet industry collaboration for next-level innovation.

The Coatema Slot Die Masterclass



Master precision coating in our hands-on training program, led by industry specialists to optimize slot-die performance and product excellence.



R&D customers















































Hochschule Niederrhein University of Applied Sciences





























Fraunhofer

Fraunhofer

IVV





















Fraunhofer







03/06/25



R&D projects overview 2022 – 2025



In-line and real-time digital nanocharacterization for flexible organic electronics



NOUVEAU

The NOUVEAU project will develop solid oxide cells (SOCs) with innovative La- and PMG-free electrode materials





R2R production line for OPV solar with integrated backend



Upscaling and development of EC based switchable films to decrease energy use in buildings





Implementation of laser drying processes for lithium-ion battery production



R2R process optimization for solid state batteries





Plasmonically enhanced photocatalysis for wastewater treatment



R2R nanostructuring of functional films





The WaterProof project aims at developing an electrochemical process that converts CO₂ emission



Creating an openinnovation testbed for sustainable packaging 2.

Coatema Easycoater





Overview of product features & options for the Easycoater



LAYOUT FEATURES (as shown in drawing)		
1	Unique LED system shows the operating status	
2	Vacuum table down to 1µ accuracy	
3	Easy to access all parts of the unit	
4	Application systems slot die/ flat screen/doctor blade	
5	Electrical heated dryer, UV LED, infrared or NIR	
6	Servo drives	



Easycoater overview



Coating systems

- ✓ Slot die
- ✓ Doctor blade

Substrate fixation

- ✓ High precision vaccum
- ✓ Standard precision vaccuum

Printing system

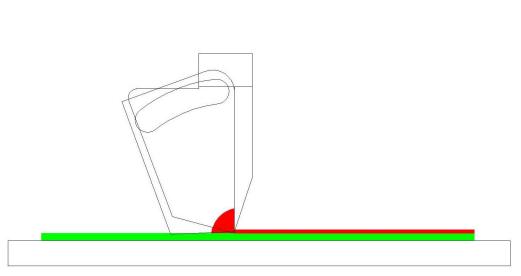
- ✓ Screen printing
- ✓ Inkjet
- ✓ Gravure printing

Heating / crosslinking

- ✓ Heated air
- ✓ Infrared
- ✓ UV



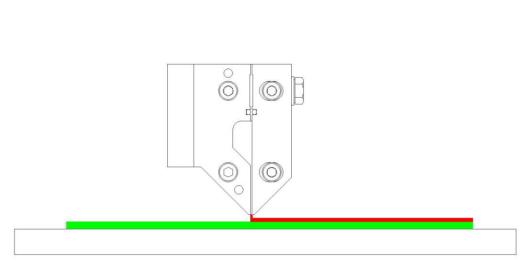
Application system – doctor blade







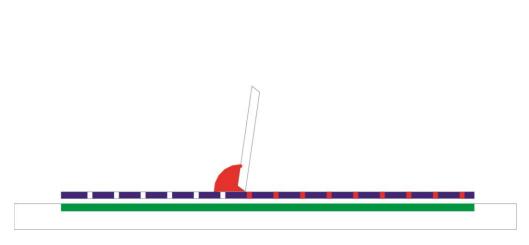
Application system – slot die







Application system – screen printing





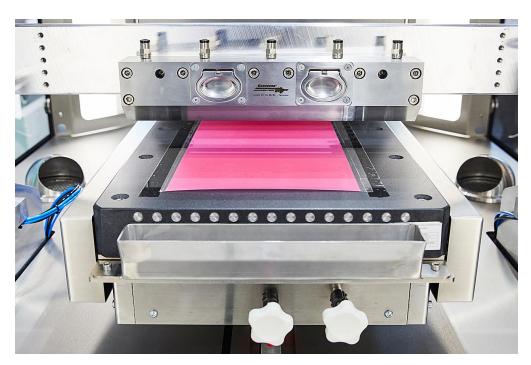


Slot die and dryer









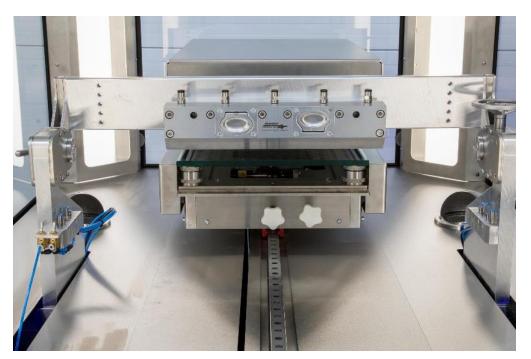






















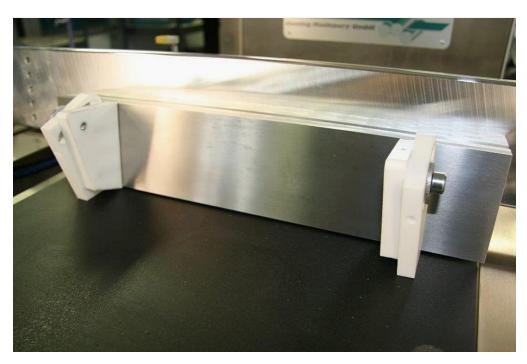
Doctor blade

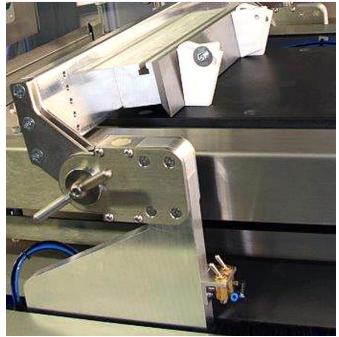






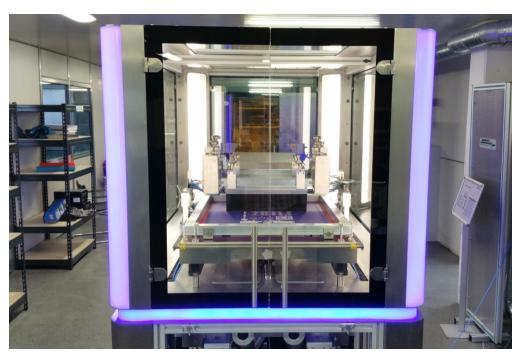
Doctor blade

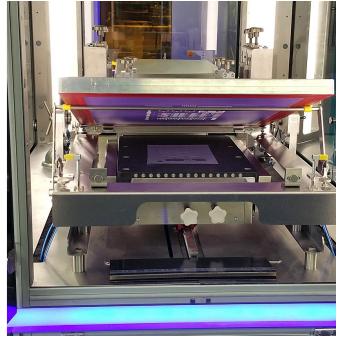






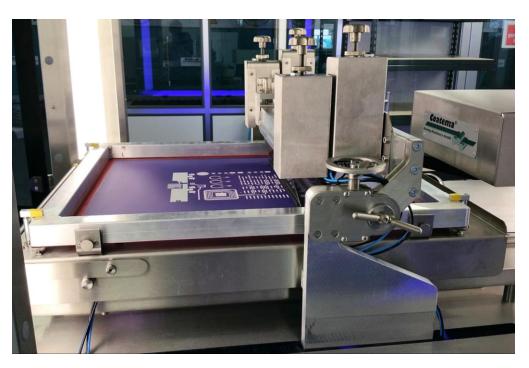
Flat screen printing







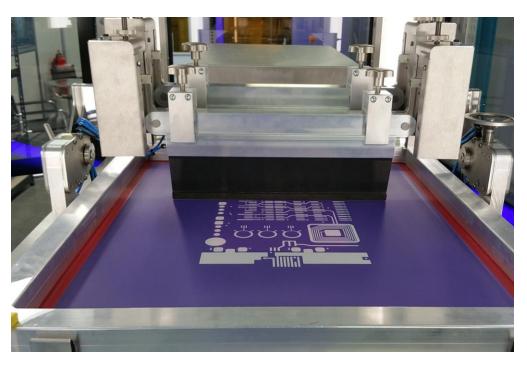
Flat screen printing

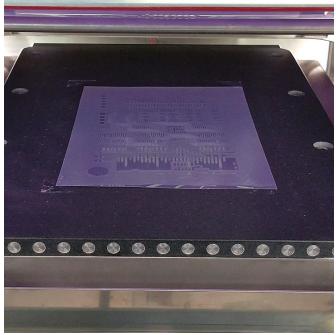






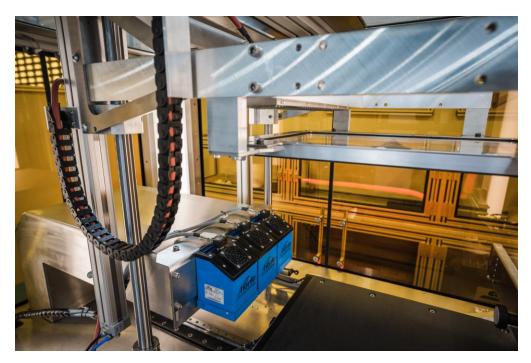
Flat screen printing

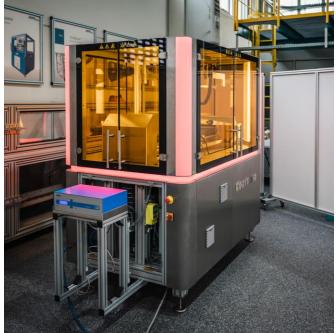






UV







Air roller







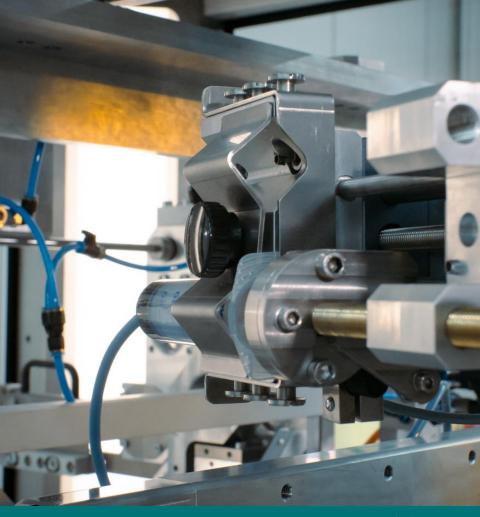
Easycoater – easy to use





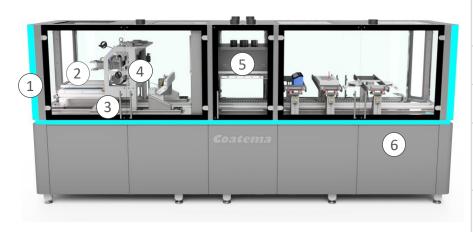
3.

Easycoater custom made





Overview of product features & options for the Easycoater



LAYOUT FEATURES (as shown in drawing)		
1	Unique LED system shows the operating status	
2	Vacuum table down to 1µ accuracy	
3	Easy to access all parts of the unit	
4	Application systems slot die/ inkjet/rotary screen/doctor blade	
5	Electrical heated dryer, UV LED, infrared or NIR	
6	Servo drives	

Easycoater custom made













Easycoater custom made















Easycoater





Press Button to show the video

Options & specifications





Options & specifications







Options & specifications



Specifications







Knife

Vacuum table

Inkjet

Slot die

Screen

Integrated heating

Options & specifications



Technical specifications in detail

Coating + printing options

- ✓ Slot die
- ✓ Doctor blade
- ✓ Screen printing
- ✓ Inkjet printing

Operating options

- ✓ Siemens S7 mobil PLC
- ✓ Remote service modem

Dimensions for A4 table size

✓ 1,920 x 1,220 x 1,920 mm (LxWxH)

<u>Dryer</u>

- ✓ Hot air standard –
 UV & IR optional
- Machine function indicators
- ✓ High-visibility LED display

Machine Base

- ✓ Stainless steel frame
- ✓ Granite core with 1.5µ surface precision
- ✓ G0 / Schneeberger linear guideways

Vacuum table

- ✓ Vacuum table made of granite with 1µ surface precision
- ✓ Vacuum holes 0.9 mm in diameter
- ✓ Vacuum holes 20x20 raster array
- ✓ Vacuum table adjustable in X-Y direction
- ✓ Available in A3, A2 size and custom made size

4.

Summary



Summary



The customer benefits

- ✓ The Coatema Easycoater has been an industry standard for more than 20 years
- ✓ The Easycoater III version is designed for new markets such as printed electronics,
- ✓ medical applications, batteries, renewable energy and flexible displays
- ✓ A compact coater and printer combined
- ✓ Automated and motor driven application systems
- Minimal amout of materials required



Easycoater





Press Button to show the video

Coatema research & development centre



Do not hesitate to contact us!



The Easycoater 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

Download broschures & presentations





Thank you

Roseller Straße 4 • 41539 Dormagen • Germany T +49 21 33 97 84 - 0 • info@coatema.de

www.coatema.com

MEMBER OF ATH