



MCS

International GmbH

ALL-COMPOSITE

the lightest solution with
unlimited lifetime



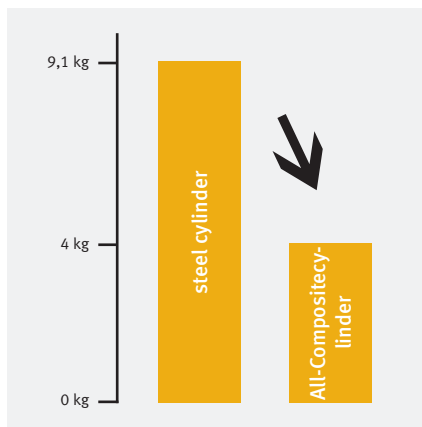
All-composite for breathing apparatus

55% less weight

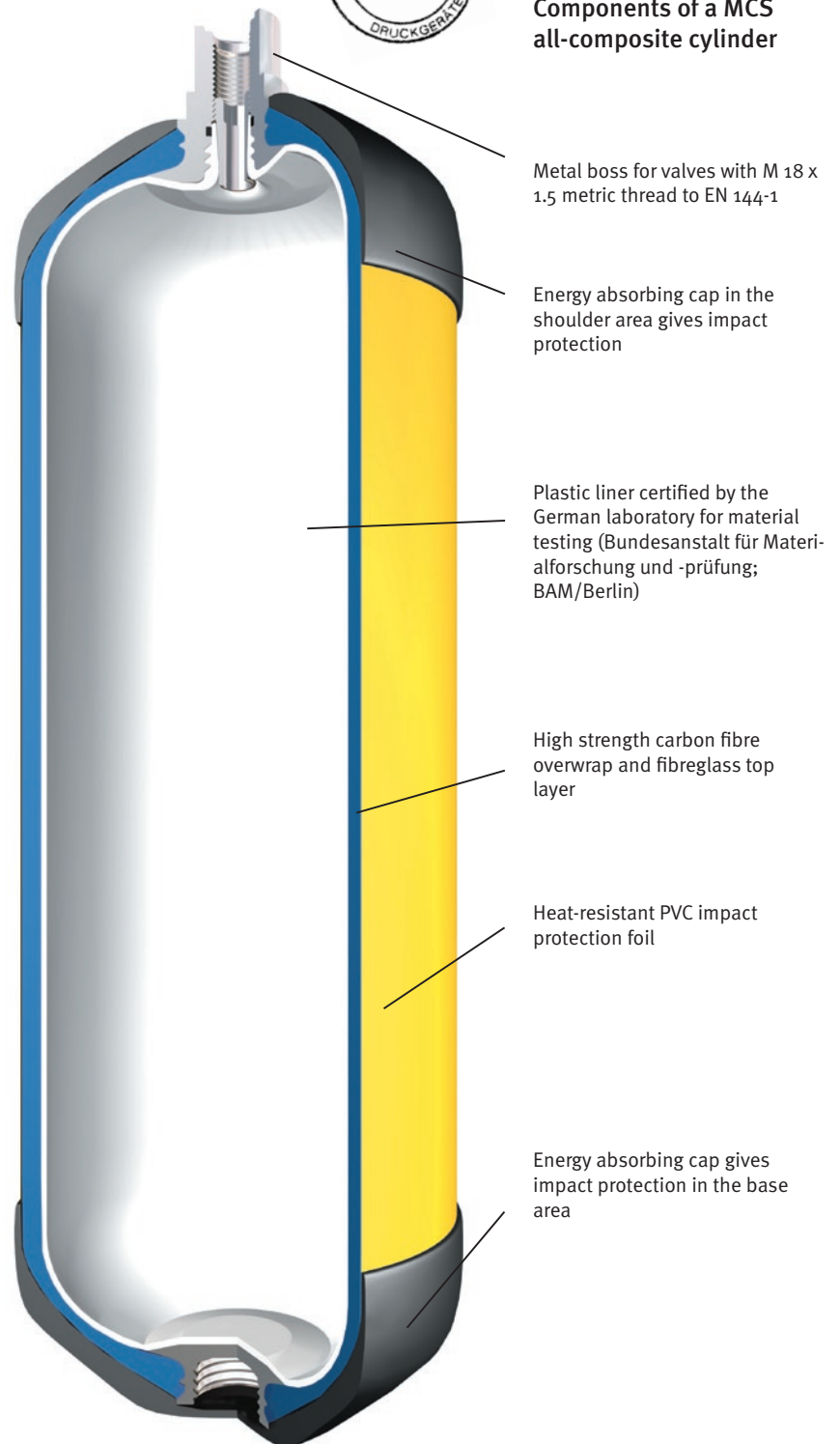
As the leading manufacturer of cylinders and pressure vessels in Europe, **MCS International GmbH** pursues innovative material and manufacturing technologies. The patented combination of fibre material and plastic liner results in a considerable weight reduction of 55% compared to a conventional 300/450 bar steel cylinder designed to EEC Directive.

A 6.8 l 300/450 bar full composite cylinder weighs only 3.6 kg. In addition, with reference to the weight of a conventional steel cylinder, 120% more breathing air can be transported.

Our products are certified to the type approval Directive 97/23/EEC. (PED and CE sign)



Components of a MCS all-composite cylinder





Comfortable to wear

The combination of compact design and very light weight gives better freedom of head and body movement to the wearer. This provides the fireman with additional safety as well as increased carrying comfort.

Best performance

The most significant advantages of the **MCS** all-composite cylinder are:

- lowest weight at highest pressure
- noncorrosive due to plastic liner
- unlimited life according to EN 12 245
- maximum carrying comfort
- patented impact protection for shoulder and base
- high fatigue resistance
- high load-bearing capacity with burst pressures averaging 1200 bar

Highest safety and unlimited lifetime

The safety of this innovative all-composite cylinder has been proven under extreme conditions by tests and trials carried out within the type approval procedure according to the latest ISO and CEN Standard Drafts.

Fire, climate chamber, drop and bullet tests document the safety reserves of this cylinder.

As a result of the high

Important approval tests:

- Burst test
- Fatigue test
- Environmental test
- Drop test
- Flaw test
- Bullet test
- Bonfire test
- Gas cycling test
- Permeability test
- Salt water immersion

All tests were successfully concluded (according to EN 12 245).

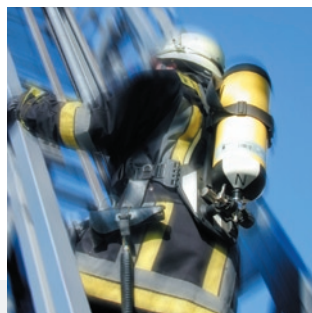
Retesting

product quality a simple hydraulic pressure test **every 5 years** suffices for periodic retesting.

It is not necessary to conduct the technically extensive and costly water jacket test on **MCS International** all-composite cylinders.

Product range

volume (l)	external diameter (mm)	length (mm)	weight (kg)
4,0	133	464	2,2
4,7	133	529	2,5
6,0	157,4	502	3,1
6,8	157,4	556	3,6
9,0	176	565	4,3



We are working for your future

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