

700 bar Type III Hydrogen Pressure Vessel with Steel Liner

Presented Object

- ❖ Type III fully wrapped composite cylinder with steel liner

Characteristics

- ❖ Design requirements according to European Integrated Hydrogen Project (EIHP-II)
- ❖ Working pressure: 700 bar
- ❖ Dimensions:
300 mm diameter x 925 mm length
- ❖ Volume: 39 l
- ❖ Weight: 40 kg
- ❖ Neck size: 1.125"-12UNF



Status & Future Perspectives

- ❖ Prototypes satisfactorily tested for a reduced number of filling cycles as contemplated by the EIHP II.
- ❖ The fatigue behaviour requirement set by the European Integrated Hydrogen Project is achievable using higher modulus carbon fibres.
- ❖ Further study of the composite material (matrix and fibres) is needed in order to take full advantage of fibres with higher modulus.

Partners

- ❖ Faber



Website

www.storhy.net



The project partners wish to thank the European Commission for financial support of the Integrated Project StorHy– Hydrogen Storage Systems for Automotive Application (Contract No.: SES6-CT-2004-502667) within the 6th RTD Framework Programme.