

# Hydrogen Solutions

**CP** INDUSTRIES manufactures large, seamless steel pressure vessels to safely contain high-pressure Hydrogen that are designed and constructed in accordance with ASME , Section VIII, Division 1 and ASME, Section VIII, Division 3. Avoidance of sulfide stress cracking and hydrogen embrittlement is inherent in design.

Ultimate Tensile Strength is controlled and all vessels are ultrasonic shear wave tested for wall flaw detection, and pneumatically tested. User Design Specifications (UDS) are required for consideration of proposed cycles and inspection intervals.



## What we offer:

- Vessels with pressures up to 15,000 psi (1034 bar).
- Designs address the demands of lowering \$\$/kg of hydrogen stored.
- Collaborate with end users to design a compatible ASME, Section VIII, Division 3 solution for pressures above 10,000 psi.
- Single vessels and finished multi-vessel assemblies complete with valves and piping manifolds.
- Customized assemblies with any number of vessels of different pressures to meet end user cascade banking demands.
- Vessels certified for use in a number of countries.
- Technical assistance on installation, future inspections and provide continuing support after your system is on line.



*A worldwide supplier of superior products and exceptional customer service, since 1897*



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**Designed To Specific Site Installation, we offer solutions for:**

### **Type 1 ASME Section VIII, Division 1 Designs**

Pressure		Dia.		Length		Vol.		KG H2
bar	psi	mm	In.	M	Ft.	L	Cu. Ft	Kg.
250	3,626	610	24	12.2	40	2716	95.9	48.5
500	7,252	457	18	11.6	38	1192	42.1	37.0

### **Type 1 ASME Section VIII, Division 3 Designs**

Pressure		Dia.		Length		Vol.		KG H2
bar	psi	mm	In.	M	Ft.	L	Cu. Ft	Kg.
1034	15,000	324	12.75	10.4	34	436	15.4	21.8

**Sized to meet space constraints**

**Multi-vessel assemblies can have vessels of different pressures**

**\*Material can be ordered for specific requirements based on customer specifications**

#### **Key Features:**

- Offer valves and fittings that meet industry requirements
- Custom paint systems are available
- Modular designs available - permits installation of additional storage capacity
- "I" beam or frame assembly & manifold options



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