



# AVL Fuel Cell Demo Truck

Energie aus Wasserstoff

TÜV SÜD Impuls-Reihe

J. Rechberger

# AVL Fuel Cell Technology Demonstrator Truck

## Key Technology Building Blocks



**High-Performance  
BATTERY**



**Compact  
E-AXLE**



**Predictive  
ENERGY MANAGEMENT**



**Durable  
FUEL CELL SYSTEM**

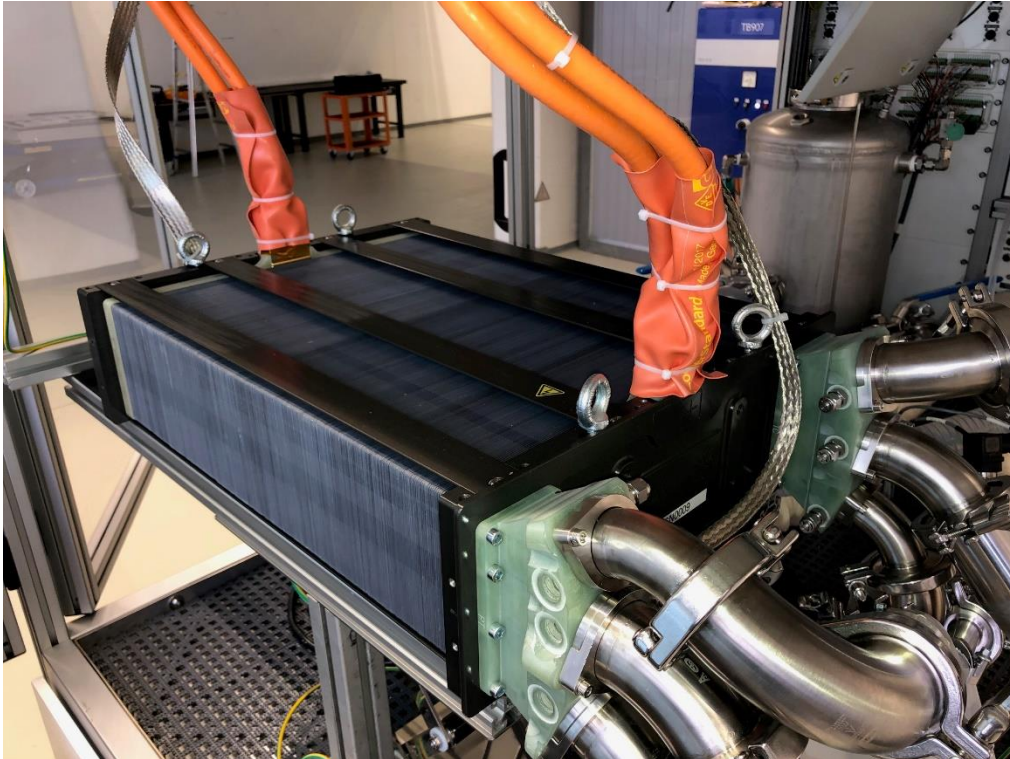


**High Performance  
VEHICLE COOLING**

**Model Based Development Platform  
(Office, VTB & Powertrain Test Bed)**



# AVL Gen0 Stack

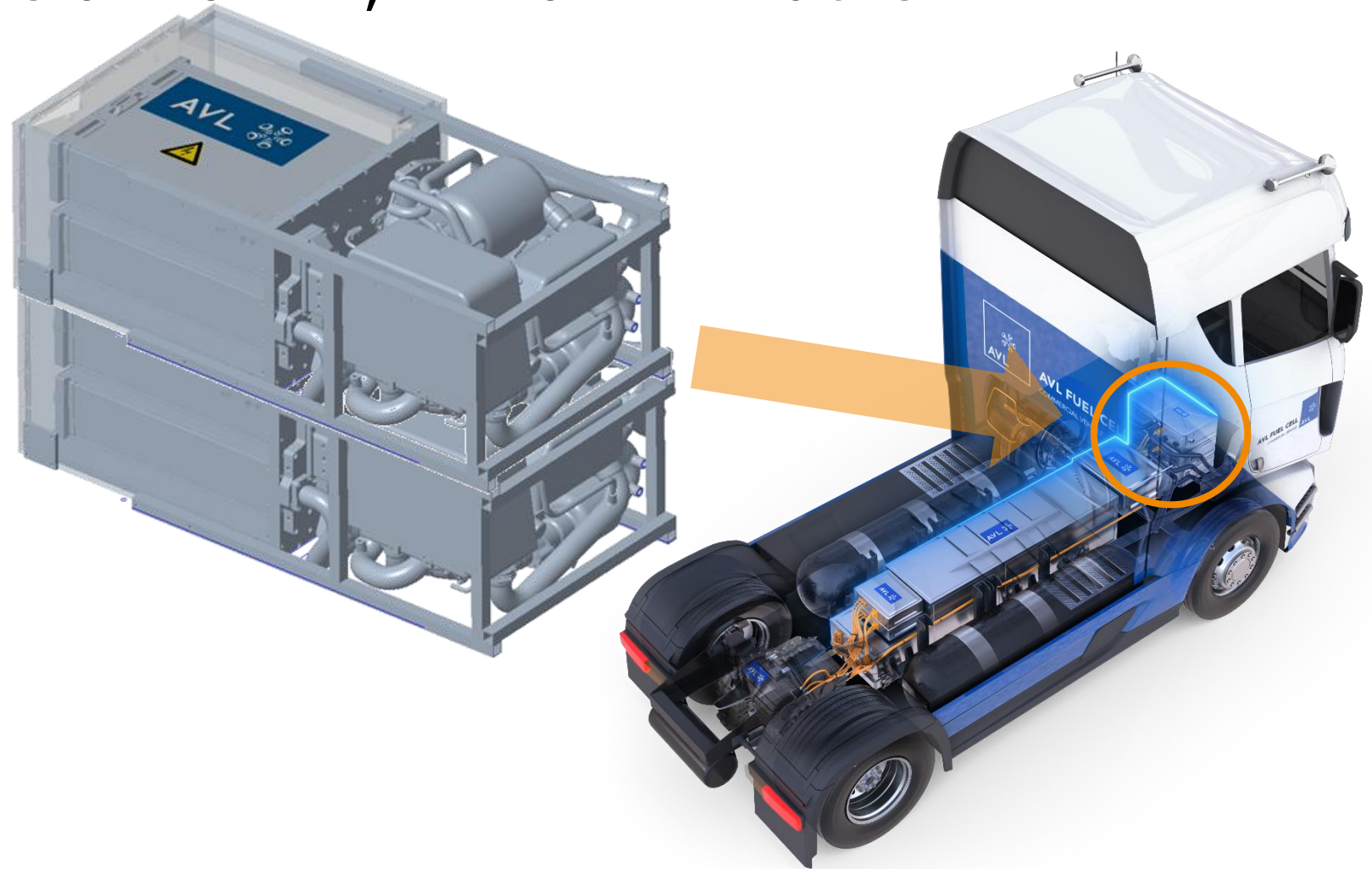


- **Gen0 stack performance is confirmed by short-stack tests**
- **First full-scale stacks built and tested right now**
- **First 150kW truck fuel cell system equipped with AVL Gen0 stacks on the test rig in Q1/2021**

# AVL Modular Fuel Cell System Concept

## Fuel Cell Main Propulsion for LD, MD & HD Trucks

2 Modules	
<b>FC Gross Power</b>	360kW
<b>FC Net Power</b>	<b>310kW</b>
<b>Efficiency @max Power</b>	50%
<b>Peak Efficiency</b>	60%
<b>Dynamics T90</b>	<1s
<b>Lifetime</b>	<b>&gt;20.000 hrs</b>



**Modular Fuel Cell System Concept for LD, MD, HD Truck and Bus**

Thank you



[www.avl.com](http://www.avl.com)