



RGV500

Hydrogen Tank 500 Bar

The RGV500 range of high pressure hydrogen storage tanks is available in volumes ranging from 160 to 300 litres.

These type 4 tanks are perfect for stationary hydrogen storage or transport.

They can store up to 10 kg of hydrogen at 500 bar and have a long service life (20 years).

They can be arranged in bundles of one to several cylinders.

Certification:

- PED for stationary applications
- TPED for transportation applications

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Specifications

Terms of services				
	Stationary use (PED)		Transportation use (TPED)	
Maximal working pressure	500 bar		590 bar	
Maximal refilling pressure	500 bar		590 bar	
Operating temperature	From -40°C to + 65°C			
Position of use	Vertical or horizontal			
Permeation rate	0.1 Ncm³/h/L			
Dimensions				
Inner volume	160 L	200 L	240 L	292 L
Weight of empty tank	150 kg	185 kg	220 kg	260 kg
Mass of hydrogen stored (500 bar, 15°C)	5,1 kg	6,5 kg	7,8 kg	9,4 kg
External sizes (cm) without support	Ø48 L 179	Ø48 L 217	Ø48 L 257	Ø48 L 307
Thread Int.	1" ½ - 12 UNF			
Materials				
Body material	Polymer liner with composite materials (carbon fiber)			
Boss (x2)	Aluminum alloy			
Approval				
Certification	EN12245 - PED (2014/68/EU) & TPED (2010/35/EU)			
Service life	10.000 cycles (PED) - 20 years (TPED)			
Hydraulic pressure proof test	750 bar			
Stored gases	Hydrogen, also approved for Helium and Nitrogen			
Options				
Plug	Thread on request			
Valve	PED or TPED			
PRV	Max 500 bar (PED) or 590 bar (TPED)			
Fitting rack	Simple or configuration in bundle			

Example of assembled tanks:

