

## **MAKING SYSTEMS INTELLIGENT**

ITK ENGINEERING GMBH







### **TAILOR-MADE SOLUTIONS**





#### **AUTOMOTIVE**

#### SHAPING THE MOBILITY OF TOMORROW





#### **Highly Automated Driving**

automated and safe: tailor-made solutions for the car of tomorrow



**E-Mobility** 

electrified and connected towards the future



**Systems Engineering** 

mastering complexity with methodology expertise



**Verification & Validation** 

intelligently verify & validate complexity



**Automotive Applications** 

future-oriented solutions pertaining to connectivity and automotive health



**Automotive Products** 

from software & hardware development to serial production





# **COMMERCIAL VEHICLES**SAFE. ECONOMIC. CONNECTED.





**Logistics 4.0** 

transport chain digitalization (last mile, automation of business processes, intelligent trailer)



Development & Implementation of Connected Services

platooning, connectivity, fleet management, predictive maintenance



**Custom-Made Prototype** & System Development

platform-independent system solutions for TCO reduction (autonomous driving kit systems)



**Emission-Free Drive Solutions** 

hybridization / electrification / H2 technologies





#### **OFF-HIGHWAY VEHICLES**

#### ADVANCING OCCUPATIONAL SAFETY AND PRODUCTIVITY





#### **Digitalization**

smart farming, Nevonex feature development, connectivity – along with increasing automation of machines and processes



### **Certified System Solutions**

system development, reliable detection of objects & people, sensor simulation, use cases on digital 3D capturing



& Cross-Platform, Cross-Product & Cross-Component Realization

grey-box engineering from prototype to industrialized solutions – tailored to customer requirements





# **RAILWAY ENGINEERING**DIGITAL. MODEL-BASED. CERTIFIED.





## Digital Solutions for Rolling Stock & Infrastructure

modern software und systems engineering as a partner for railway operators as well as systems and component manufacturers



**Rail 4.0** 

innovations on the track via software, cross-industry synergies and smart engineering



**Strategic Areas** 

modular software architectures, smart maintenance, Al and cloud-based, distributed acoustic sensing (DAS), cyber security, automated operation and safe and extremely precise localization



**Software Factory** 

certified ITK CENELEC Reference Workflow for process-oriented, automated and standard-compliant development



#### **MOTORSPORT**

#### INTELLIGENT. FASTER. FIRST.





From the Initial Idea to Racing Application

development and implementation of innovative concepts, optimization of race cars, technical support on the racetrack



**Test Lab for New Concepts** 

endurance test for the future of series vehicles on the street



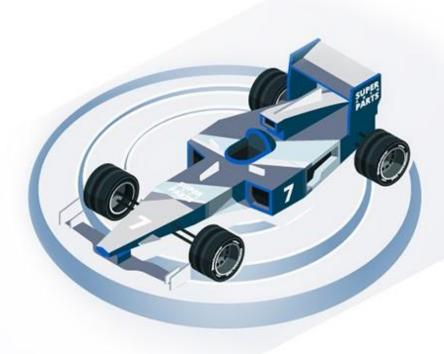
**Motorsport as** a Team Sport

passion and major successes – in the race and at the development stage



Cross-Manufacturer & Cross-Racing Series Realization

simulation & optimization, data analysis, verification & validation, algorithm and function development





#### **MEDICAL SYSTEMS ENGINEERING**

#### SHAPING TOMORROW'S HEALTHCARE TECHNOLOGY





**Systems Engineering** 

tailor-made systems engineering all from one source: software, electronics, and mechanics



**Digital Health** 

one-stop supplier for connected health solutions: from consulting and development to approval



**Robotics** 

smart, robot-supported assistance systems: safetycritical software, control algorithms, electronics and mechanics



**Medical Consulting** 

consulting rooted in real-world experience regarding regulatory topics as well as new technologies and business models





#### **INDUSTRY**

### **ENABLING DIGITAL TRANSFORMATION**





**Smart Factory: Digital Transformation** 

partner on the trajectory towards custom-tailored industry 4.0 solutions



**Smart Products: Prototype to Series Production** 

enablement and realisation of non-automotive products

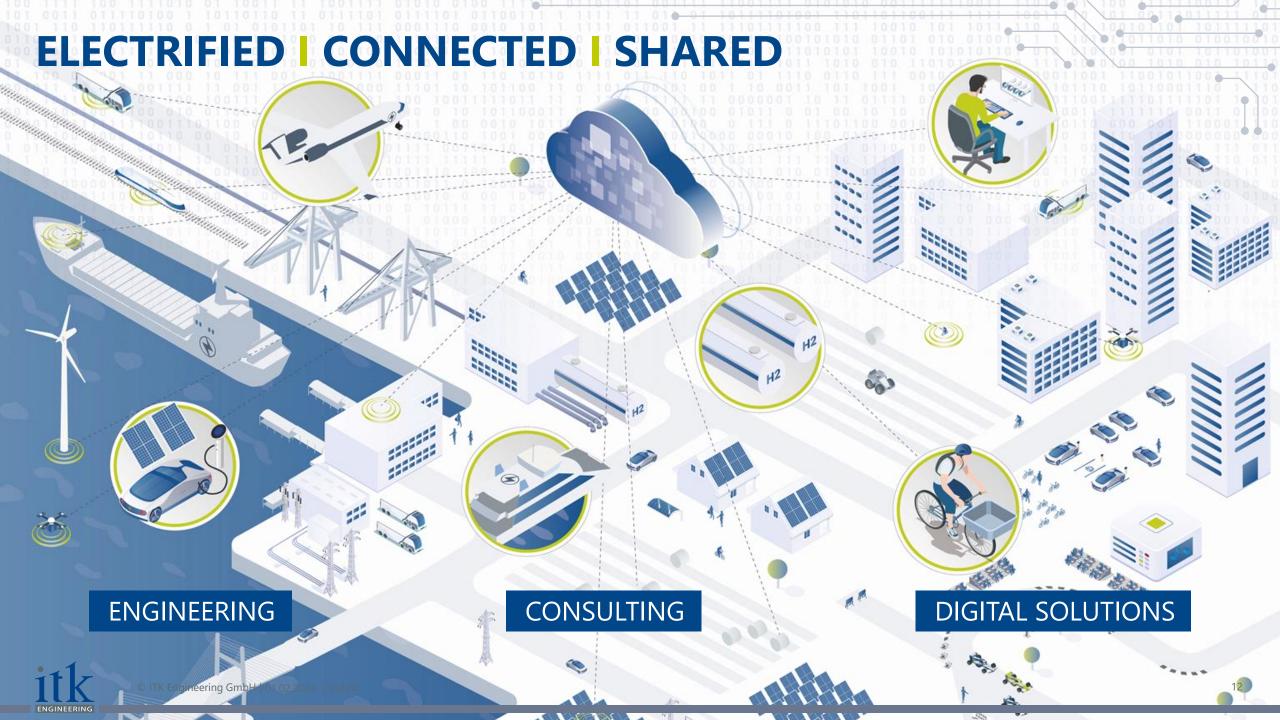


**Smart Machines: Digital Industry Systems** 

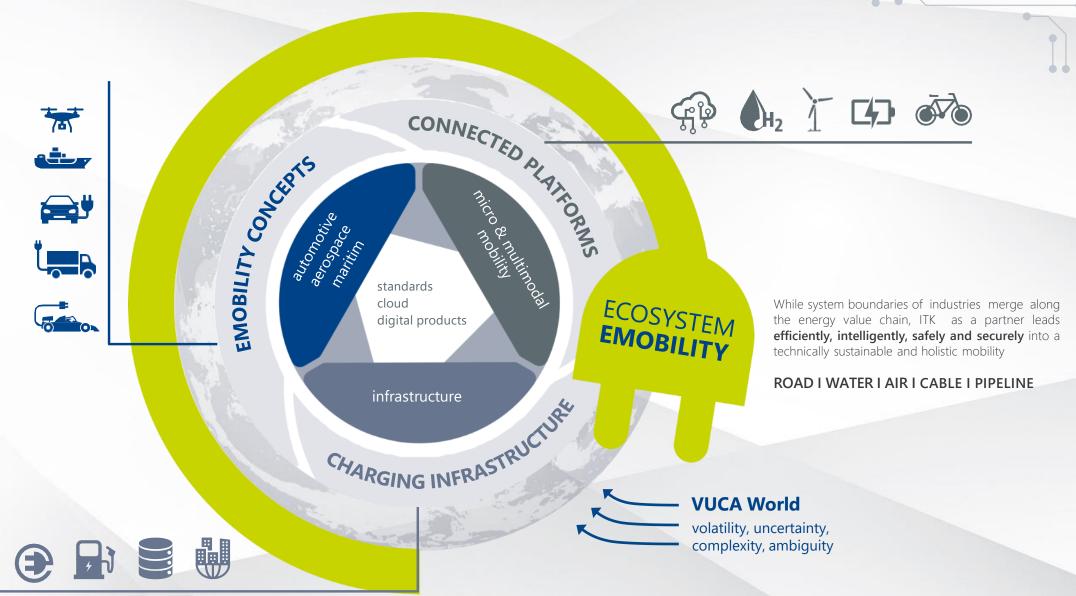
general contractor for custom-made system solutions in small quantities







#### **OUR CROSS-DOMAIN EXPERIENCE**





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#### FROM IDEA TO FINISHED SOLUTION

#### MISSION STATEMENT

... who solves complex technological challenges.

Methodological expertise combined with a deep system understanding – that is the basis of our tailor-made solutions.



reliable

partner...

... who guides customers directly to solution, even in a volatile world.

From idea to product – responsively, structured, on schedule.

... who creates trust.

No surprises but security, transparency and commitment.



Individual whitebox solutions including IP – giving our customer exclusivity and independence.

... who transforms customer ideas into standard-compliant requirements.

Understand, describe, and realize – our customer can focus on what really counts.

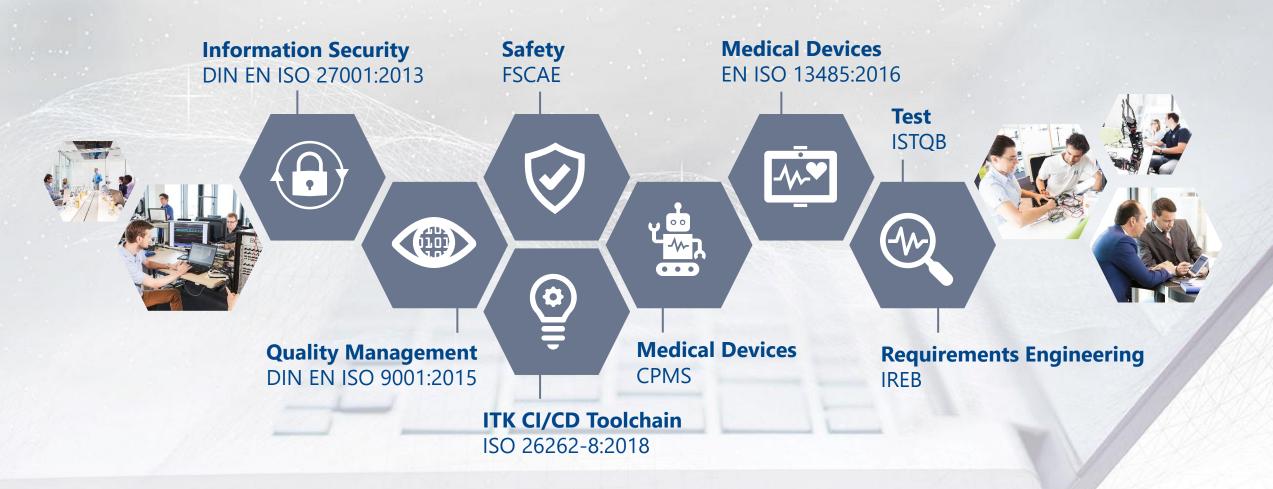


... whose enthusiasm and passion you can feel.

A partner who is one step ahead.



# FROM IDEA TO FINISHED SOLUTION CERTIFICATIONS





#### **FACTS & FIGURES**



**Dr. Frank Schmidt** CEO



**Jens Hofmann** CFO



100% subsidiary of Robert Bosch GmbH since 2017



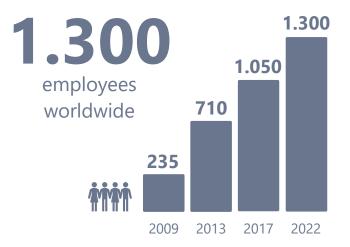
10 locations in Germany
Ruelzheim | Berlin | Holzkirchen |

Ruelzheim | Berlin | Holzkirchen | Ingolstadt | Stuttgart | Frankfurt | Lollar | Cologne | Braunschweig | Friedrichshafen

5 locations worldwide
Barcelona | Detroit | Wuxi | Tokyo | Vienna

>25 years

of experience in custom-made systems and software engineering in various industries









## THANK YOU FOR YOUR ATTENTION.









