

FLEXOO GmbH an InnovationLab company





We sense your needs

We specialize in delivering end-to-end solutions for smart sensors and electronics from initial development to final manufacturing.

Our dedicated team takes pride in tackling challenges headon. Experience firsthand fast and purposeful problem-solving tailored to your unique needs.





Battery Monitoring Solutions for
enhanced lifetime
efficient charging
improved safety
easier management

E-mobility and Renewable Energy Storage

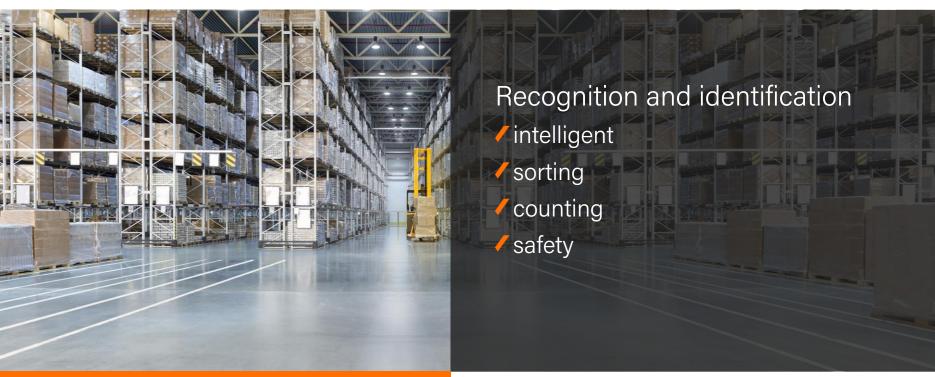




Detection and measurement
decentralized
delocalized
complex
pressure, temperature, leakage and more

Industry & Automation





Logistic & Retail





Automotive & Transportation





Recognition and identification
/ high performance
/ thin and flexible
/ hybrid
/ sustainable

Telecommunication & Flexible Electronics

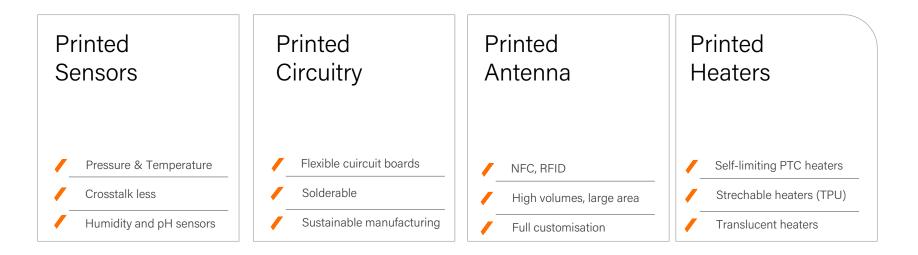




Defense Industry

Our Technological Know-How





End-to-End Solution for Unique Needs





Development

1200 m² of clean rooms and laboratories

Tailoring the layout and specs of existing sensor technologies

Developing new sensor technologies and sensor systems

Conceiving, engineering and production of hard- and software components

Embedding of the sensors into hardware, software and cloud systems



Our pilot line is a Gallus RCS 330 modified specifically for printed electronics with all type of printing (Flexo, ink-jet, gravure, etc.) and curing methods (IR, heat, UV, etc.)

Used for **process optimization** and **small series production** (<100k pieces) and prototypes.

Designed for **optimal usage** of ink volumes in order to **limit cost** of process development



Mass production

Manufacturing line: Gallus RCS 430

High precision (20 micron), high-speed production (up to 160 m/min), up to 7 different layers in one run

Easily accessible and exchangeable printing modules and curing units allow for **fast switch between products** (1-7 days vs 2-4 weeks)

Expertise and technology in practice

From R&D to mass production





BaMoS as a R&D tool

Battery Monitoring Solution is an exceptional R&D tool for measuring temperature and pressure distribution in prismatic and pouch cells.

With the capacity to deliver up to 100 million data points per day, it offers invaluable insights to understand and optimize battery performance. Possibly extends battery lifespan by up to 40%.



We design and develop the **tailormade solutions** to measure vital components of the battery cells.

Matrices are not only **cost-effective** but also engineered to provide **precise real-time data** from your battery pack.

Perfectly fitted sensors **seamlessly integrate** into your management system.



Mass production

With over a decade of expertise and cutting-edge printing technology at our disposal, we excel in delivering top-tier parts with unparalleled cost-effectiveness.

We have the capability to swiftly supply **millions of parts**, ensuring your needs are met with **remarkable efficiency**.

Collaboration & Partnership

Partnership based on bilateral expertise

Broad network of leading ink and materials providers to assure consistency in large volume production and bring the best solution to our customers.









End-to-End Realization

We accompany customers from initial development to mass production and ensure seamless integration and success by **reduced time to market**.

High-Volume R2R Manufacturing

Our roll-2-roll printing machines are designed to manufacture complex products with several layers and different types of materials. Our unique manufacturing setup offers **large-scale production** of tailor-made sensors and electronics.

European Manufacturing Excellence

Our manufacturing lines are used to satisfy highest quality standards, established over years of experience by a Swiss leader for manufacturing of graphical printing machines, modified to produce functional prints with **highest quality and consistency**.

Flexibility

Our team possesses extensive expertise in materials and process technology, allowing us to deliver unparalleled **flexibility in designing** sensor and electronics products, setting a new standard in the market.

Who is FLEXOO?



R&D leader meets manufacturing excellence

	2008	2014	2017	2018	2019	2020	2021	
	Formation of InnovationLab	Consolidation of iL 16 R&D projects	1 st Pilot Printed Electronics Production		1 st Industrial Printed Electronics Production ISO 9001	HPE is created as 100% subsidiary of HDM	1 st Proprietary Product BaMoS	FLEX
funded 6 years	by BMBF for for printed hics R&D	Became a true open- innovation platform financed by its shareholders (names below)	Cooperation w Heidelberger Druckr			HPE		Formation of FLEXOO
Innovat	ionLab original Shar	eholders :				oduction line talled in Wiesloch		















Schedule an appointment

Bart Jarkiewcz Technical Sales Manager

Lars Keiz Product Manager Battery Monitoring Solutions



Dr. Florian Ullrich Head of Business Development



Company presentation 17

 Custome 	FLEX			
	TRELLEBORG	SANOFI	NEC	LEONI
Bausch		RECARO	ROLIC technologies a subsidiary of BASF	KOB
(M) MARQUARDT	HEIDELBERG	SAP	The Chemical Company	
G R O U P	method	tacterion	^C REHAU	innome
BioMed 🗙	vibrosonic«	PUREVALUE	sovanta simplicity first	