



Stockholms universitet



Metal Hydride Storage

→ Hydrogen Storage Alloy offers:

- Capacity for stored amount of hydrogen
- Pressure at a certain temperature (useable temperature range)



→ Metal Hydride Storage System contains:

- Hydrogen Storage Alloy (AB₂, AB₅) made from La, Ce, Ni, Ti, Zr, V, Mn, Fe,...
- Pressure vessel (aluminium or stainless-steel), tubing, valve, filter
- Advanced systems: integrated heat exchange equipment





Metal Hydride Storage Tanks

→ PED 97/23/EU or TPED 99/36/EU apply.

- small units: „good engineering practice“

- bigger: CE-marking // PI-marking

→ There are no EU-wide general rules for installation and running pressure devices, so certification has to be done together with national certified bodies

→ European Certified Bodies do not have the same knowledge level about MH-technology

→ Their time and money-consuming process of learning is paid by MH-manufacturers and MH-end-users