



Coatema

Coatema Click&Coat™

03/06/25

MEMBER OF ATH

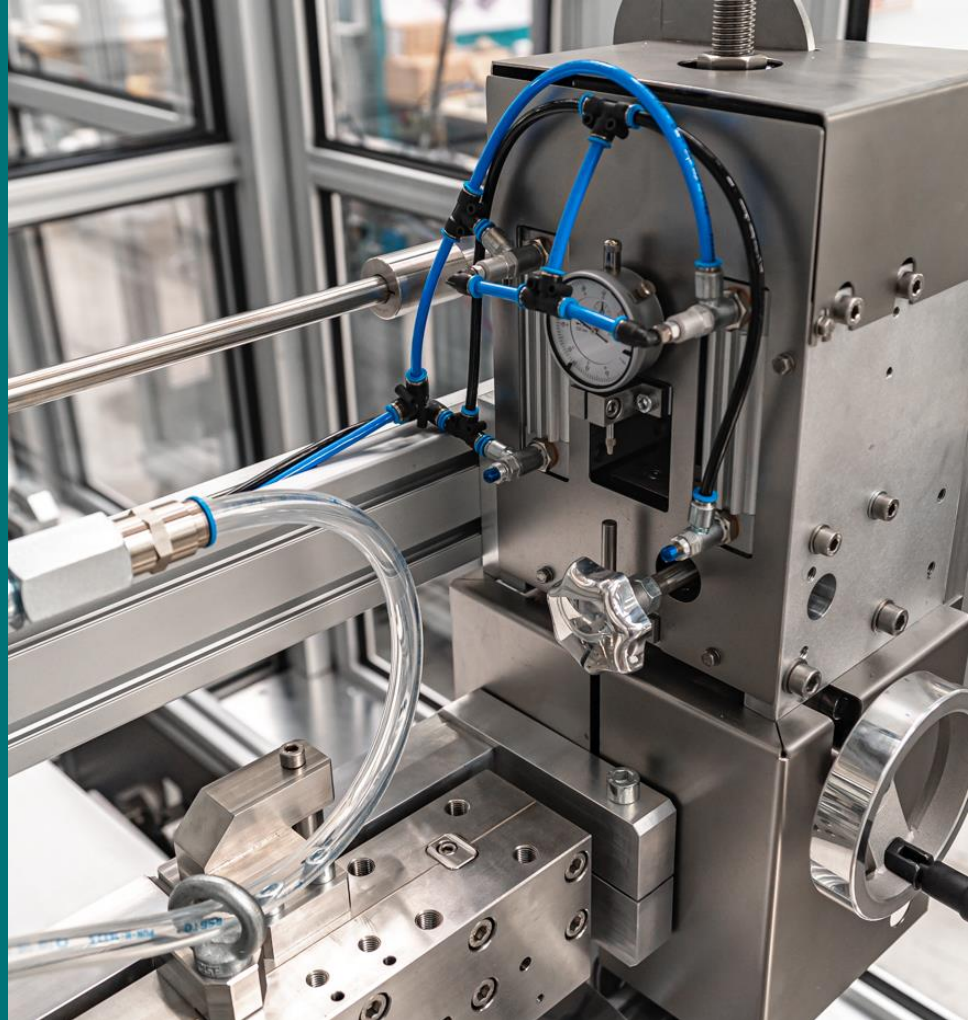
Agenda

1. Introduction
2. Click&Coat™
3. Click&Coat™ steel layout
4. Click&Coat™ for Prepreg production
5. Options & specifications
6. Summary

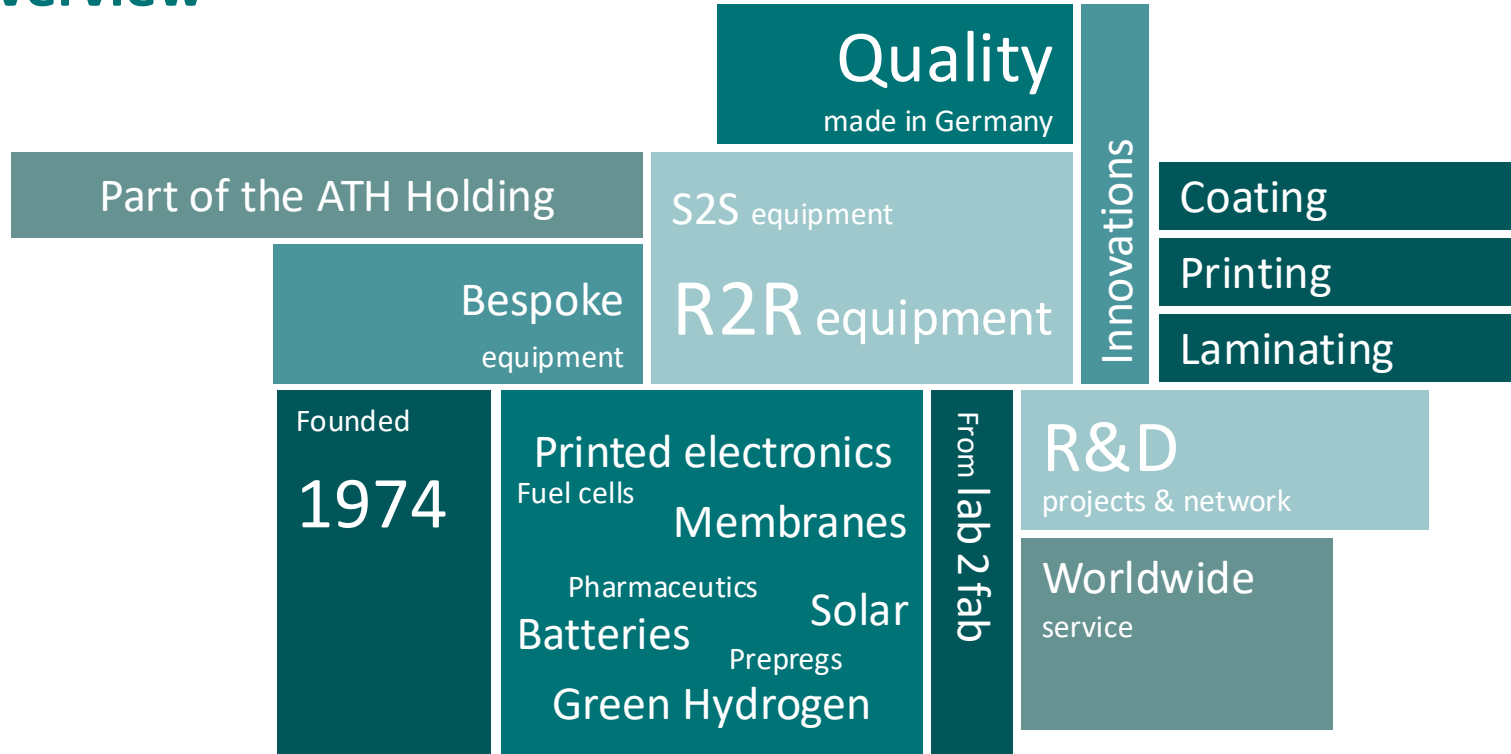


1.

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

Coatema equipment platform strategy for lab 2 fab



Lab

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



Pilot Production

- ✓ Proven processes for printing, coating and laminating equipment
- ✓ Highest-quality pilot lines enable stable pilot production and reduce cost of operation
- ✓ Scaling laboratory equipment to enable pilot production



Production

- ✓ Full-scale production lines
- ✓ Optimize the manufacturing process, including streamlining assembly, reducing material waste, and optimizing the carbon footprint

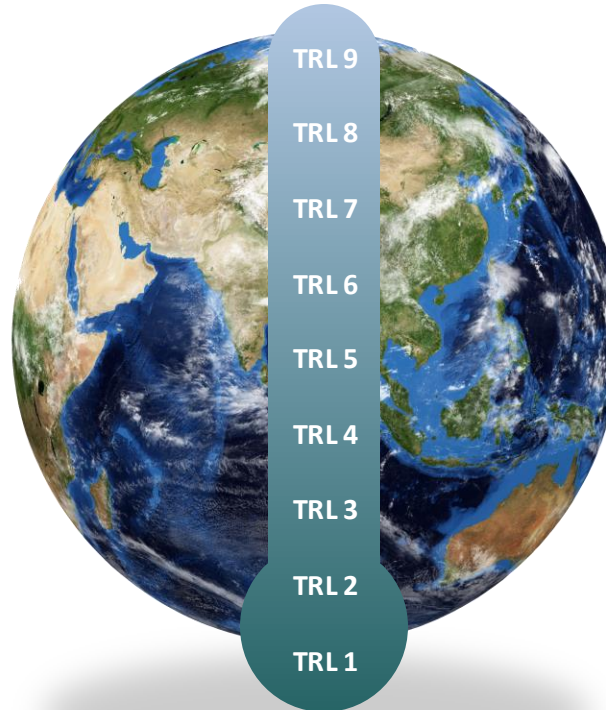
Our markets – Coatema focus areas

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



Education

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



Development of custom-made design for equipment

- ✓ Prototyping
- ✓ Proof of concept



Public funded research projects know-how

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



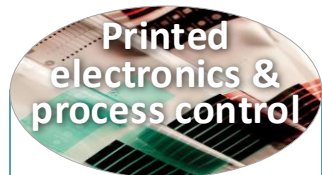
Master precision coating in our hands-on training program, led by industry specialists to optimize slot-die performance and product excellence.



R&D customers



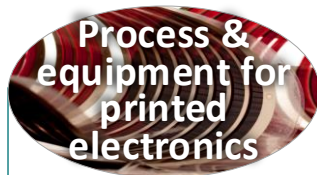
R&D projects overview 2022 – 2025



In-line and real-time digital nano-characterization for flexible organic electronics



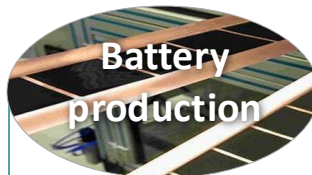
The NOUVEAU project will develop solid oxide cells (SOCs) with innovative La- and PMG-free electrode materials



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 open-innovation testbed for sustainable packaging

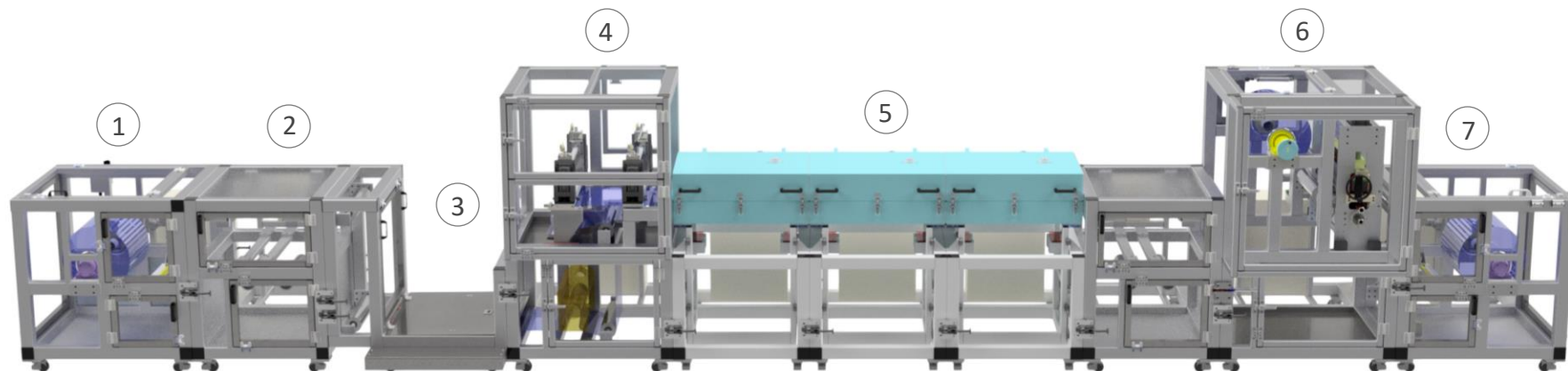
2.

Click&Coat™



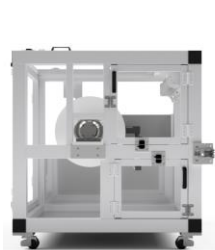
Overview of product features & options for Click&Coat™

LAYOUT FEATURES (as shown in drawing above)						
1	Unwinder	4	Coating station	7	Laminating and rewinding	
2	Edge guiding system	5	Dryer			
3	Podestral	6	Edge guiding system			

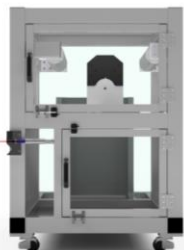


Click&Coat™ R2R

Click&Coat™ your own ideas



Winder



Corona



Podestral



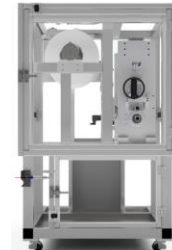
Coating



Inkjet



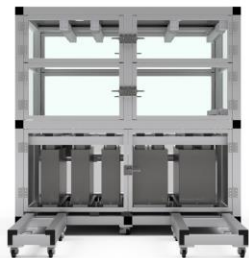
Dryer



Laminator



Rewinder



Chemical treatment bath



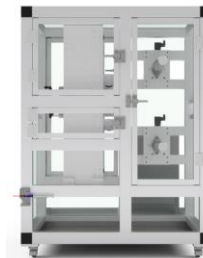
Inert Coating and
laminating



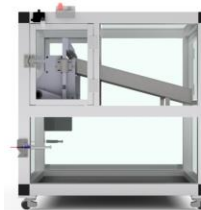
Registration
control



Turning
device



Lamination



Cutting

Overview



Coating / printing systems

- ✓ Over 38 systems
- ✓ Doubleside configuration available

Printing system

- ✓ Screen printing, gravure, flexo as analog systems
- ✓ Inkjet as digital system

Drying / crosslinking

- ✓ Heated air
- ✓ IR / NIR / Photonic sintering

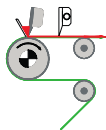
Control system

- ✓ Siemens S7

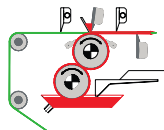
The Click&Coat™



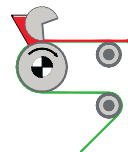
Coating systems



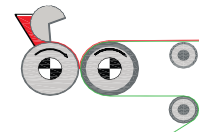
Knife system



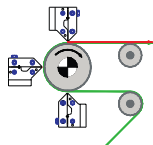
Double side coating system



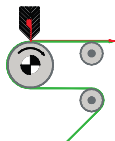
Commabar system



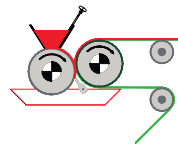
Reverse commabar system



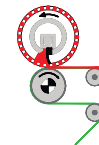
Slot die system



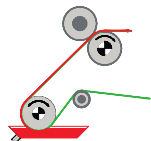
Curtain coating system



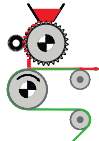
Case knife system



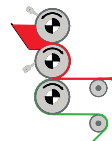
Rotary screen system



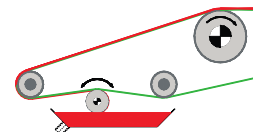
Dipping system (Foulard)



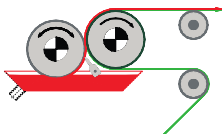
Powder scattering system



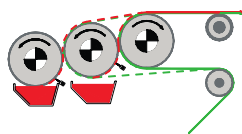
Reverse roll coating system



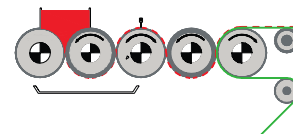
Micro roller coating system



2-roller coating system

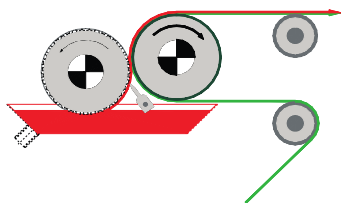


3-roller combi coating system

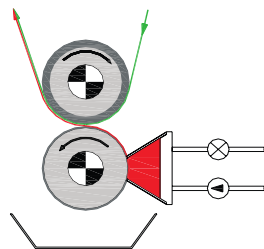


5-roller coating system

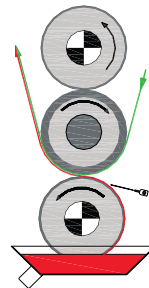
Printing systems



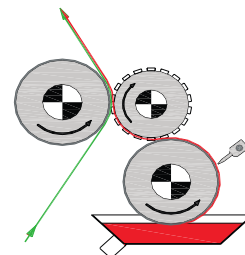
Engraved roller system



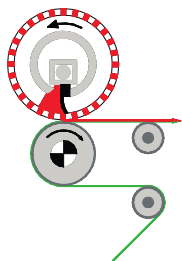
Gravure roller system



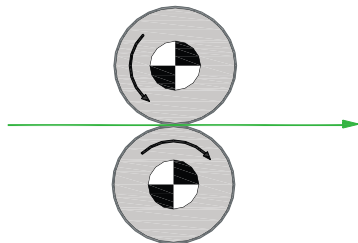
Gravure indirect system



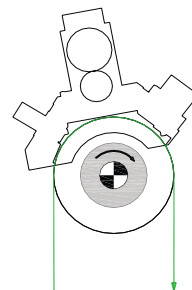
Flexography system



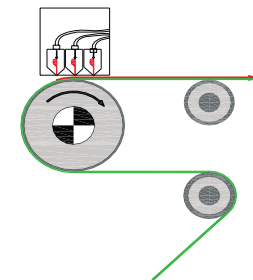
Rotary screen system



Hot embossing system

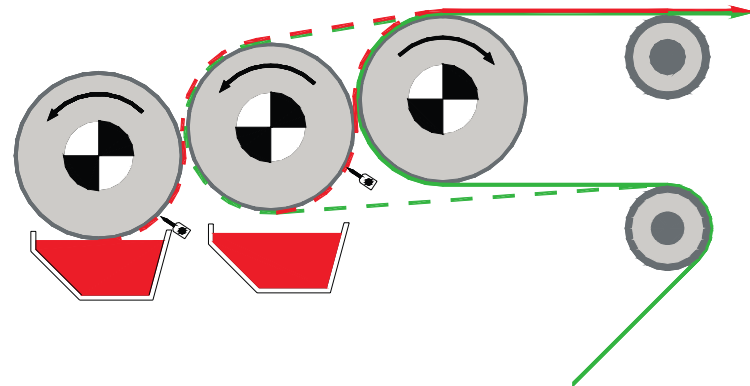


Nanoimprint system

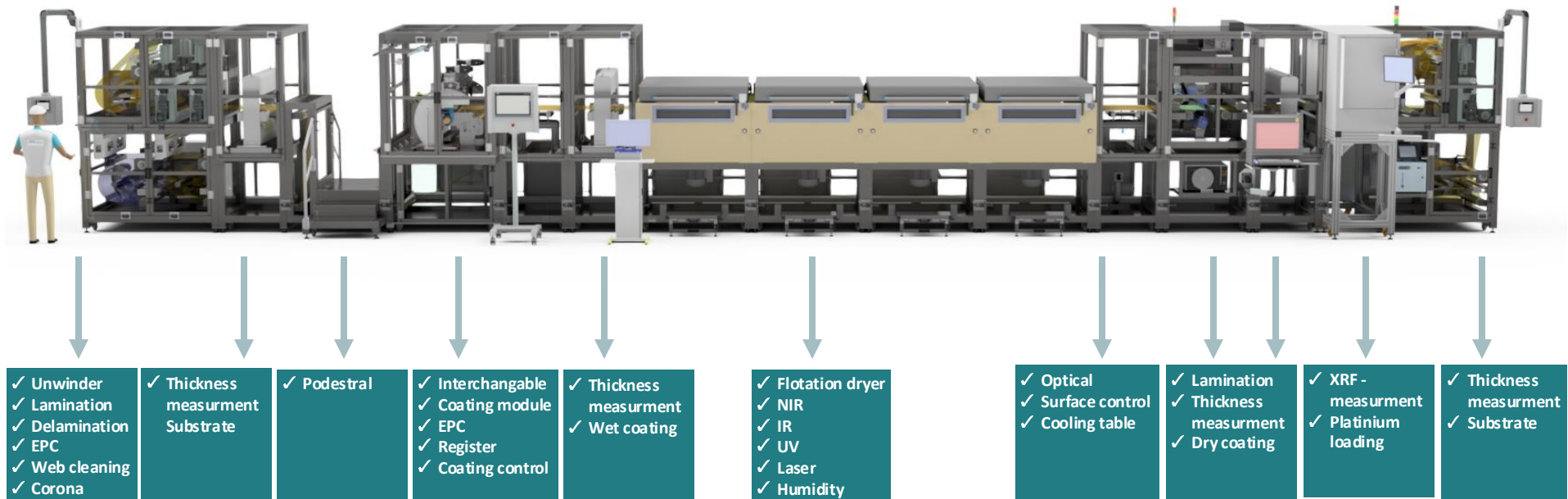


Inkjet system

Modular coating system



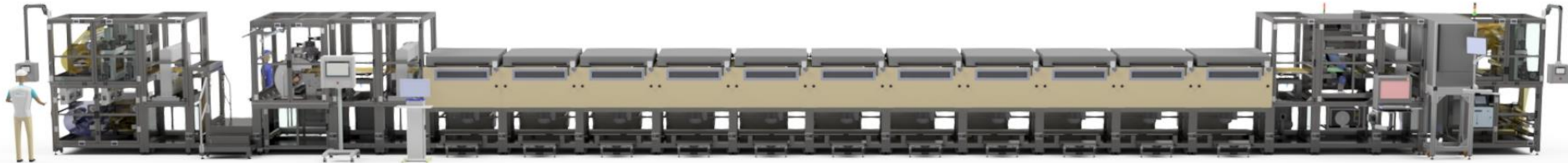
The Click&Coat™ in production scale



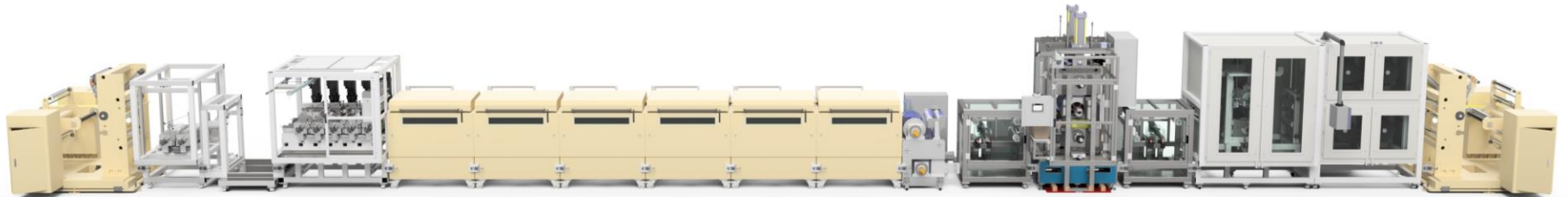
The Click&Coat™ in production scale



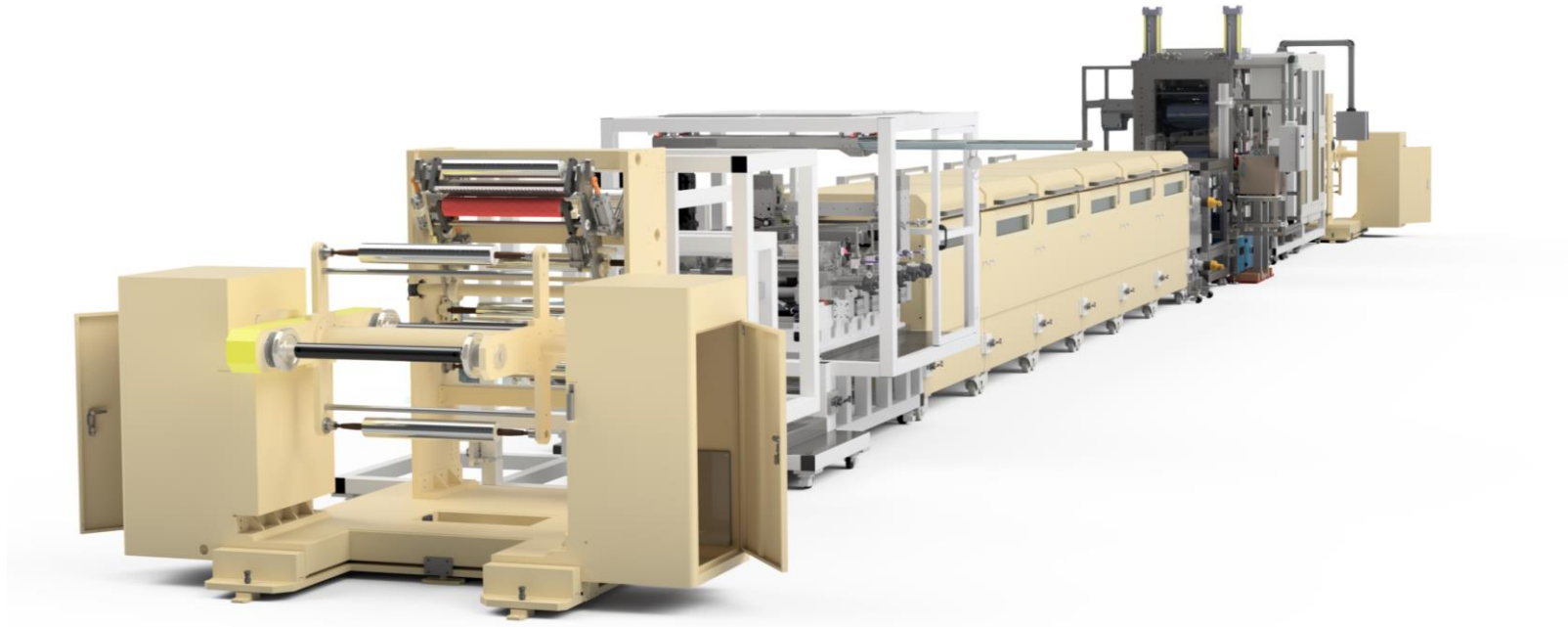
The Click&Coat™ in production scale



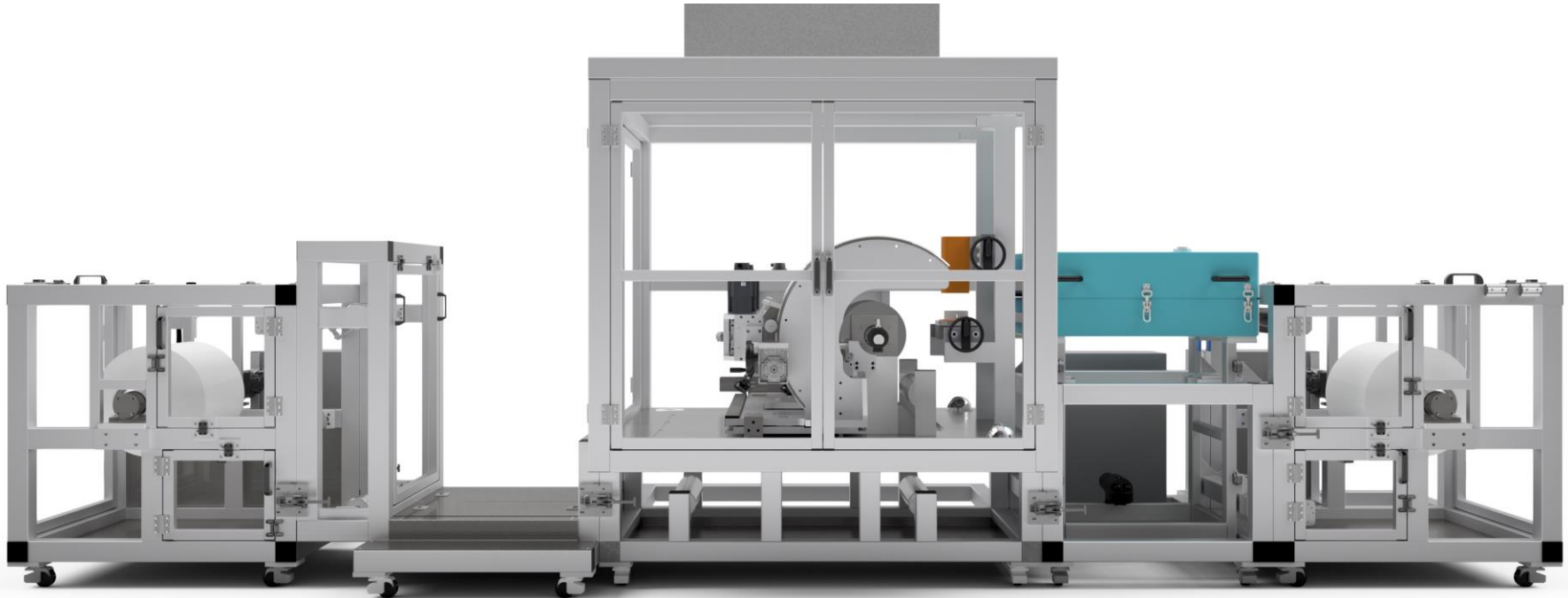
The Click&Coat™ in production scale



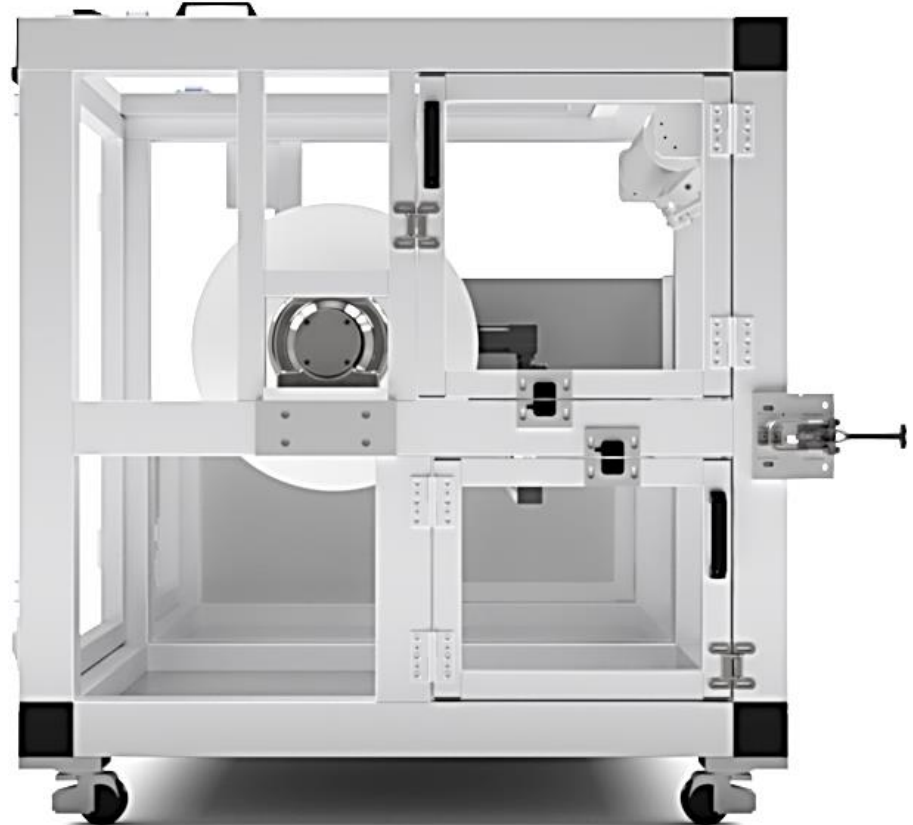
The Click&Coat™ in production scale



The Click&Coat™



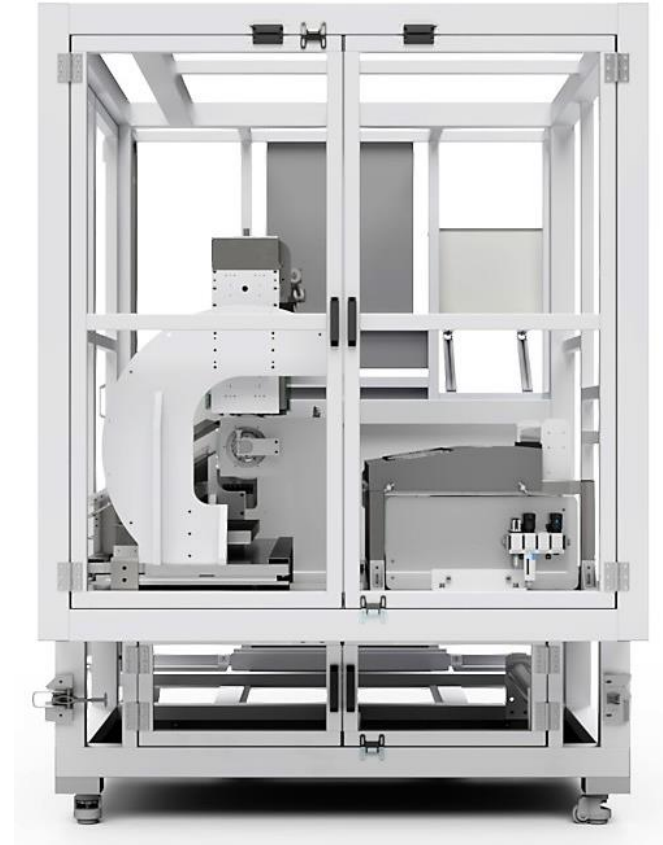
The Click&Coat™ winder



The Click&Coat™ operating platform



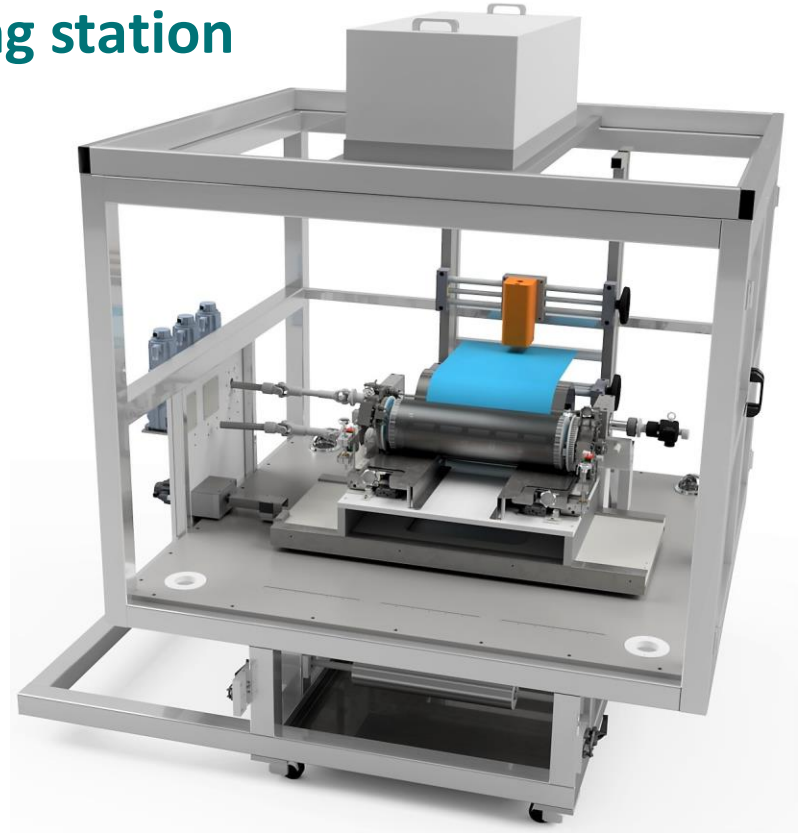
The Click&Coat™ coating station



The Click&Coat™ slot die station



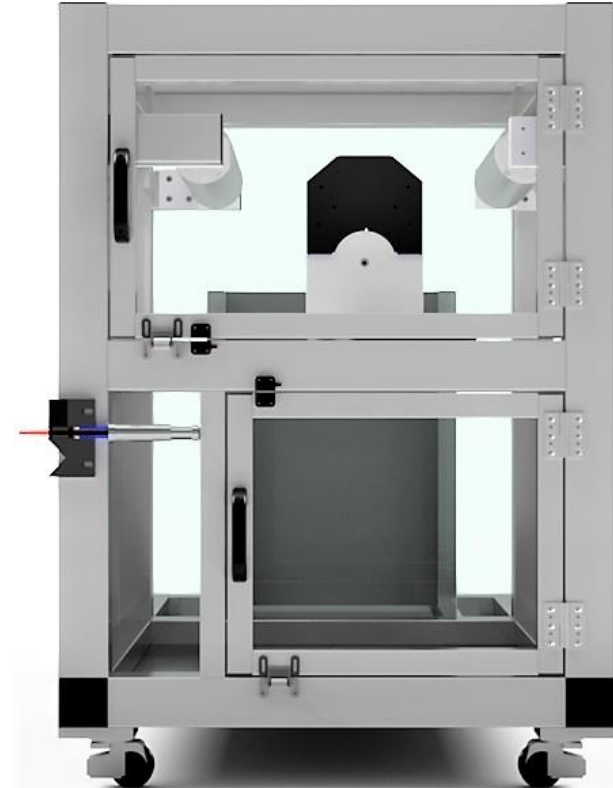
The Click&Coat™ modular coating station



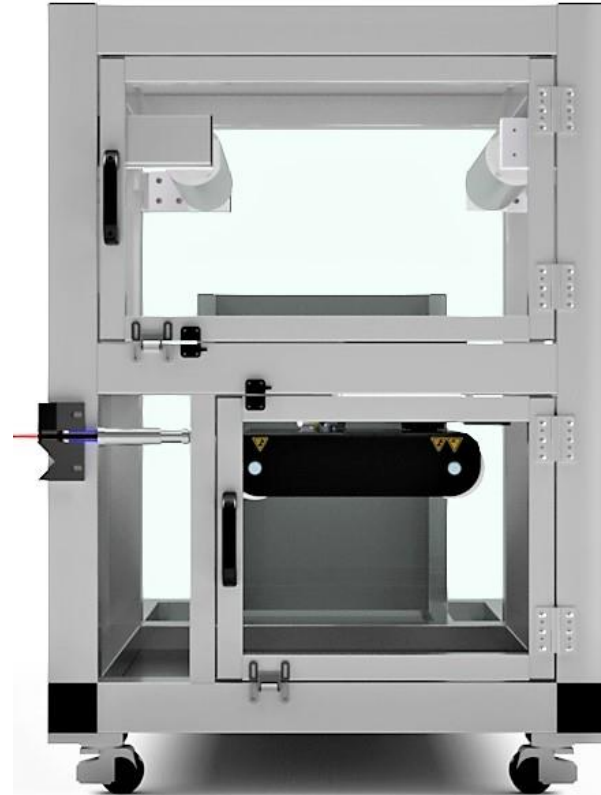
The Click&Coat™ laminating



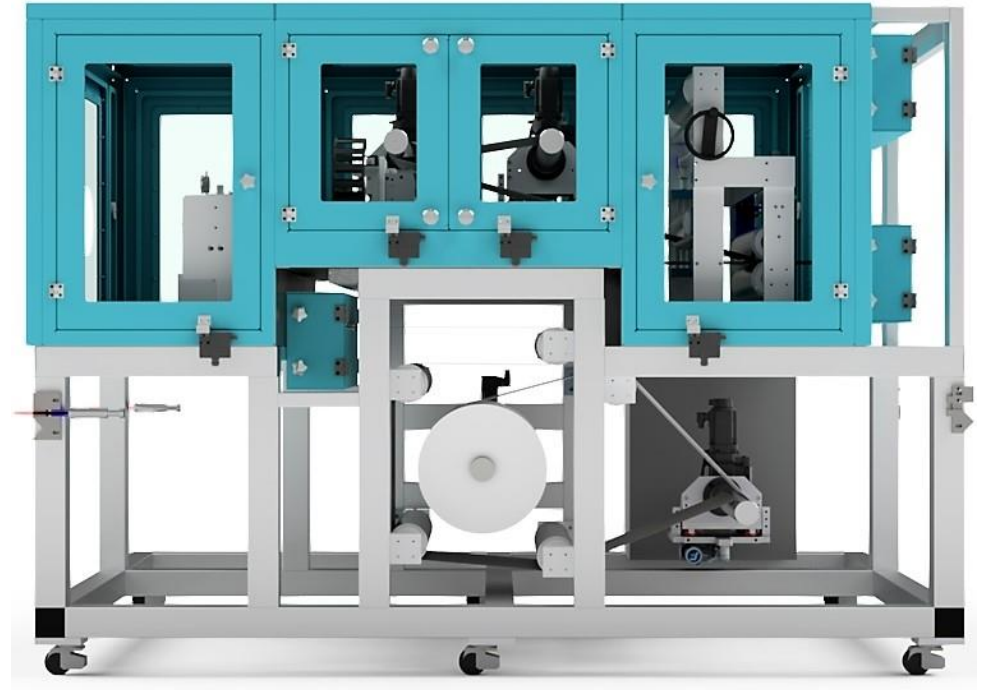
The Click&Coat™ corona



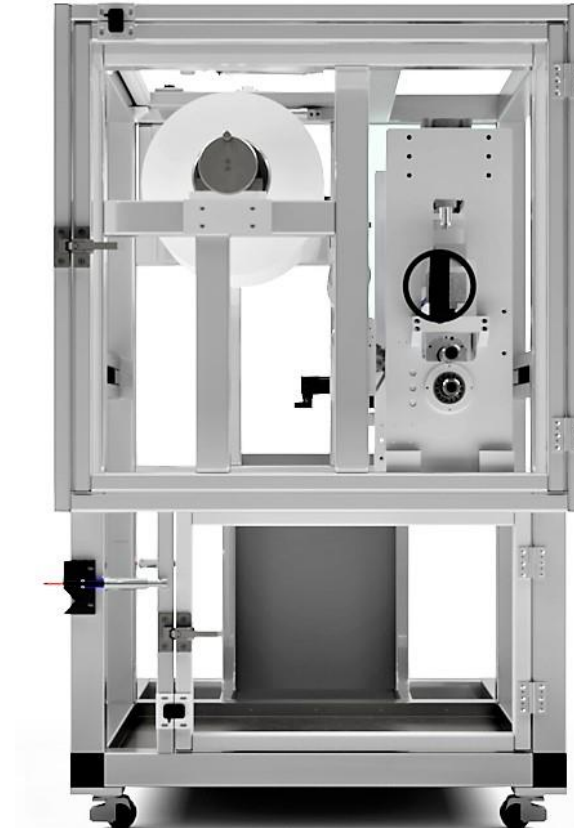
The Click&Coat™ EPC



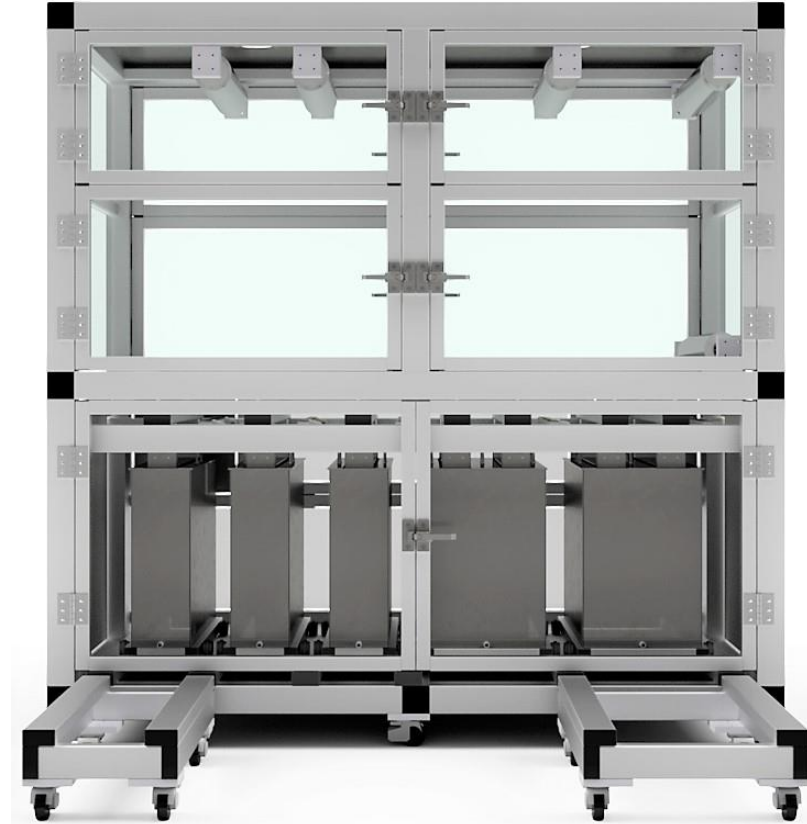
The Click&Coat™ inert



The Click&Coat™ lamination



The Click&Coat™ chemical treatment bath



The Click&Coat™ flotation dryer



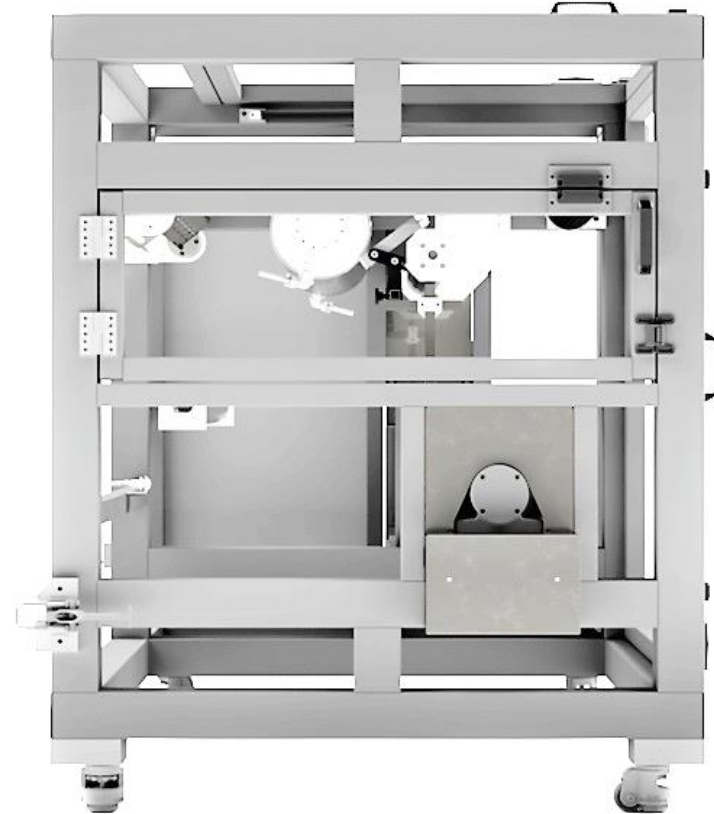
The Click&Coat™ electrical dryer



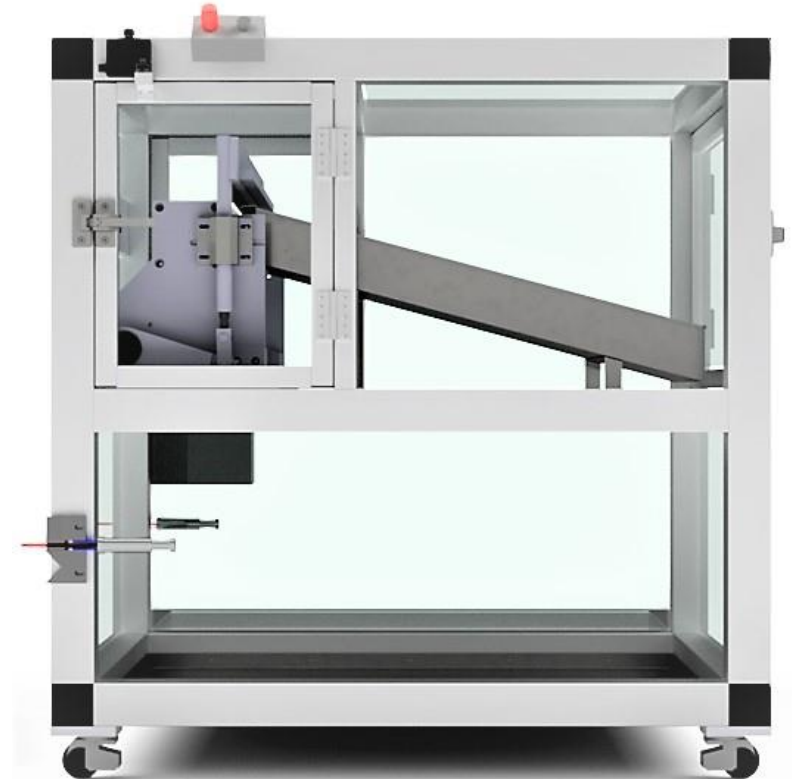
The Click&Coat™ turning device



The Click&Coat™ rewinder



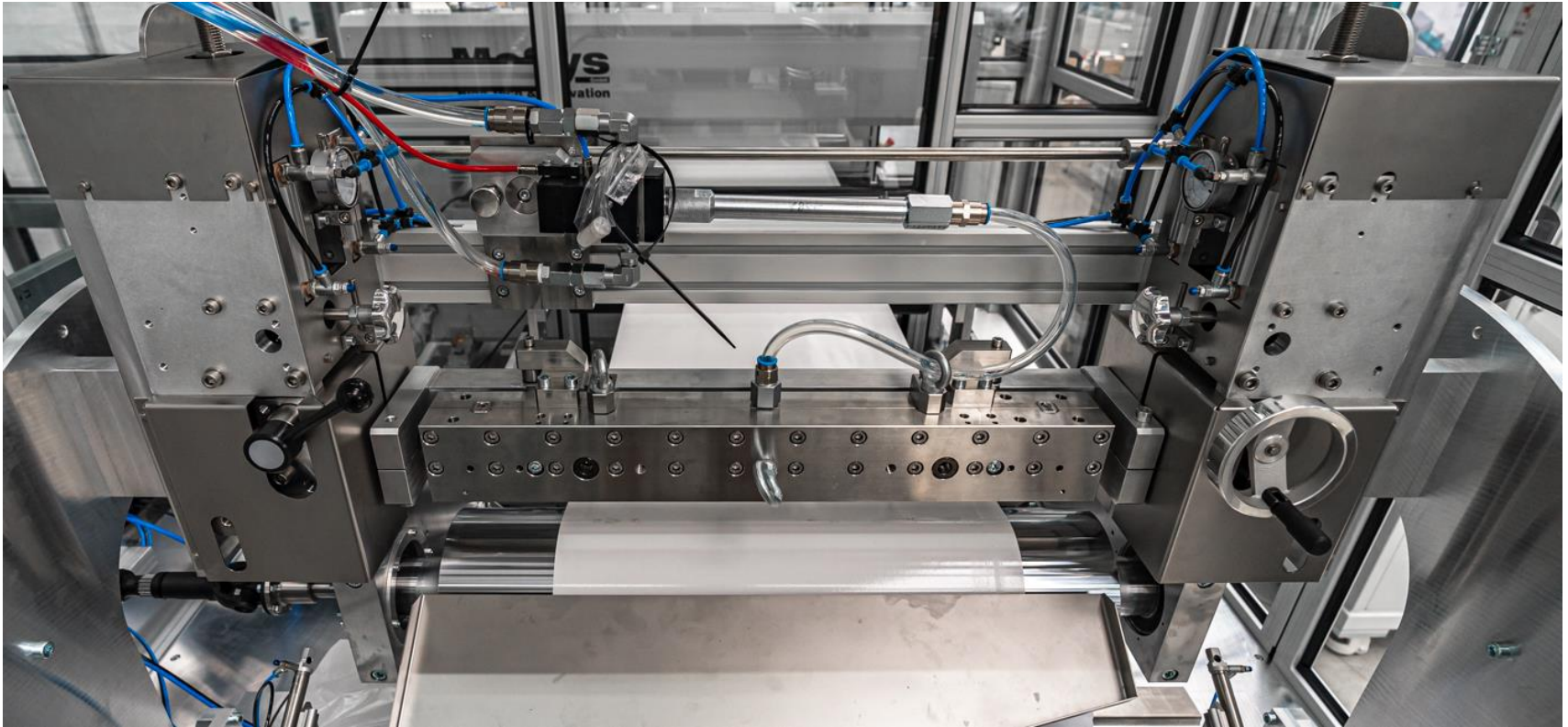
The Click&Coat™ cross cutting

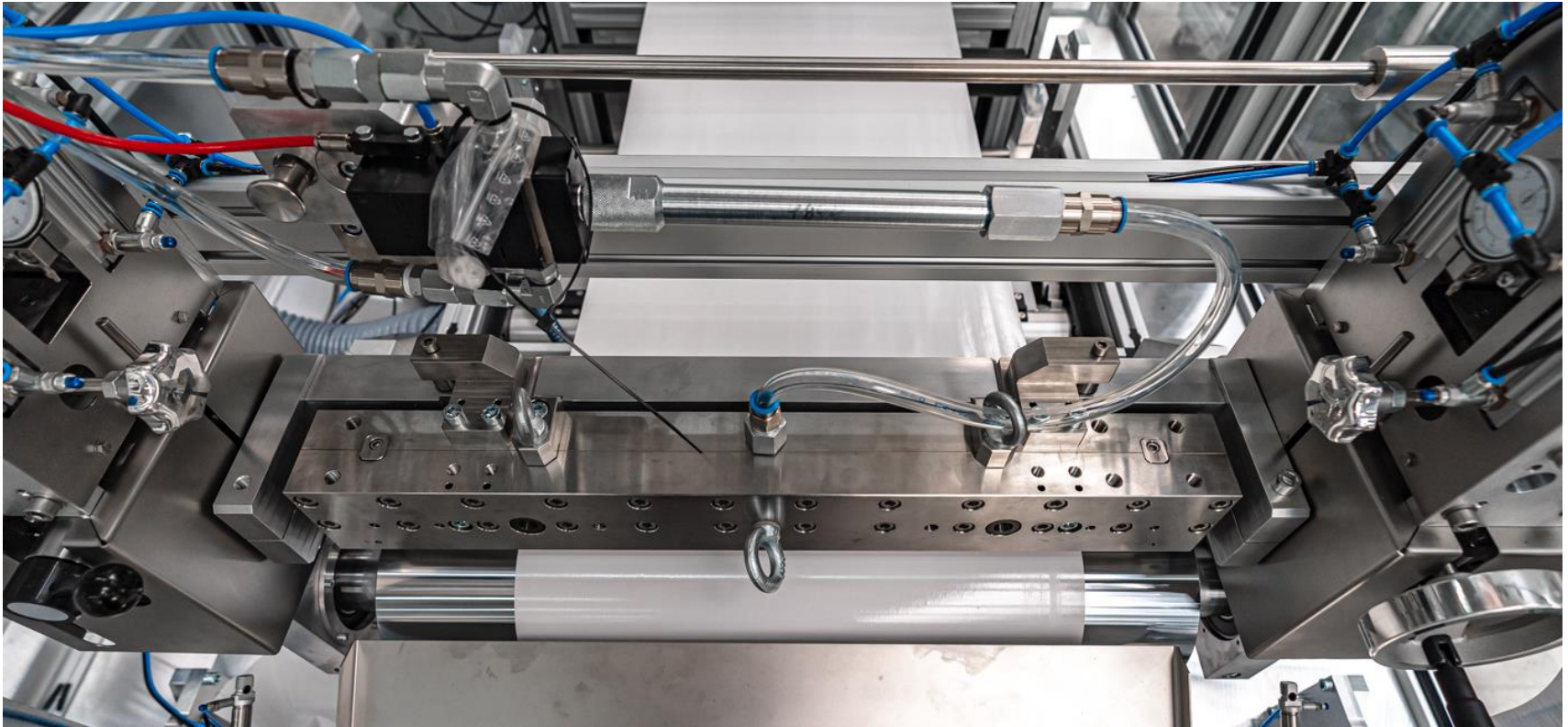










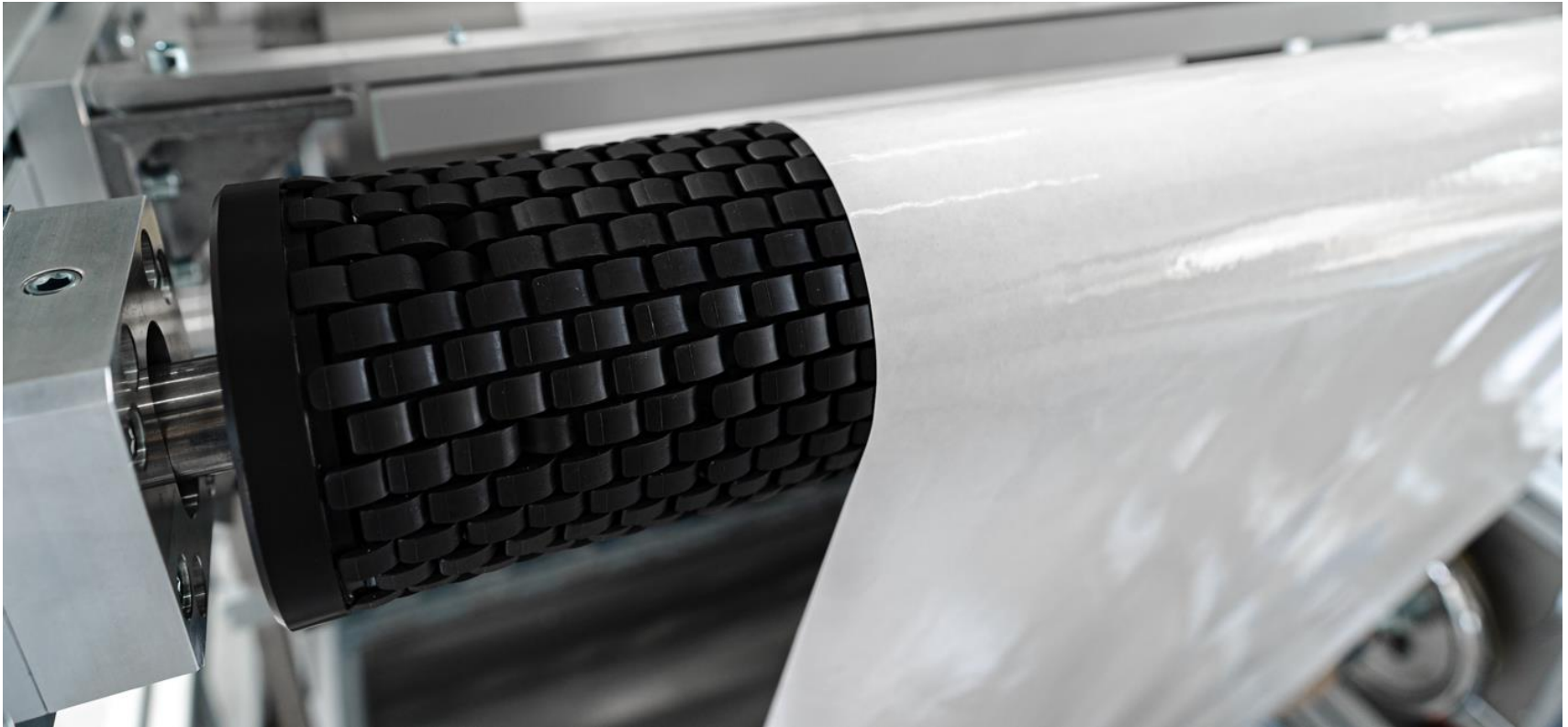














3.

Click&Coat™ steel layout



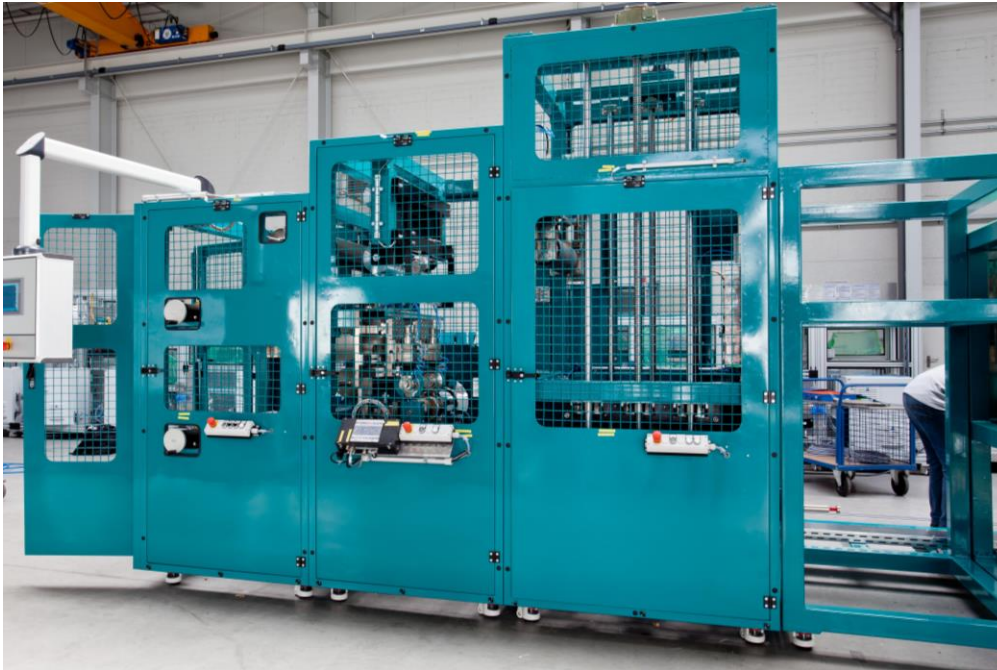
Coatema Click&Coat™ steel layout



Coatema Click&Coat™ steel layout



Coatema Click&Coat™ steel layout

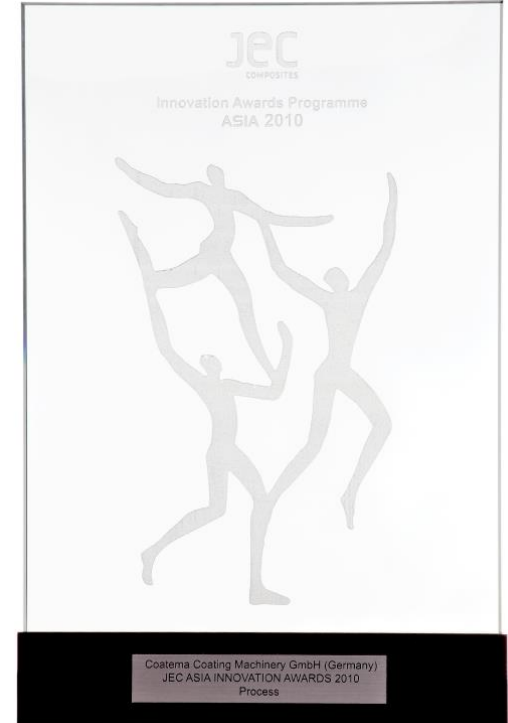


4.

Click&Coat™ for Prepreg production



Coatema Click&Coat™ for Prepreg production



Coatema Click&Coat™ for Prepreg production

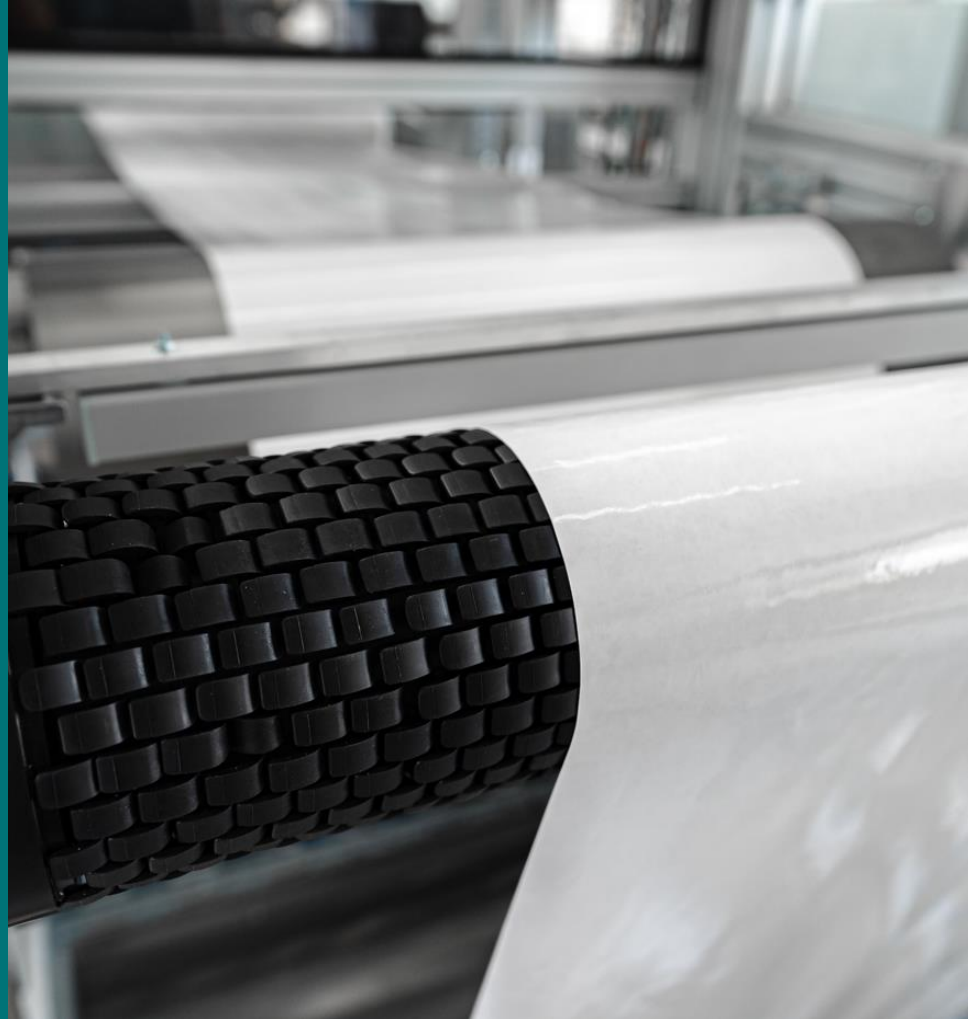


Coatema Click&Coat™ for Prepreg production



5.

Options & specifications



Technical specifications in detail

Awards & Patent

- ✓ Award winning Click&Coat™ design for connecting and aligning modules
- ✓ Patented Click&Coat™ design for connecting the modules

Operating options

- ✓ Siemens S7 software solution

Dimensions size

- ✓ Depending on configuration (LxBxH)

Dryer

- ✓ Hot air, IR, NIR, UV and photonic curing

Coating options

- ✓ Over 40 coating and printing systems easy to change

Machine Base

- ✓ Easy to use three-wire electrical connection
- ✓ Fast set up time for new processes or increased through-put

Additional equipment

- ✓ Washing module
- ✓ Lamination module
- ✓ Corona module
- ✓ Web cleaner
- ✓ Turret winder
- ✓ Inert coating modul
- ✓ Relaxation modul
- ✓ UV dryer (mobil)
- ✓ Double side lamination
- ✓ Inkjet printing
- ✓ Laser scribing
- ✓ Quality control systems

6.

Summary



The customer benefits

- ✓ Over 40 coating, printing and ancillary modules available
- ✓ Award winning Click&Coat™ design for connecting and aligning modules
- ✓ Easy three-wire electrical connectors
- ✓ Siemens S7 software solution
- ✓ Fast set up time for new processes or increased through-put
- ✓ Over 40 coating and printing systems for plug in and out
- ✓ Patented Click&Coat™ design for connecting the modules

C&C



Press Button to
show the video



Do not hesitate to contact us!



The Click&Coat™ 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
brochures & presentations



Coatema

Thank you

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www.coatema.com

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