Comuro, hydrogen compression system based on metal hydrides.



DESCRIPTION

Actual hydrogen standards for use and transport requires high pressure storage, therefore we need to compress this gas. Comuro system lets us to compress hydrogen providing heat directly to metal hydrides, in opposite to standard compressor which requires membranes and pistons.

With comuro's technology we can reach up to 20 MPa, employing metal hydrides. This kind of materials is being used for years for hydrogen storage applications gas, so that the systems are well known.

This novel solution to compress hydrogen is driven by temperature differences to perform reactions that increase the hydrogen pressure. The compression system uses this technique and achieves compression pressures and a gas outlet quality superior to conventional systems.

FEATURES

- Without mobile parts.
- The driving force is heat.
- Purification of hydrogen flows.
- High pressure reached.
- Minimun environmental impact.

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TABLE			
Inlet pressure:	1 – 3 MPa		
Outlet pressure:	Max. 21 MPa		
Capacity:	2.0 m ³		
Low:	1.2 m ³ /h		
Compressor weight:	36 kg (empty)		



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