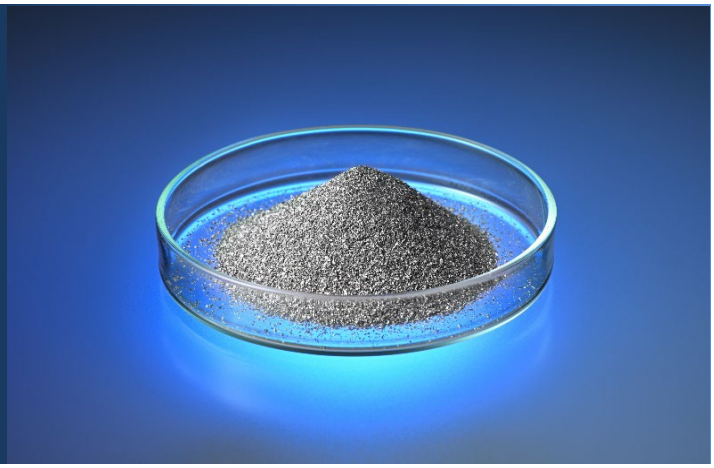
PROTERIAL

水素貯蔵合金
Hydrogen storage alloy



水素貯蔵タンクで活用する事により、大量の水素を
低圧、かつコンパクトに貯蔵可能となります。

By using it in a hydrogen tank, a large amount of hydrogen can be stored compactly at low pressure.

概要 Overview

従来のNi含有の水素貯蔵材料に比べ低コストなTiFe系水素貯蔵合金の開発
Development of low-cost TiFe-based hydrogen storage alloys compared to conventional Ni-containing hydrogen storage material

高い水素貯蔵量
High hydrogen storage capacity

良好な初期活性・プラトー性
Good initial activity and plateau

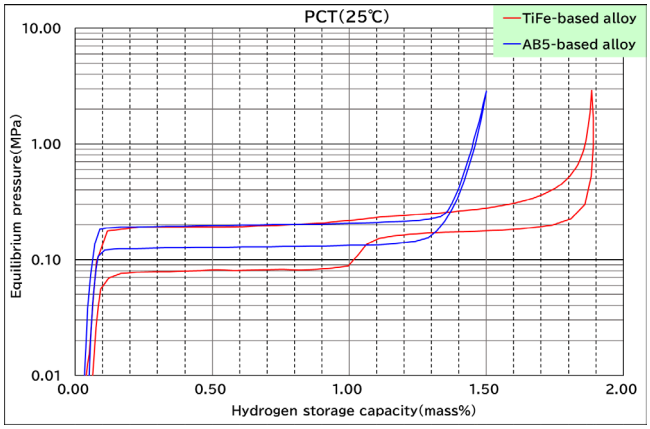
用途 Applications

水素貯蔵タンク
Hydrogen storage tank

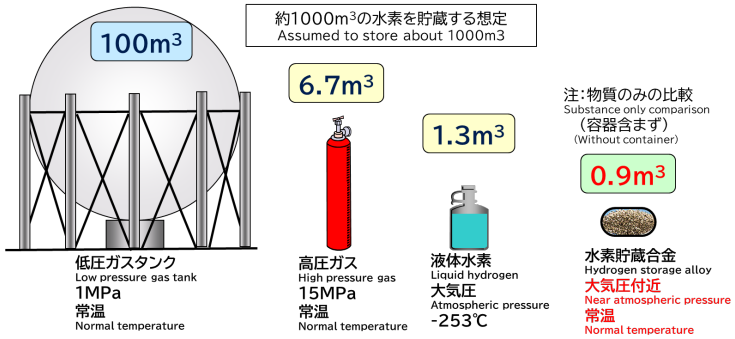
水素貯蔵キャニスター
Hydrogen storage canister

特徴 Feature

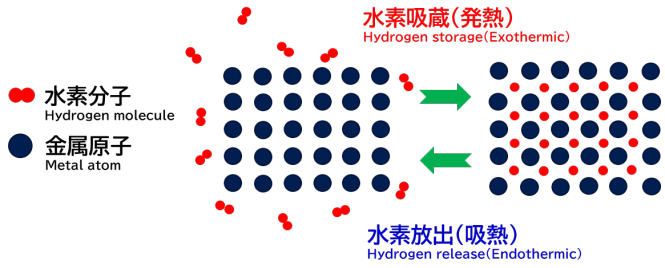
※独自製法における一例
Example of original manufacturing method



貯蔵方法別の水素貯蔵体積の比較
Comparison of hydrogen storage volume by storage method



水素吸蔵放出イメージ
Hydrogen absorption/desorption image



水素貯蔵合金は最もコンパクトな水素貯蔵方法の一つ
Hydrogen storage alloys are one of the most compact hydrogen storage methods

常温低圧[10気圧未満]で水素化物[固体]として貯蔵するため安全性が高い
It is highly safe because it is stored as a hydride[solid] at normal temperature and pressure[less than 10 atom]

開発TiFe系合金は従来のAB5系合金と比べ、重量ベースで約25%水素貯蔵量アップ
The developed TiFe-based alloy has an about 25% increase in hydrogen storage capacity on a weight basis compared to conventional AB5-based alloys.

⇒合金タイプや特性など様々な御要望を御相談ください
Please to contact us with your various requests such as alloy types and alloy properties.

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