

Drafting of New Large-Scale Hyperloop Research Infrastructure: Design decisions required for designing a Large-Scale Cargo Research Infrastructure

Developing Large Scale Hyperloop Research Infrastructures in European Research Program

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| Supervisor UOL: | Supervisor by arrangement |
| Assistant Supervisors: | Lukas Eschment |
| Modules: | Professionalization (UOL), Bachelor /Master thesis |
| Major/Field: | Engineering Physics, Economics, |
| Term: | Winter term 2022/23 |
| Start: | September / October 2022 |
| Submission Deadline: | March / April 2022 |
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| Execution: | Time and place by arrangement, group work possible, English language |

Short description:

Hyperloop is a guided transport system in which so-called pods are designed to transport people and goods at the speed of sound in a partially evacuated tube. Within the framework of the “Hyperloop Development Program” a European research initiative, individual technologies, economics and use cases of this system are being investigated.

This project deals with the drafting of new research infrastructure with a focus on implementation of new testing needs and designing technical requirements regarding cargo for this new mode of transport. The aim of this project is compiling testing needs from previous work in the program such as studies and questionnaires to develop technical requirements for the testing facility which can be used to engineer a large-scale Hyperloop Cargo research infrastructure.

Goal:

- Defining test results and design decisions to be achieved and implemented before design of large-scale Hyperloop research infrastructure can be implemented
- Compile test results and design decisions from industry stakeholders and standardization that are already agreed upon and differences in designs and therefore testing requirements
- Detailing the role of industry, researchers, certifiers and policy makers for the testing facility on the basis of a proposed structure for a Large-Scale Technical Research Infrastructure

Please reach out and visit www.iht-emden.de for more information. We are happy to supply you with more detailed information of the research program

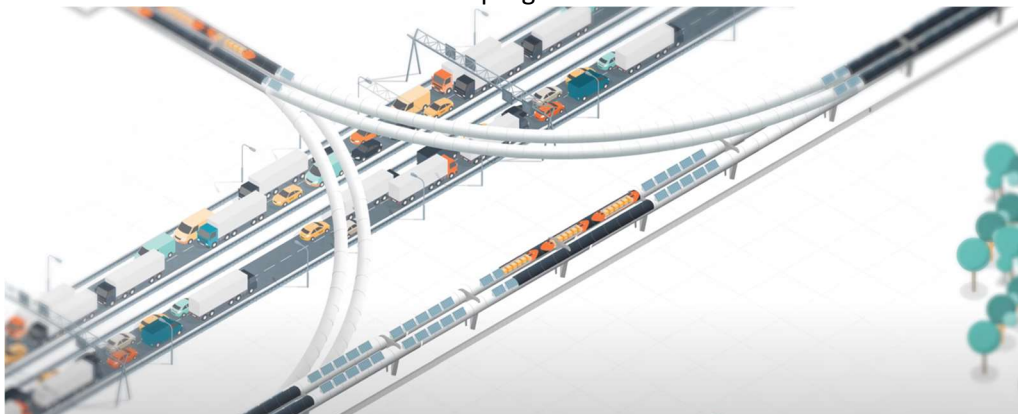


Image: Hardt Hyperloop