

## HYDRALLOY® C

GfE Art. No. 2004732 / 2005169 / 2019929

### Application

The trademark "Hydralloy" describes a group of alloys which are capable to absorb Hydrogen from the gas phase at low temperatures and gas pressures and to form reversible metal hydrides.

Therefore these materials are considered as suitable candidates for the storage of hydrogen e.g. in fuel cell systems.

The Hydralloy® C group is a low temperature AB<sub>2</sub> type hydride alloy for applications at ambient temperature.

### Production method

Vacuum induction melting

### Size

0 – 2 mm (GfE Art. No. 2019929)  
 0 – 10 mm (GfE Art. No. 2005169)  
 2 – 10 mm (GfE Art. No. 2004732)

### Packaging

In sealed steel drums

### Chemical Analysis in wt%

Ti + Zr	25 – 35
Mn	45 - 55
V + Fe	15 - 20
Further possible alloying elements Cr, Ni	

### Properties of the hydride:

Mid plateau pressure of absorption  
 - approx. 10 bar @ 20 °C

Mid plateau pressure of desorption  
 - approx. 5 bar @ 20 °C

Maximum storage capacity  
 - approx. 1.8 wt% @ 20 °C