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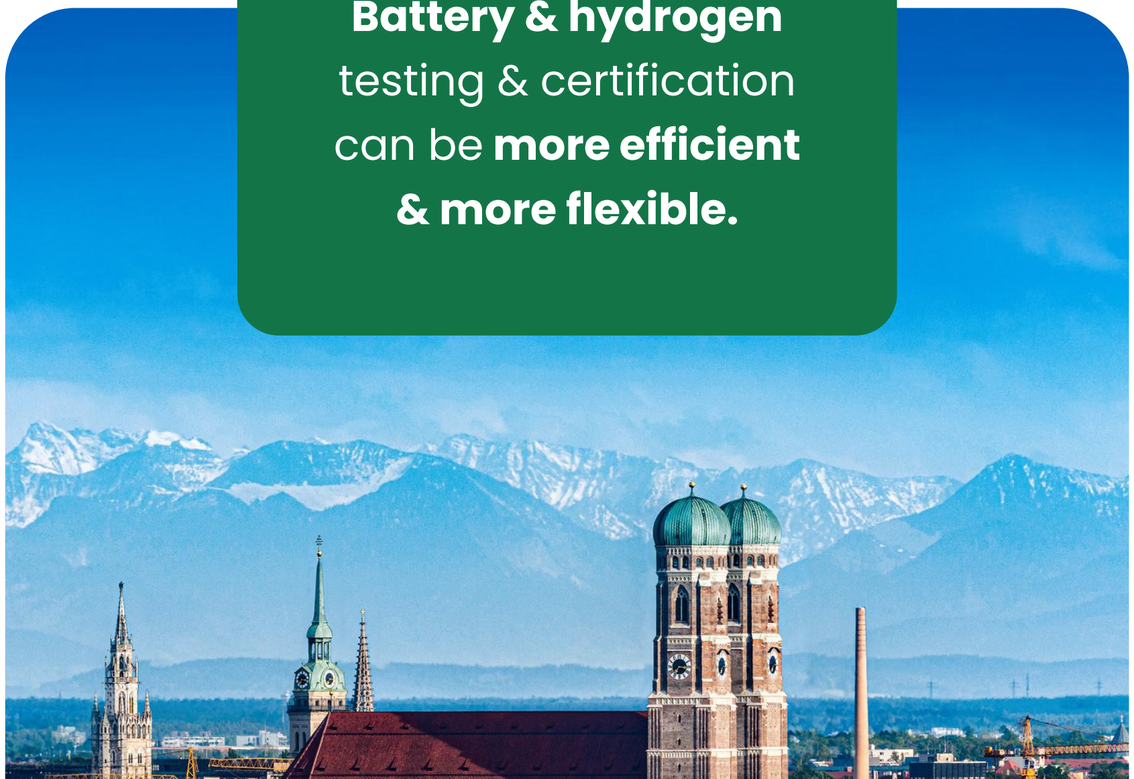
Increasing **efficiency, safety & quality**
for battery & hydrogen systems

June 2025

We believe:

Battery & hydrogen testing & certification can be **more efficient & more flexible.**



Founders

Martin Sekura and **Johannes Rößner** have 30 years of joint experience in the **hydrogen and battery** TIC (testing, inspection & certification) industry.

Mission

Our goal is to help clients from the hydrogen and battery industries to become **faster, safer and cheaper**.

HOW?

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OUR GOAL FOR YOU

IS TO BECOME

FASTER

by better testing organization, efficient certification and streamlined CE conformity

SAFER

by better risk assessment, safer technology handling and increased knowledge

CHEAPER

by more efficient design, lean validation and optimized approval

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Profile

Johannes Rößner

Battery technology

Since 2024	Managing director and co-founder at **batch2 engineering GmbH**
Since 2022	Managing director and co-founder at **BT Advisor UG**
2021 - 2024	Managing director and co-founder at **Sekura & Roessner Media GbR**
2019 - 2022	Global focus segment manager New Energy Vehicles at **TÜV SÜD Product Service Division**
2016 - 2018	Section manager EV battery testing Greater China at **TÜV SÜD China**
2015 - 2016	EV battery technical manager Japan at **TÜV SÜD Japan**
2012 - 2015	Test engineer, team lead and deputy general manager at **TÜV SÜD Battery Testing GmbH**

Johannes has been part of the battery testing industry since the very beginning. He studied Electrical Engineering and joined the freshly founded TÜV SÜD Battery Testing GmbH in 2011. Later, he took the position of Global Focus Segment Manager "New Energy Vehicles" at TÜV SÜD Product Service division and spent seven years in Japan and China, building up battery test labs and coordinating the global battery testing at nine locations worldwide. In 2022, he founded BT Advisor UG.

Johannes has deep experience in the planning, setup and operation of battery labs - from business case and market analysis to construction, ramp-up and operation.

He has extensive knowledge about battery testing, test standards, validation plans and battery handling. He performed various trainings and presentations in the areas of battery safety and efficient battery testing and validation. Johannes also supported local operations in ramping up business and developing new services, for example hydrogen testing.

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Profile

Martin Sekura

Hydrogen technology

Since 2024	Managing director and co-founder at **batch2 engineering GmbH**
2021 - 2024	Managing director and co-founder at **Sekura & Roessner Media GbR**
2021 - 2024	Business development manager hydrogen & fuel cell at **TÜV SÜD Product Service GmbH**
2011 - 2020	Test engineer, team lead and Head of sales & certification at **TesTneT Engineering GmbH**
2010	Working student and consultant at **Ludwig-Bölkow-Systemtechnik GmbH**

In the hydrogen industry since 2010, Martin is likely one of the most experienced members of the "hydrogen family". He studied Mechanical Engineering and is a Master of Business Administration.

Martin started his career with Ludwig-Bölkow-Systemtechnik GmbH and TesTneT Engineering GmbH.

Before he co-founded batch2 engineering GmbH, he was the Hydrogen and Fuel Cell Business Development Manager at TÜV SÜD Product Service GmbH and founded Sekura & Roessner Media GbR together with Johannes in 2021.

Through all of his roles, he gained extensive experience in planning, setup, and operation of hydrogen test labs for qualifying materials, components, tanks, and systems.

Martin managed all phases of lab business: From business case creations, market analysis, construction, and commissioning though operation.

He is a member of various expert groups and technical committees, and developed various test standards, norms and regulations.

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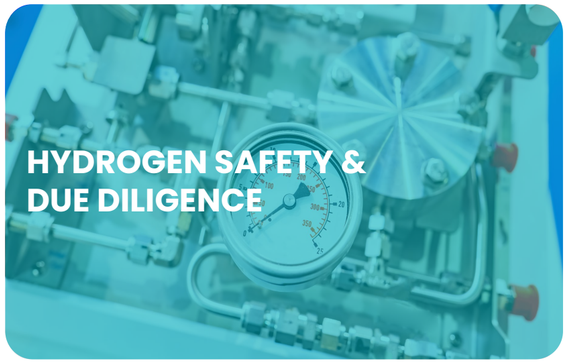
SERVICE PORTFOLIO



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ENERGY SYSTEMS & TEST LAB CONSULTING

Our services

encompass thorough test lab feasibility studies and in-depth technical due diligence and risk assessment of lab concepts.
We assist in the setup and validation of business cases, while also providing detailed layout planning and cost estimations to streamline operations.
We handle supplier due diligence and coordination to ensure trustworthy collaboration, all while offering quality management support to uphold the highest standards throughout the project life cycle.

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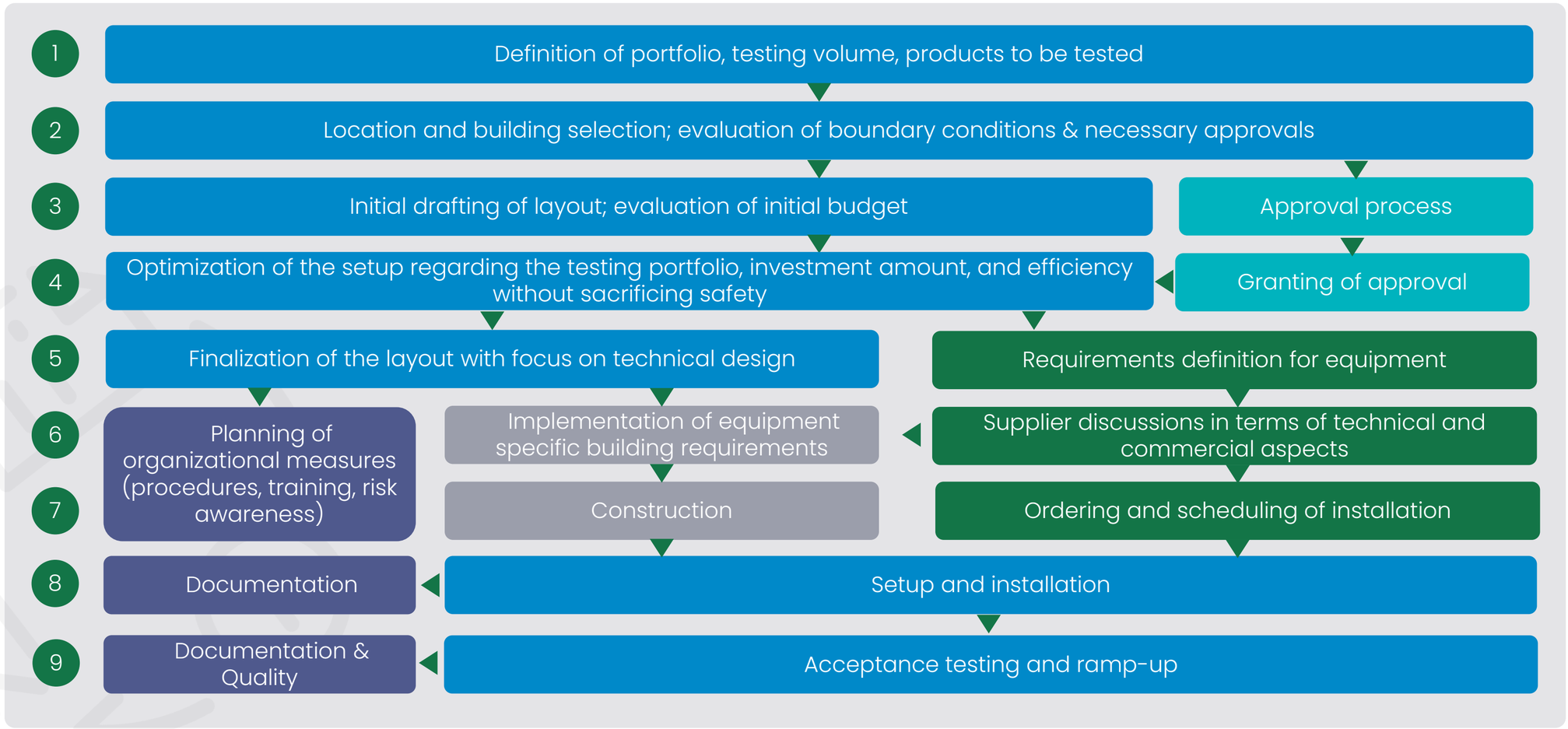
BEST PRACTICE APPROACH FOR TEST LAB PLANNING



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ENERGY SYSTEMS & TEST LAB CONSULTING

SPOTLIGHT

Business case creation for test labs

batch2 engineering assists several clients in evaluating optimal locations, customer networks, and market opportunities. Services included the initial planning of the lab portfolio, the design of the lab layout with efficient processes in mind, and the budgeting of investments.

batch2 also developed complete business cases with CAPEX, OPEX and sales expectations. We guided the search for suppliers and supported during supplier negotiations - offering independent, unbiased opinions to facilitate informed decisions.

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ENERGY SYSTEMS & TEST LAB CONSULTING

SPOTLIGHT

Risk, uncertainty and sensitivity analysis of business cases

Investing in exciting technologies like battery and hydrogen is promising but also linked to uncertainties and insecurities.
Coming from decades of experience, batch2 engineering is your partner for evaluating the influencing dynamics of your business models and development concepts.
We identify and analyze the risk factors and sensitivities – helping you make informed decisions with a good feeling.

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BATTERY SAFETY & HANDLING ADVISORY

We focus

on the evaluation and optimization of battery handling processes, carefully reviewing each step from incoming goods to storage, assembly, and testing.
Our team supports safety improvements, addressing potential battery risks to ensure a secure and efficient workflow.

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BATTERY SAFETY & RISK ASSESSMENT

SPOTLIGHT

Safety concepts, risk assessment, HAZOP, FMEA, FMECA, FMEDA

Providing a safety concept and performing a risk assessment is a mandatory aspect of development projects. Based on decades of experience, batch2 engineering supports you in identifying and evaluating safety aspects and risks properly and thoroughly.
We make sure you are professionally fulfilling your obligations as a manufacturer or as an operator of a battery storage system - with the good feeling that you and your customers are safe.

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BATTERY SAFETY & HANDLING ADVISORY

SPOTLIGHT

Safety evaluation of battery test labs

batch2 engineering conducts thorough analysis of lab setups, portfolios and processes, mapping out each process step from the perspective of battery management, project execution, and lab oversight.

Our services include detailed safety evaluations of battery handling, storage, and testing - along with the identification and evaluation of optimization opportunities to enhance efficiency and safety.

batch2 engineering

HYDROGEN SAFETY & DUE DILIGENCE

We ensure

in-depth product feasibility studies and technical due diligence of product concepts, alongside comprehensive market research and competitor analysis. Our services include professional risk assessment, evaluation and review of materials selection criteria, safety concepts and explosion protection concepts.

We create your design verification plans and develop your certification and CE marking strategies to ensure your products meet industry regulations and standards.

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HYDROGEN SAFETY & DUE DILIGENCE

SPOTLIGHT

CE conformity of hydrogen & renewable energy systems

batch2 engineering helps you on your path towards successful CE marking of your hydrogen systems.
We guide you through the relevant European regulations and directives, such as Pressure Equipment Directive (PED), Machinery Directive (MD), Low Voltage Directive (LVD), Transportable Pressure Equipment Directive (TPED), as well as ATEX, RoHS and EMC directive.
We include notified bodies when needed, and can put our test lab network to use for any lab testing requirements.

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HYDROGEN SAFETY & RISK ASSESSMENT

SPOTLIGHT

Safety concepts, risk assessment, HAZOP and FMEA

Providing a safety concept and performing a risk assessment is a mandatory aspect of many development projects. Based on decades of experience, batch2 engineering supports you in identifying and evaluating safety aspects and risks properly and thoroughly.
We make sure you are professionally fulfilling your obligations as a manufacturer or as an operator of a hydrogen or battery system - with the good feeling that you and your customers are safe.

batch2 engineering

TECHNICAL COACHING AND TRAINING

We enable

our client to ensure technical compliance and to create design verification and certification strategies.

Our expertise includes trainings on comprehensive battery handling procedures and awareness, covering everything from functionality to safety risks.

We also provide management coaching in technology, safety, strategy, and terminology, to empower leadership with the knowledge needed to drive informed decision-making and meet industry standards.

batch2 engineering

TECHNICAL TESTING & CERTIFICATION

We provide

expertise in creating test plans and test procedures, in managing technical and scheduling risks, and in developing certification, type approval, and homologation strategies.
Our services also include ensuring CE conformity and crafting market access strategies, tailored to meet regulatory requirements for successful access to global markets.

We know:

Hydrogen compatibility evaluation of components & systems must become **faster**, **safer** and **cheaper**.

The solution: ***LAUNCH2***

LAUNCH2 is the new, efficient program for the **first hydrogen compatibility evaluation of your components and systems**.

LAUNCH2 ...

- ... is slim, quick, flexible and cost-efficient
- ... evaluates material & product hydrogen compatibility
- ... includes doc checks and, if required, lab tests
- ... is the ideal basis for advanced-level certifications like

  H2 readiness (DVGW),

  ISO certifications (e.g. ISO 19887-1, ISO 22734),

  type approval (e.g. UNECE R134, 2021/535/EU).

info@batch2-engineering.com

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TECHNICAL TESTING & CERTIFICATION

H2 Ready

SPOTLIGHT

Technical hydrogen testing portfolio

batch2 engineering is your partner for technical testing of your products and systems according to the state of technology.
Have your products tested efficiently and effectively with batch2!

ISO 15848-1: Fugitive emissions of industrial valves
DVGW G 405: Conversion of asset valves to hydrogen
DVGW G 406: New gas valves in H2 applications
DIN SPEC 3456: Industrial armatures for H2 applications

ISO 19887-1: Hydrogen vehicle components
ISO 17268: Hydrogen refueling interface
(EC) 79-2009: Hydrogen vehicle components
ANSI CSA HGV 3.1: Hydrogen vehicle components

SAE J2579: Metallic material H2 compatibility (table B.2)
CSA ANSI CHMC2: Plastic material hydrogen compatibility
ISO 19880-X: H2 refueling stations (components)
ANSI CSA HGV 4.X: H2 refueling stations (components)

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PRODUCT CERTIFICATION & TYPE APPROVAL

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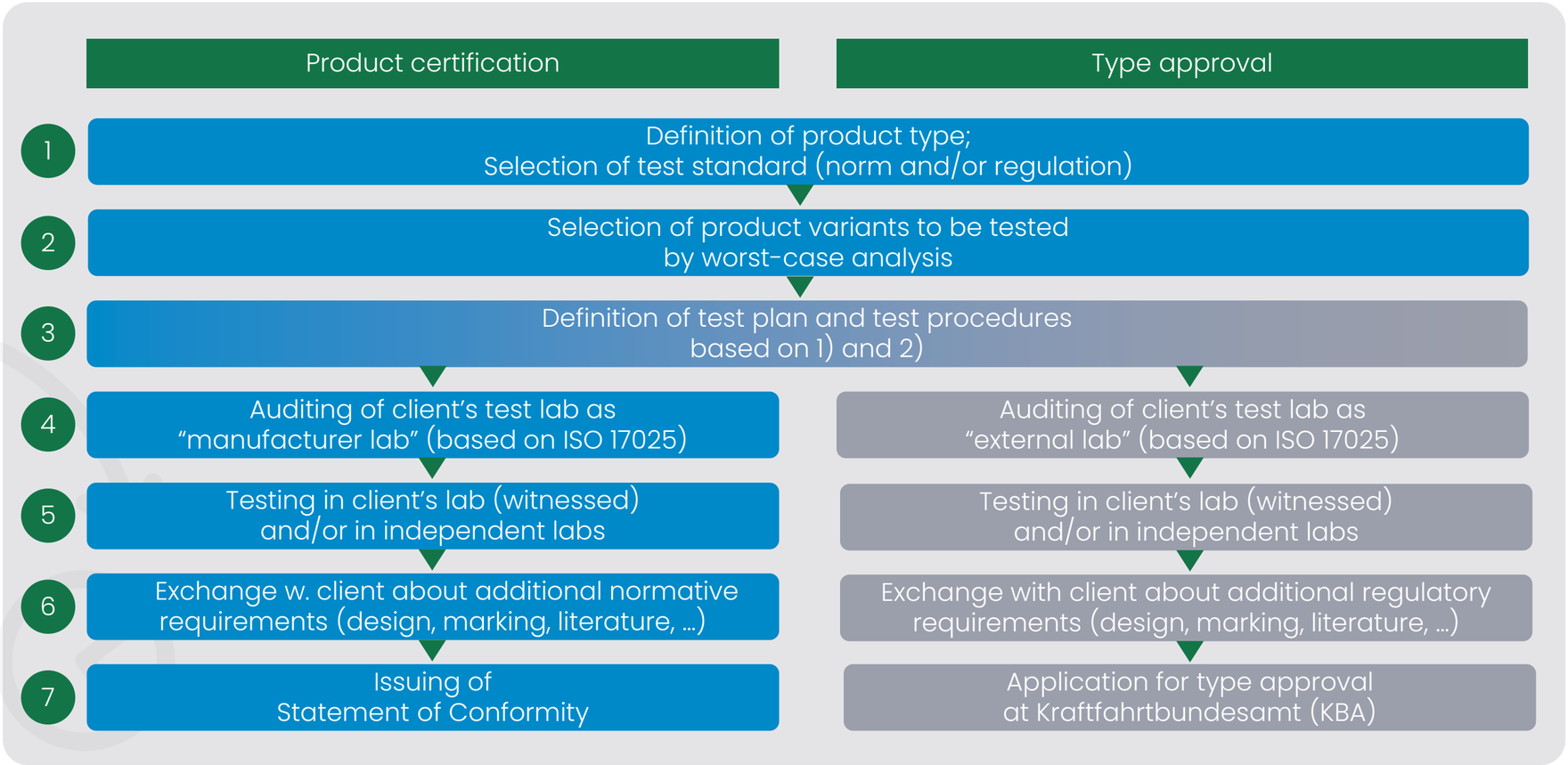
Technical service



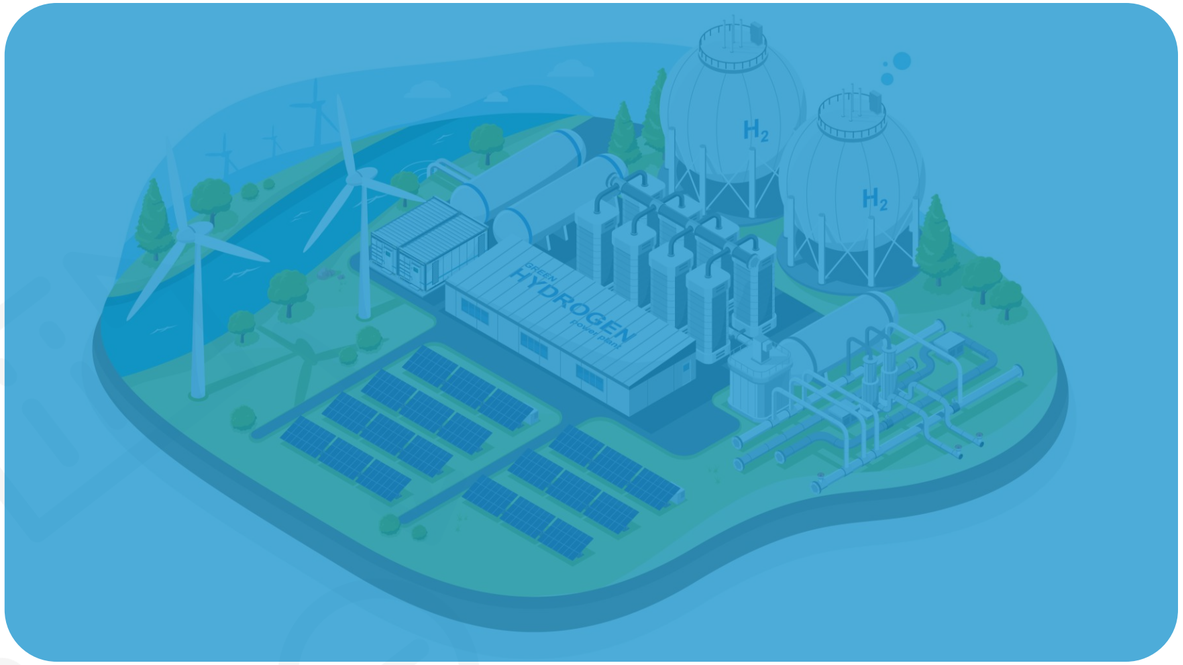
TECHNICAL TESTING & CERTIFICATION

SPOTLIGHT

Management of product validation

batch2 engineering is taking care for your technical product validation.
Already during the development process, requirements must be regularely validated to ensure finally a product that meets the expectations of the customers and regulatory requirements.
Before placing the product on the market, applicable regulations and mandatory requirements must be met.
batch2 engineering is stepping in to take off your shoulders the burden of ensuring complete testing and complying with the applicable regulations
Have your products tested efficiently and effectively with batch2!

TECHNICAL TESTING & CERTIFICATION



SPOTLIGHT

ISO 22734 compliance now mandatory for European Hydrogen Bank funding

October 2024, the European commission decided that electrolyzer systems need to be compliant with the standard ISO 22734 before becoming eligible for the European Hydrogen Bank funding mechanism.

Manufacturers of electrolyzers should make sure their products meet all ISO 22734 requirements, in order to offer an attractive product to their customers.
batch2 engineering supports you in making your product ISO 22734 compliant - get in contact with us!

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PODCASTING & PODCAST PRODUCTION

We inspire

listeners by planning, recording and publishing thought- and insightful podcasts.

Apart form the legendary “Hydrogen Bar Podcast”, we produce the “Battery Testing Mentor” and various clients’ podcasts. With many years of experience in podcast production, batch2 engineering is your ideal partner. If you want to start your own podcast or want to appear on one as a guest – let us know!

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