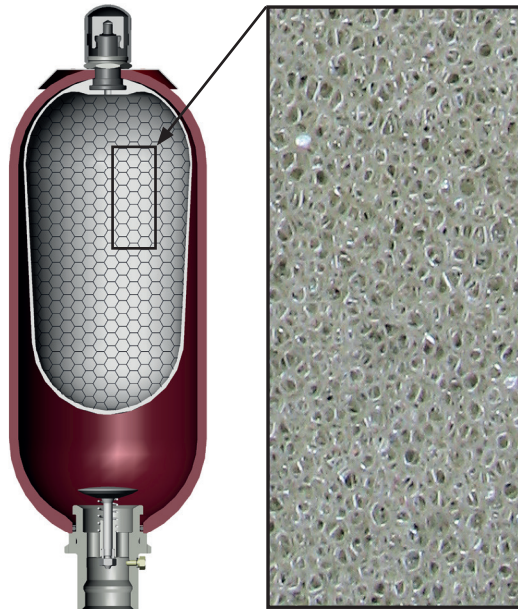
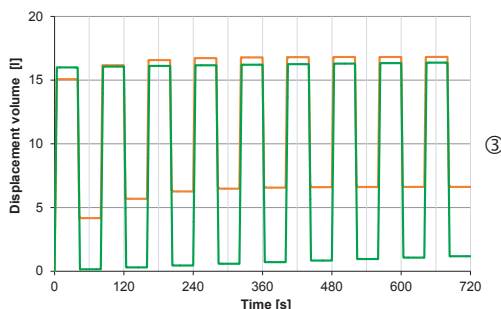
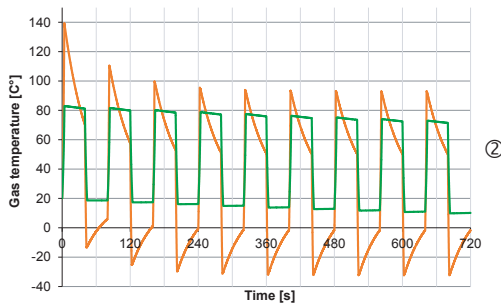
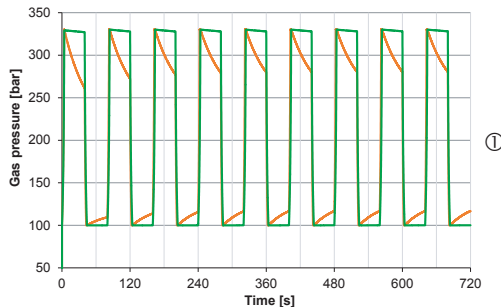


HYDAC Accumulator Technology: Sustainable Hydraulics

Bladder accumulator with foam-filled bladder



Foam filling



Description

Bladder accumulators are hydraulic accumulators with a flexible elastomer bladder acting as a gas-proof screen between the compressible gas section and the operating fluid.

From the outside, a bladder accumulator with a foam-filled elastomer bladder looks exactly the same as the usual standard accumulator. The difference is in the core of the accumulator, namely the bladder, which utilizes not only the compressibility of the gas to store energy, but also the foam filling. It enables the amount of storable energy to be increased by approx. 30%, depending on the nominal volume and application of the accumulator (in extreme cases up to 70%).

Consequently, selection of a smaller nominal volume is possible for the same energy requirement.

Advantages

- High thermal capacity on the gas side
 - Low temperature fluctuation during highly dynamic charging and discharging processes
- Foam provides effective insulation in relation to the oil
 - Reduction in heat exchange with the environment equals greater efficiency

■ Standard SB330-32 litres

■ Foam SB330E-32 litres

① ■ high heat exchange
■ low heat exchange

② ■ high temperature increase
■ low temperature increase

③ ■ small exchange volume
■ large exchange volume

- a further advantage is the high elastic recovery of the foam in the bladder
 - Reduces the residual volume by half



TECHNEWS

HYDAC Accumulator

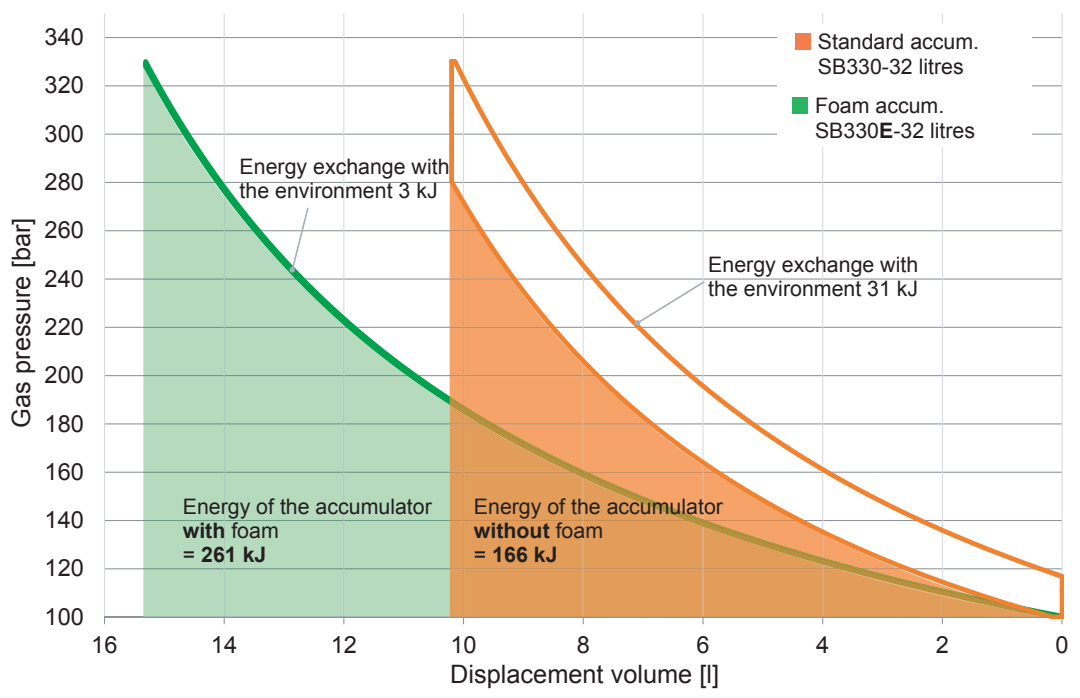
Technology:

Sustainable Hydraulics

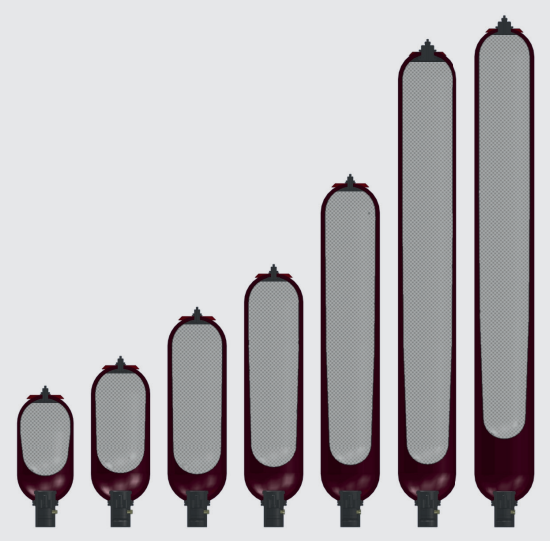
Bladder accumulator with foam-filled bladder



Energy comparison of both accumulators



Models



Description	Part no.
SB330E-10A1/112U-330A	3885817
SB330E-13A1/112U-330A	3885821
SB330E-20A1/112U-330A	3837206
SB330E-24A1/112U-330A	3885822
SB330E-32A1/112U-330A	3870958
SB330E-50A1/112U-330A	3816091
SB330E-54A1/112U-330A	On request

Other models on request

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HYDAC Accumulator Technology: Sustainable Hydraulics

Bladder accumulator with foam-filled bladder

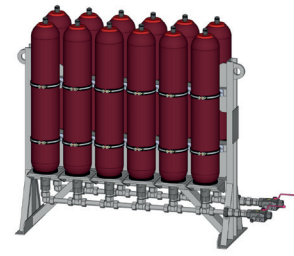
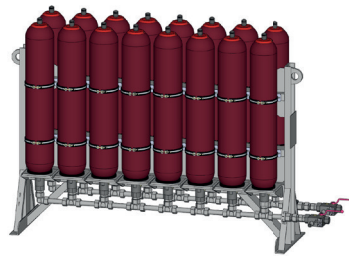
Application example from industry

By installing HYDAC bladder accumulators with foam-filled bladders, an accumulator station which is being used to provide energy to a press, for example, can be designed to smaller dimensions.

In this case, for the same amount of energy, instead of **16x 32 litre** standard bladder accumulators, **just 12x 32 litre** bladder accumulators with foam filling are sufficient.

This increases the efficiency enormously:

- Reduction in material required,
- Smaller installation space required,
- Reduction in the service and maintenance costs,
- Reduction in purchase costs.



Accumulator station of type	SS330B-16x32(U) with 16 off SB330-32 litres	SS330B-12x32E(U) with 12 off SB330E-32 litres
Working pressure	p2 = 325 bar / p1 = 100 bar	
Usable volume	163 litres	184 litres
Dimensions	2281 x 1774 x 660 mm	1725 x 1774 x 660 mm
Weight	1755 kg	1336 kg
Purchase costs	100 %	ca. 90 %