

POWERING THE SUSTAINABLE PATH AHEAD



Constantia
Flexibles





IN A NUTSHELL

Welcome to Constantia Flexibles, where innovation in flexible laminates drives sustainable solutions for high-performance industries. With deep expertise in manufacturing advanced foils and materials, we deliver high-quality, environmentally responsible solutions tailored to meet the technical demands of sectors like lithium-ion battery production.

SOURCING

Sourcing in Europe and utilizing a CO2-friendly EU electricity mix. Sustainability screening of our suppliers.

EXPERIENCE

Long-term experience in supplying global product leaders in the FMCG industry.

LOWCARBALU

All products accessible with low carbon aluminum from Europe. Reach your GHG emissions and mitigate carbon taxes.

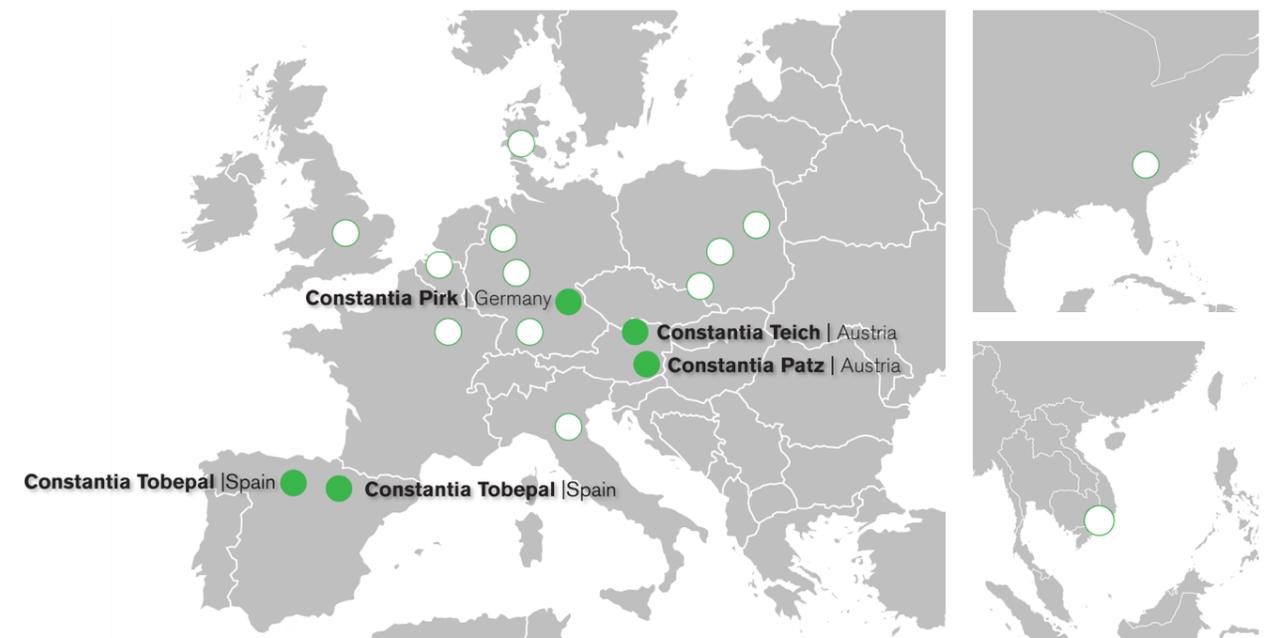
GREEN ELECTRICITY

100% sustainable electricity. Continuous optimization of carbon footprint at our plants, specifically utilization of waste heat and heat recovery.

CERTIFICATIONS



GLOBAL LOCATIONS



KEY FACTS



#2
IN EUROPE



#3
GLOBALLY



Vienna
HEADQUARTERS



37
PRODUCTION SITES
IN 18 COUNTRIES



>8.650
EMPLOYEES

SUPPORTER
ONE ROCK
CAPITAL PARTNERS

POUCH CELL LAMINATE

The Pouch Cell Laminate enhances battery lifespan and safety with strong PP seals, delamination resistance, and thermally stable adhesives. Through its flexibility, it supports large automotive cell designs, is optimized for serial production, and has a low CO2 footprint.

WHAT IS POUCH CELL LAMINATE?

The pouch cell laminate serves as the outer casing of a battery pouch, providing **protection to the cell chemistry** while allowing **flexibility in shape and size**. The shown laminate variants are made of lightweight and durable materials which combine aluminum along with polymers to **provide sealability and insulation**.

High resistance against electrolytes

Excellence max. forming depth

Superior heat sealing strength

Outstanding mechanical properties

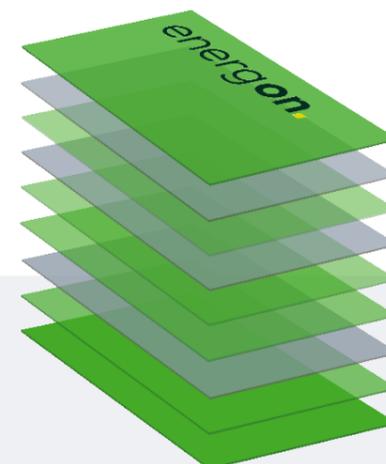
	PIN HOLES	LAMINATION STRENGTH	LAMINATION STRENGTH	SEAL STRENGTH	PUNCTURE STRENGTH	FORMING DEPTH	ELECTROLYTE RESISTANCE
	after forming up to 10mm	oPa/Alu at RT	Alu/cPP at RT	cPP/cPP	acc. to JIS Z 1707	349x104 mm punch	lamination strength Al/cPP
155µm				>120 N/15mm	>18 N	>10 mm	> 15 N/15mm after 24h, 85°C with LiPF6 EC/EMC/DMC 3/3/4
185µm	0 Pin holes/ m²	> 8 N/15mm	> 18 N/15mm	>120+ N/15mm	>22 N	>13 mm	

SUSTAINABILITY

- Reducing the CO2 footprint by 50% compared to standard products using EU-sourced aluminum and other sustainable raw materials.
- All aluminum processing steps for cathode foil at Constantia Teich are powered by renewable electricity sources.
- Optimized supply chain with production near Vienna for short and efficient material transport within Europe.
- Free from hazardous chemicals.

KEY BENEFITS

- Enhanced safety: superior mechanical strength, flexibility for deep forming
- Excellent machinability
- Protection against moisture and oxygen
- Extended cell life: Superior chemical resistance to modern electrolytes
- No deformation and sealing issues under extreme conditions
- Personalized product innovation supported by four Constantia Flexibles R&D centers
- Fully customizable widths up to 1600 mm



LAYER STRUCTURE

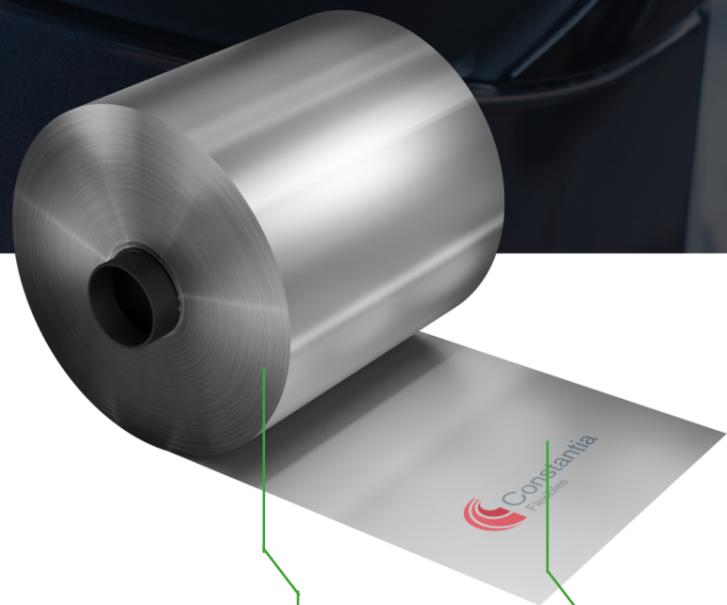
- PET
- Adhesive
- oPA
- Adhesive
- Alu Treatment
- Alu
- Alu Treatment
- Adh
- cPP

CATHODE FOIL

Designed for optimal conductivity and durability, our aluminum cathode foil enhances energy transfer and extends battery life in electric vehicles. Additionally, it is engineered for seamless integration in serial production, offering excellent bonding properties with Cathode Active Material (CAM).

WHAT IS CATHODE FOIL?

A **cathode foil** is a thin aluminum sheet that serves as a current collector, supporting active cathode material and enabling efficient electron flow. It is valued for its **lightweight, conductivity**, and corrosion resistance in high-voltage environments. **High elongation and tensile strength** are crucial to ensuring excellent machinability for large-scale battery production.



Excellent machinability through high tensile strength and elongation

Customizable bandwidths up to 1800 mm

Optimized wettability for perfect adhesion of CAM on aluminum

Low carbon footprint

ALLOY	THICKNESS	WIDTH	PRODUCTION STANDARDS	TENSILE STRENGTH	ELONGATION	WETTABILITY	CARBON EMISSION
A1100	10-20 µm Up to	1800mm	ISO 9001 & IATF 16949	>260 Mpa	>2.5%	>32 dyne	< 5 CO2 eq.

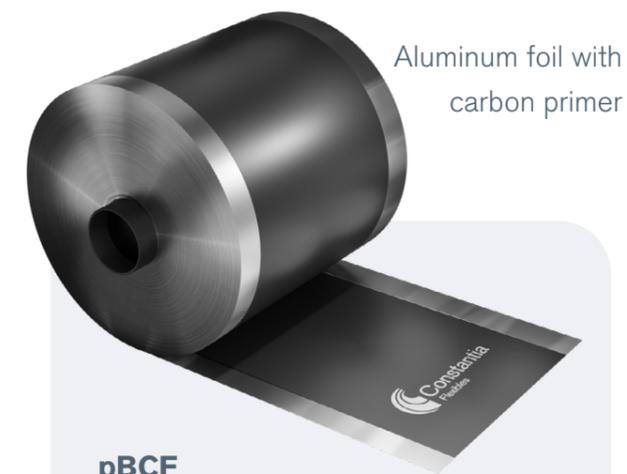
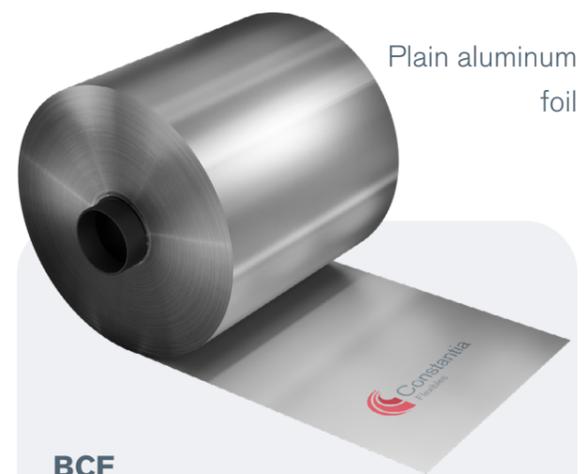
SUSTAINABILITY

- Exclusive utilization of low-carbon aluminum sourced from the EU.
- Manufactured using exclusively renewable electricity sources
- Minimization of production scrap through more than 110 years of experience in metal processing.
- Streamlined logistics from our manufacturing facility in Austria.

KEY BENEFITS

- Compliant with automotive standards.
- Optimized for large-scale production with superior elongation and tensile strength.
- ISO 9001 and IATF 16949 certified.
- Low carbon footprint: <5 kg CO2/kg
- Customizable widths up to 1800 mm.
- Backed by 40+ aluminum R&D experts for tailored solutions.
- Enhanced battery lifespan and performance with improved CAM bonding.
- Energon C^P: High conductivity with advanced carbon primer.

PRODUCT TYPES





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