

Composite Low Pressure Vessel

Increasing safety and reducing cost

A new generation of light weight, cost-competitive composite air pressure vessels (CAPV) are now being delivered. Its noncorrosive properties coupled with our new SmartTank system ensures reduced life cycle cost and increased safety.

Introduction

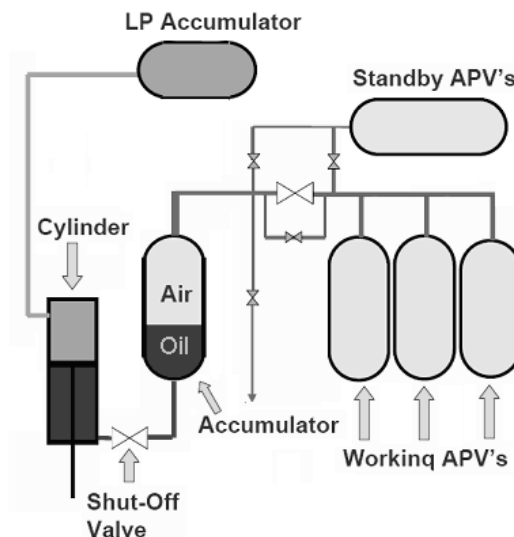
Umoe Advanced Composites has designed a low pressure CAPV according to DNV offshore standard OS-C501, both acknowledged by DNV and ABS. It is typically used on the low pressure side of risers in offshore riser tensioning systems where its noncorrosive properties excel.

Composite Pressure vessels offer a 40% weight reduction compared to equivalent steel vessels. They are also safer than steel as they have a higher burst pressure capacity and are designed according to the "leak before burst" principle.

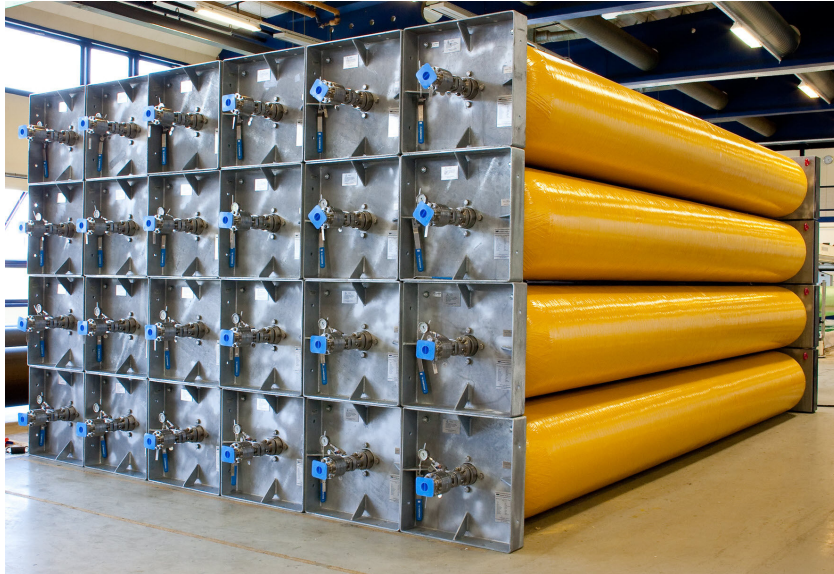
Maintenance costs are reduced as composites do not corrode, resulting in lower life cycle cost compared to equivalent steel vessels. Further life cycle cost reductions are obtained through full integration with our new SmartTank system, an integrated lifetime monitoring system, ensuring full life utilization and even extending its 25 year service life.

CAPVs from Umoe Advanced Composites are now installed on several of the new drillships and semisubmersible rigs operating in the deep and ultra deep waters worldwide.

System Overview



Vessel Specifications



Design Data

Area classification	SAFE
Design code / standard	DNV-OS-C501 / ASME X
Environment	Harsh offshore environment
Temperature range	- 40°C to +70°C
Volume range	300 to 2250 litre
DNV type approval	Pending
ABS type approval	Pending
Working pressure	20bar
Design Pressure	22bar
Burst Pressure	>100bar
Internal Diameter	610mm
Outer diameter	max. 650mm
Bare bottle weight (2000l)	500 kg
Pressure medium	Air or Nitrogen
Cleanness	NAS class 8
Connection:	SAE J 518 Code 61, type 1 (other interfaces on request)
Connection size:	2", 3" and 4"

Further Information

You can obtain further information (data sheets, instructions, etc.) via our internet address www.uac.no

Specifications and dimensions given in this leaflet represents the state of engineering at the time of printing. Modification may take place and materials specified may be replaced without prior notice.

Umoe Advanced Composites AS

Gismerøya, Mandal, Norway
Tel: 38 27 92 00 – Fax 38 26 03 88
e-mail: sales@uac.no,
web: www.uac.no

