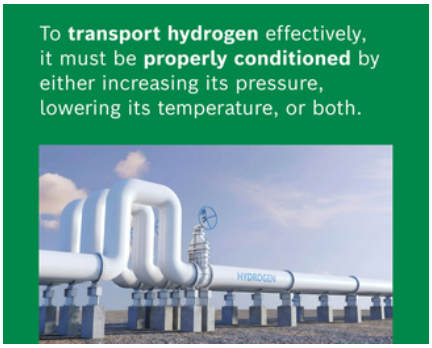
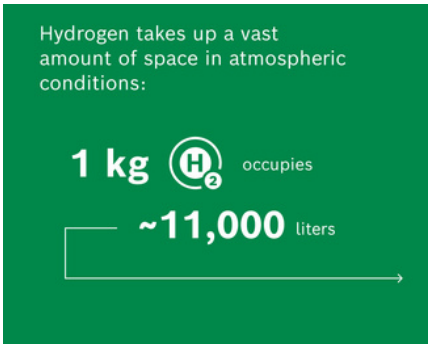
# Hydrogen Compression

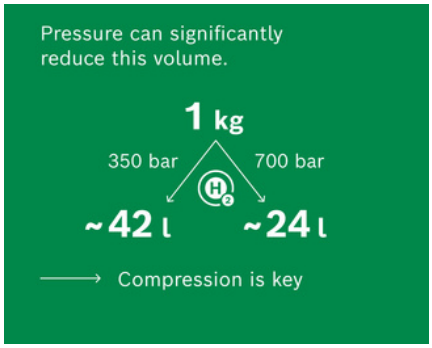
Episode 12 - Marius Plingen


While hydrogen is renowned as a future energy solution, the vital role of its efficient, safe and economic transportation or storage often remains overlooked.
In this episode of -253°C, our expert Marius Plingen from Bosch Rexroth demonstrates how advanced compression technologies are the key to unlocking hydrogen's full potential. Increasing the pressure, which means compressing hydrogen molecules, leads to an efficient way of making transportation possible.

## How we make hydrogen storage and transportation possible

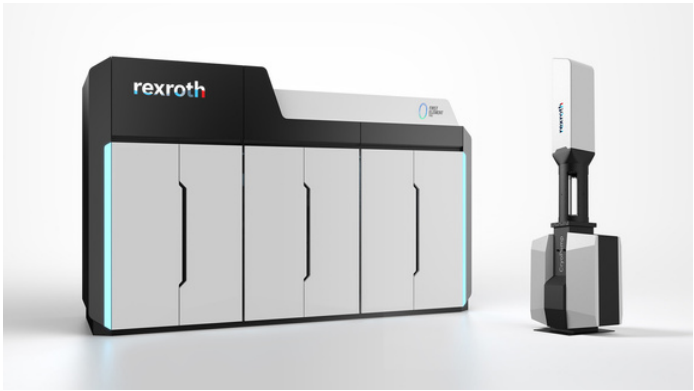



## Bosch Rexroth solutions

Innovative compression solutions, such as hydraulically driven gas compression and advanced cryopump technology from Bosch Rexroth, are overcoming hydrogens storage and transportation problem. Leveraging their expertise in hydraulics, Bosch Rexroth develops compact, energy-efficient drive systems capable of delivering the immense forces required for hydrogen compression. Their cryopump systems deliver up to 600 kg/h at 900 bar to efficiently compress liquid hydrogen – a gamechanger for high-pressure infrastructure.




**“The next breakthroughs [...] is to build reliable and efficient compression systems for the different applications in the value chain of hydrogen”**

Marius Plingen, Technical Sales Manager at Bosch Rexroth

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