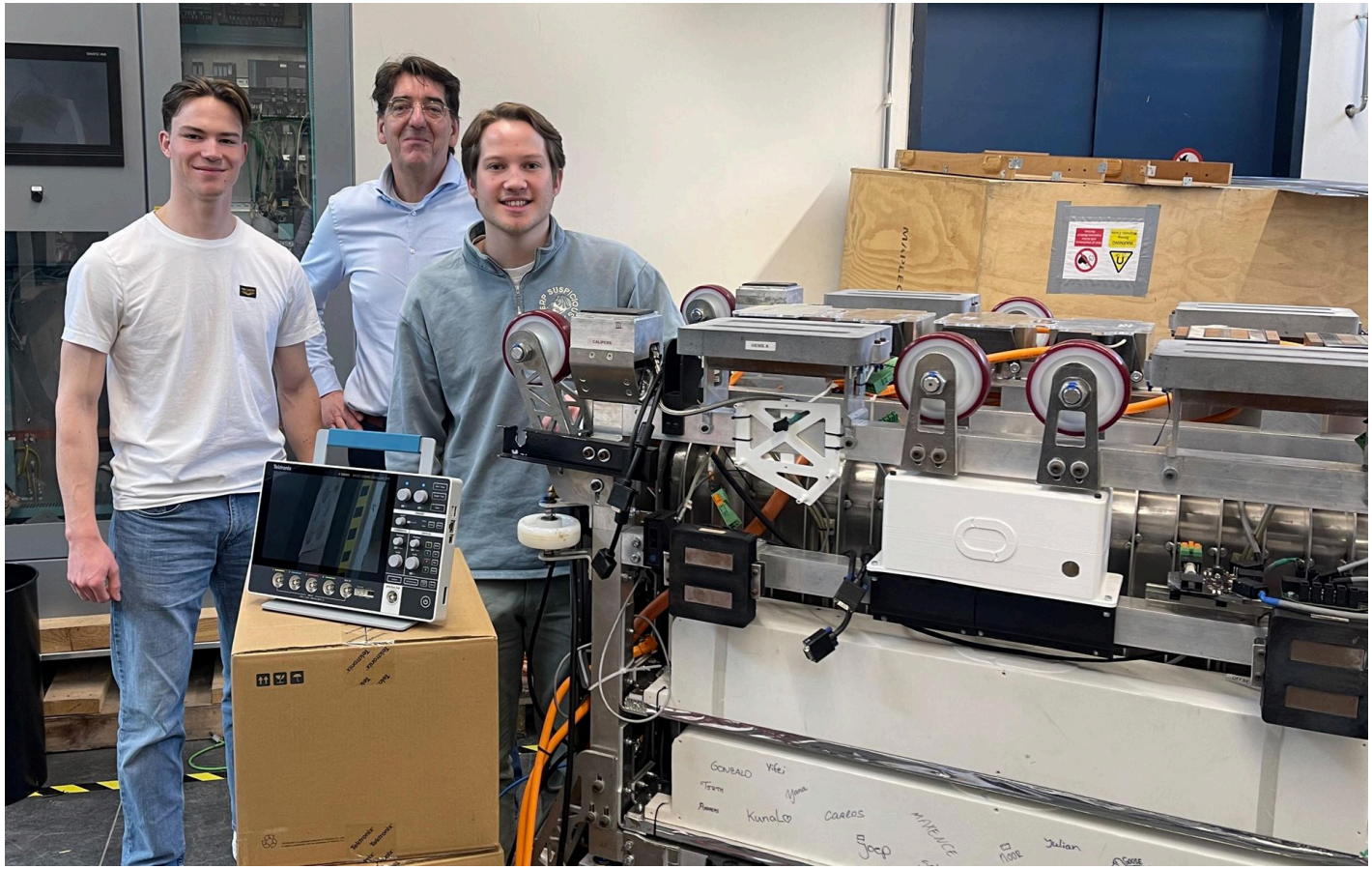
Tektronix and CN Rood: Supporting Tomorrows Engineers

The Delft Hyperloop Story

Tektronix and CN Rood: Enabling the Future of Transportation

At Tektronix, we are proud of our role in delivering innovative solutions to engineers across various industries who are putting our products to use and pushing the world forward. They are the true heroes in our industry, continually driving for progress. This year, we're excited to highlight a key initiative with our partner CNRood and the talented student engineers at Delft Hyperloop that reflects our commitment not only to the advancement of technology, but also to giving the next generation of innovators the tools they need to succeed.

Delft University of Technology: DH 09 “THEIA”



In 2016, a group of students from the Delft University of Technology joined together and founded Delft Hyperloop, a project aimed at developing a climate-neutral, scalable hyperloop system and becoming the fifth mode of transportation.

This year the team of 40 led by Sophie Loogman, alongside project leaders from many backgrounds, has the task of scaling up the hyperloop system to accelerate its full-scale implementation. Their goal, to compete at the European Hyperloop Week in Groningen Veendam in July 2025 with their “THEIA” pod.

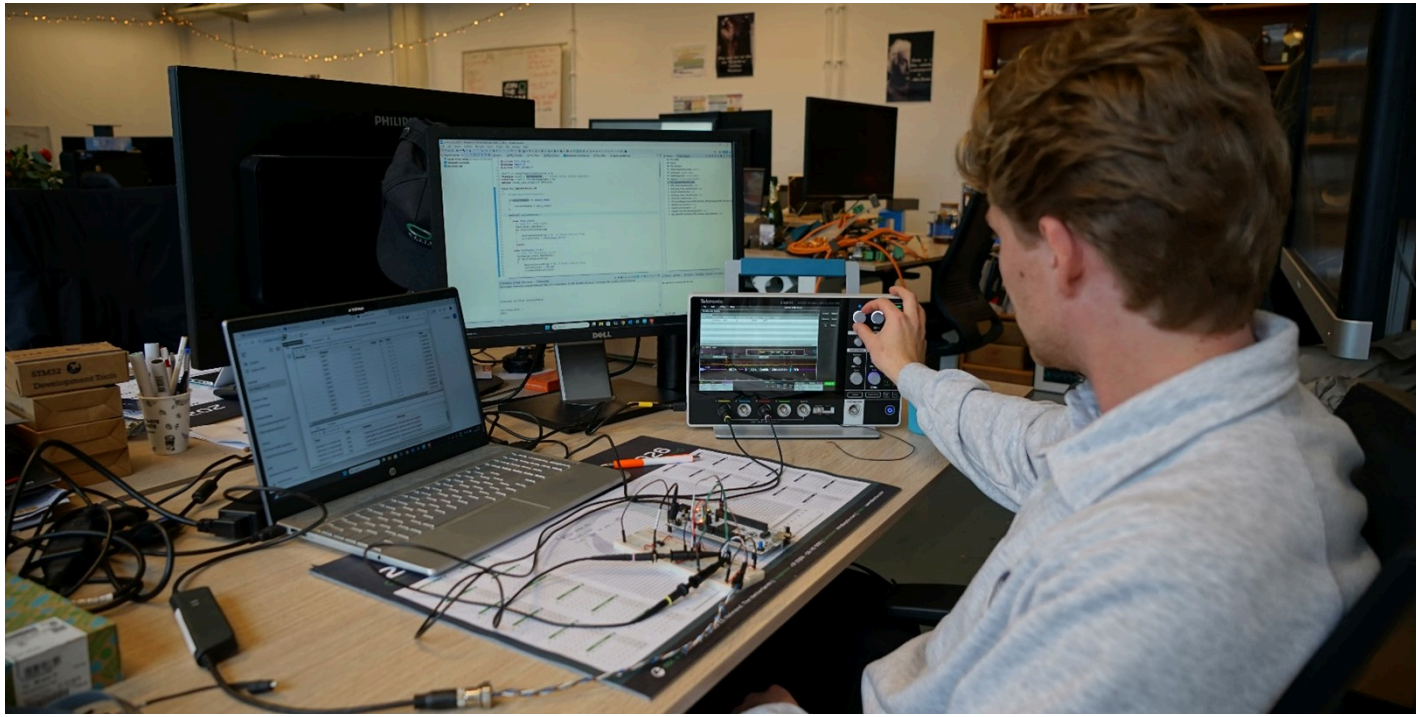
THEIA, named after the Greek goddess of light and vision, is taking a major step towards scaling up Hyperloop technology and driving standardization. The pod features custom-built motor drives and full compatibility with vacuum environments and is hoping to win the “full-system award” on the 420-meter-long large-scale test track.

Upgrades: Powering Innovation Through the Next Generation

With a constant eye on innovation, our partner CNRood wanted to make a difference and provide solutions to enhance the capabilities of the Hyperloop team.

After speaking with the team, it was discovered that they were working with only one dated oscilloscope, trying to process information from many sensors to regulate the propulsion and levitation of the prototype. This put a strain on their work as oscilloscopes are used by the team every day in the development of hardware and software.

As a solution, CNRood and Tektronix donated 4 2 Series MSO oscilloscopes to the Delft Hyperloop Team, greatly enhancing their capability and providing flexibility where they needed it most. These new oscilloscopes have proven to be a great asset and an enabler for future development as Nils, a powertrain engineer on the project, states: **“***We now have four channels, good memory depth, a nice color screen, digital inputs and bus decoding. All of this was missing in our old oscilloscope. In final testing of the pod, we intend on placing the oscilloscopes in the prototype and remotely controlling it over ethernet. This was not possible before.”*



Conclusion

We are always impressed to learn of all the ways our devices are used in the advancement of technology and are happy to hear that the Delft Hyperloop Team are utilizing their 2 Series MSO oscilloscopes to their full potential. Innovation for the future is in their hands.

We would also like to thank our partner CNRood for leading the charge on this project and joining Tektronix in providing solutions that enable the next generation of engineers to change the world. Through collaboration, we can continue to enable progress and bring about meaningful change.

Let’s wish the Delft Hyperloop Team the best of luck at European Hyperloop Week and keep driving innovation together!