



## Secure and profitable storage and transportation solutions

The combination of UAC type IV low-weight pressure vessels and the secure structural design of our fully metal containers offer increased safety and greater space utilization for on-road transportation of larger volumes of compressed hydrogen.

UAC pressure vessels in fibre glass and epoxy resin materials are lightweight, robust and non-corrosive. They offer excellent fatigue durability, wide temperature tolerances, increased safety and cost-efficiency, challenging traditional steel or carbon fibre alternatives.

We supply standard configurations and tailored solutions to meet specific customer requirements and regulatory standards.

### MAIN BENEFITS

- Larger gas volume
- Superior safety levels
- High-strength durability
- Extended service lifetime
- Reduced lifecycle cost

UM  
OE

ADVANCED  
COMPOSITES

## Design specifications

Container type	<b>Hook load S53021 or SFS4417</b> Galvanized steel frame with aluminum box	<b>ISO Standard or High Cube</b> Painted steel container with composite doors
Manifold connections	Customized configurations	Customized configurations
Pressure vessel size	600 - 2 400 (l)	600 - 2 400 (l)
Gas temperature tolerances	- 40°C / + 65°C	- 40°C / + 65°C
Approvals	EN 12245-3, ADR / TPED	EN 12245-3, ADR / TPED / RID Containers can be delivered in compliance with CSC requirements.

## Transportation modules overview

Container size	Unit	20' Hook MEGC standard	20' ISO standard	20' ISO high cube	40' ISO standard	40' ISO high cube	45' ISO standard	45' ISO high cube	Remarks
Number of cylinders	#	9	9	11	18	22	18	22	
Cylinder volume	l	1 666	1 666	1 666	1 666	1 666	1 925	1 925	
Total storage volume (wc)	l	15 000	15 000	18 333	30 000	36 666	34 650	42 350	
Storage capacity (Wp 250 bar)	kg	278	278	339	555	678	641	783	@15C
Storage capacity (Wp 300 bar)	kg	323	323	394	645	788	745	911	@15C
Storage capacity (Wp 350 bar)	kg	360	360	440	720	880	831	1 016	@15C
Storage capacity (Wp 450 bar)	kg	na	438	na	877	na	1 013	na	@15C

UMOE Advanced Composites (UAC) is the leading global supplier of large fibre glass type IV pressure vessels and modules for containment, storage and transportation of CNG, biogas and hydrogen for land-based, marine and offshore applications.

Note: Modifications to specifications presented here may be made without notice.  
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