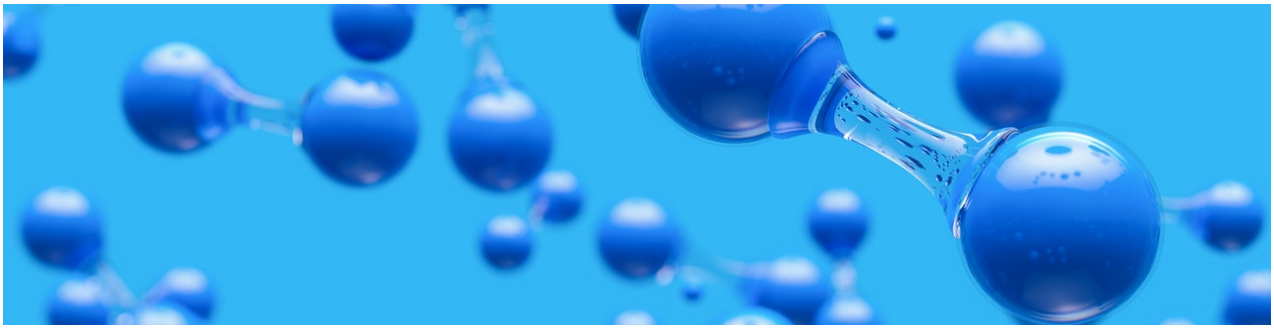


# HydroSolid

REVOLUTIONARY TECHNOLOGIE FOR STORING HYDROGEN

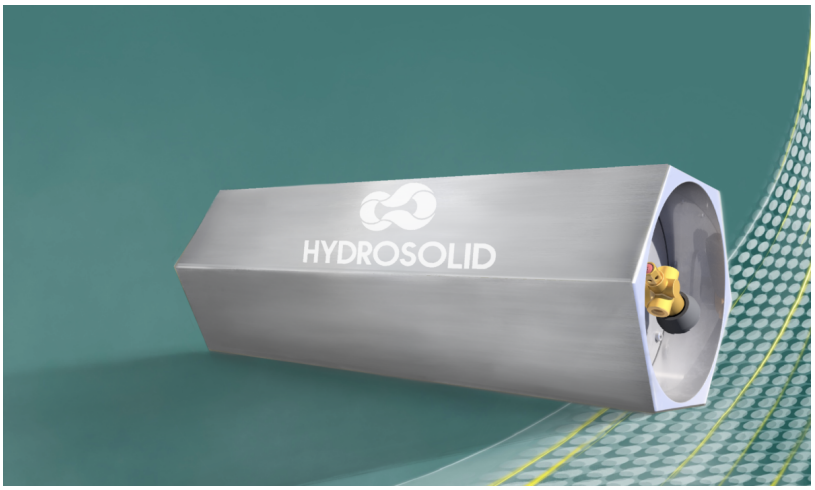
HydroSolid uses advanced space technology to store more hydrogen in significantly less volume, setting new Hydrogen is the most common element in the universe and essential for our earth. Chemically bonded with oxygen, it produces our water, our basis for life. But why is hydrogen in such demand today?
To reduce emissions and thus achieve our climate goals, we need clean energy sources. Here we like to talk about renewable energy, such as wind, water or solar power. But how do you store this green electricity?
Hydrogen is a versatile energy carrier that can be produced by electrolysis and by splitting water from renewable energy sources. Hydrogen can be stored for a long time and converted back into energy at any time by reverse electrolysis. Reconversion produces no emissions, only pure water - a 100% emission-free cycle. This storage capability makes hydrogen a beacon of hope in the field of climate protection and the long-term use of renewable energies.
But until now, it has unfortunately been very difficult to store and transport. Currently, it is mainly stored in gas cylinders under very high pressures. In mobility it is 700 bar, in heavy-duty transport 350 bar. This is not only technically very demanding, but also poses considerable safety risks.
Our highly developed, patented nanomaterial binds hydrogen at atomic level. Here, we can control the hydrogen storage in a targeted and controlled manner. The material absorbs hydrogen at room temperature and releases it again when slightly heated - all this at a low pressure of 15 bar. In this way, we surpass the state of the art in terms of storage capacity by around 250%. Our first product, the HIVE ONE, is fully recyclable and environmentally friendly, as no rare earths, lithium or cobalt are used. The main advantages are the high energy density of the hydrogen stored in the HIVE ONE, which is at least 10 times higher compared to lithium ion batteries. HIVE ONE also surpasses conventional batteries in terms of charging cycles and service life. In contrast to current high-pressure hydrogen storage systems (100 - 700 bar), the hydrogen in HIVE ONE can be stored at 15 bar.

USP
Revolutionary technology for the storage of hydrogen

Target Mark
For home: Secure energy supply for home; For industry for decarbonisation; For mobility (emission-free traffic and transport);
For sector coupling to store green electricity in hydrogen

Space Connection
Space In order to be able to develop a revolutionary hydrogen storage system, we need access to special technology. Through our participation in the European Space Agency (ESA) Business Incubation Centre Austria, we have the opportunity to use space technology to improve our technology. With the help of MIMOSII technology, one of the most accurate measurement methods in the world, we can determine the intercalation process of the hydrogen atoms in our nanomaterial very precisely and thus make extraordinary progress.

TEAM HYDROSOLID




Contact: Office (hello@hydrosolid.com)
Website: https://www.hydrosolid.at/en