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Press Release

Swissloop wins again two prizes at the European Hyperloop Week

Once again, Swissloop, the Hyperloop team of ETH Zurich, was able to demonstrate its latest prototype at the European Hyperloop Week in Delft. With the novel propulsion system, the modular design and the cargo capable pod, Swissloop managed again to win two awards for Switzerland.

The second edition of the European Hyperloop Week took place from July 18 to 24 at the Technical University in Delft and the test site in Hilversum. The goal of the event is to promote the exchange of the latest findings among student teams and the industry, as well as to advance the development of a sustainable and scalable high-speed transport system. Over the course of one week, around two dozen teams were able to present their prototypes and ideas, and compete against each other in various categories. Switzerland was represented by the Team *Swissloop*, founded at ETH Zurich in 2017. Further, Swissloop was also involved in the organization of the event.

After three successful participations in the SpaceX Hyperloop Pod Competition and the overwhelming success at last year's European Hyperloop Week, the Swiss team presented their novel prototype, named after ETH professor Lavinia Heisenberg. What stood out was, that this was the first cargo-capable prototype developed by a student team. Together with the new linear switched reluctance motor and the completely self-developed electronics, the team managed to impress the jury and the other participants. Eventually, the passionate work during the last months was rewarded with five nominations and two technical awards - the Mechanical Subsystem Award and Traction Subsystem Award.

According to Swissloop, this success is due to the high quality and reliability of the entire system, as well as the novel motor concept. Especially the compact design, the very safe operation, including the redundant braking system, and the flexibility of all systems are unique. This is made possible by the adjustable suspension system, the electronically controllable pressurized air system and the decoupled mounting of the motor from the rest of the vehicle. The new motor design also enables efficient operation, as well as cost-effective production of the infrastructure for long distances, since no active electronics or expensive magnets have to be integrated into the track.

While the team is thrilled about the successful completion of the twelve-month project season, Swissloop has set big goals for the future. The preparations for the new season are already ongoing, and the start of the next season in September is approaching very fast. “We will make big steps towards efficient and scalable passenger transportation with Hyperloop thanks to our incredibly ambitious team,” notes future team leader Carl Brander. “All the valuable experience gained this season will allow us to make another big leap forward.”

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Technical Details

General	
Size with Shell	295 cm x 137 cm x 112 cm
Weight without Cargo	230 kg
Cargo Payload	up to 100 kg
Chassis	Aluminium Sandwich Structure
Shell	Carbon Fibre Structure
Propulsion	
Motor	Linear Switched Reluctance Motor (LSRM)
Force	1.5 kN
Max. acceleration	0.5 g
Achieved Top Speed	23 km/h (12 m propulsion, 70 kg payload)
Battery	Lithium-Polymer, 24 Modules
Voltage / Current	400 V / 120 A
Inverter Power	160 kVA
Brakes	
Braking System	Pneumatic Variable Pressure
Max. Deceleration	2 g

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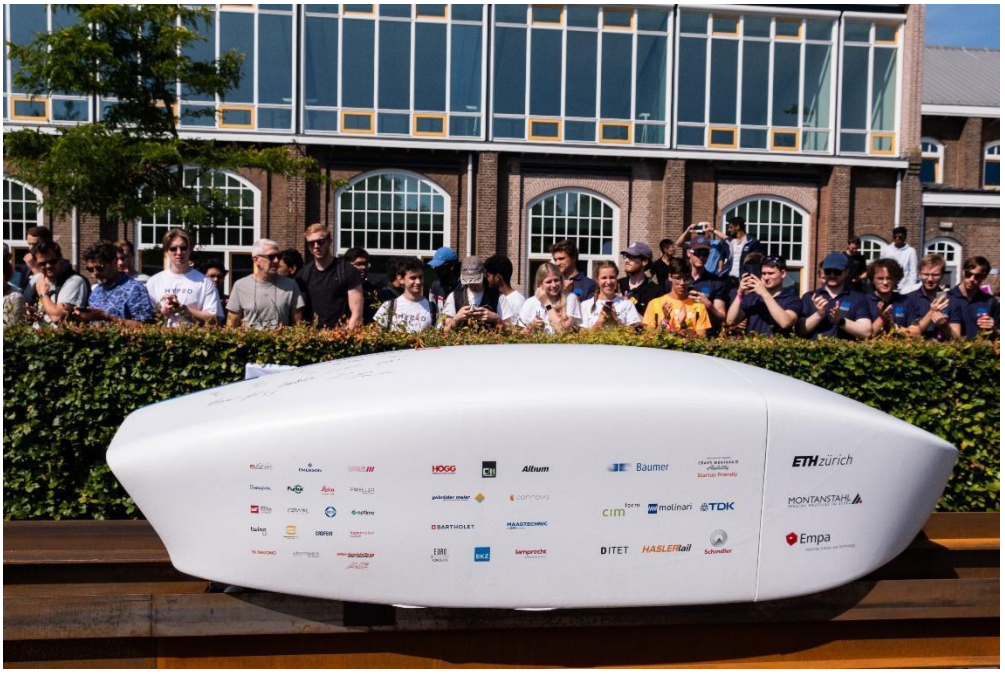
Images

Additional images are available under
https://1drv.ms/u/s!AiI6yiXM3wahhMJmijy5y5RGBFcY1w?e=zFlCGo



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