

## JOIN OUR TECH PRESENTATIONS LIVE ON STAGE & EXHIBITION

## ITK Engineering tech presentation live on stage



# Driving the future: enabling the software-defined paradigm shift in transportation

Join us for an exclusive stage presentation on enabling the paradigm shift toward the software-defined future of transportation. The Bosch Group, including its subsidiaries, ETAS, Bosch Engineering, and ITK Engineering, offers a comprehensive portfolio of hardware and software products, engineering, and consulting services to support commercial vehicle OEMs in their transformation. We will discuss the necessary changes in business models, architectures, processes, and organization to become a leading innovator in the industry. Let's work together to pave the way for the future of transportation.



#### **Enabling H2 storage for H2 based zero emission vehicles**

Considering the upcoming challenges in the transportation industry, particularly in achieving zero emissions, hydrogen is being recognized as an important additional technology alongside battery electric vehicles. In collaboration with our subsidiaries ITK Engineering and Bosch Engineering, we present the entire process of a comprehensive solution for the conception of a hydrogen tank system, resulting in a safe, optimized, and certified tank solution for road use. We have developed a customized safety concept to ensure the highest safety standards for H2 tank systems, tailored to the specific needs of our customers. This includes support for the refueling process, H2 storage, and H2 provision on demand.



#### Gate safety concept and consulting as key element of yard automation

When driving to loading gates, securing transport vehicles, and during the loading process itself, various precautions are necessary to ensure the safety of people, machinery, and cargo. Aiming at fully automated logistics yards with safe and efficient processes, we offer individual concept consulting and solutions that already support loading staff and drivers today. Using the example of DYSIS, we demonstrate a use case where drivers of conventional trucks are specifically alerted by their smartphones when pedestrians enter the maneuvering area while reversing.



## **ITK Engineering exhibition**



#### Consulting and engineering services to accelerate your path to SdV

With the shift from hardware to software-defined vehicles, software has become one of the primary differentiators for the industry. To navigate this significant transformation, manage the increasing complexity of software spanning from vehicle systems to cloud infrastructures, and tackle the surging integration efforts, a combination of hardware and software products, tailer-made solutions, and innovative development methodologies is essential. Our customized consulting and engineering services are designed to meet these demands and accelerate your transition to software-defined vehicles (SdV).



# Empowering hydrogen based zero-emission vehicles with safe H<sub>2</sub> tank systems and cutting-edge digital twin technology

Hydrogen is crucial for the transition to zero-emission vehicles, as it is an important complement to battery-powered electric vehicles, especially for commercial vehicles. Safe storing and controlled release of this highly flammable gas, as well as the refueling process, pose significant challenges. Our customized engineering services support you on the entire process, from design to implementation, creating a safe, optimized, and certified H<sub>2</sub> tank system for road use. Additionally, we employ cutting-edge digital twin technology to monitor and improve H<sub>2</sub> refilling stations, ensuring maximum safety and efficiency.



#### Gate safety concept and consulting as key element of yard automation

Evaluation and implementation of the gate safety concept focusing the blind-spot challenge. Approach to automated capturing and transferring safety and process-related information with the goal to increase safety and efficiency at loading gates in logistics yards. Experience our patented solution demo.





**ITK.** The Art of Digital Engineering.