

Olaer are the exclusive distributor of Charlatte surge vessels in the UK

## Surge Control using Bladder Vessels a simple solution to surge problems

Bladder surge vessels are a simple solution to surge problems and will protect your system from pressure changes.

Pressure surges in pipelines can result in leaking seals, burst pipes as well as component damage.

- *50 years experience*
- *World leader*
- *Range 8l to 125m<sup>3</sup>*
- *Working pressure up to 100 bar*
- *25,000 installations worldwide (in the last 8 years)*



- *No CO2 emissions*
- *Simple to install*
- *Low maintenance*
- *No noise emissions*
- *Reliable & Cost effective*
- *Quick & easy bladder replacement*
- *No air is dissolved in the water*



**Operational carbon footprint is ZERO**

# Product Information



## Clear Water

- Regulation
- Prevention of Water Hammer

The Hydrochoc surge vessel is a hydropneumatic bladder accumulator which dampens water hammer in transients due to pump start/stop or valve open/closure.

Additionally, the vessel ensures that the pressure in a system is maintained following low consumption or leaks (limits the number of pump starts per hour).

## Waste Water

- Prevention of Water Hammer

The EUV waste water surge vessel is a hydropneumatic surge vessel designed to rapidly give large flow to the system. It protects against transients due to cut off of the pumping station when the effluent is heavily charged or fibrous.



The AARA sewage surge vessel with automatic air regulation operates not only as a surge vessel but also as a balancing chimney, without compressor or bladder.

The AARA volume requirement is approximately half that of a compressor or bladder type vessel.

Designed for heavily charged or fibrous liquids, it is perfectly adapted to protect flat pipelines often encountered in waste water systems.

# Why use Charlotte vessels?

## Water hammer

The Charlotte vessels regulate flow rate and prevent water hammer (also referred to as pressure surge) protecting the pipeline and pump assets and the resulting cavitation.

WaterHammer can be defined as a rapid change in pressure. The worst case scenario for Water Hammer is "pump trip" due to power failure at maximum flow.

## Technical support & product efficiency

Each vessel is sized for the application using state of the art software ensuring optimum performance and reliability for your network. This service is free of charge.

## Cost effective

Optimised solution for system network. No expensive compressors, air receivers, back-up generators, complicated controls, sensors and valves necessary. Commissioning service/ commissioning training available.

## Strong, durable bladders

These vessels are especially designed for water and waste water applications using bladders which are strong, durable and low maintenance. This eliminates air from being dissolved into the pipe network which will cause cavitation and eventual failure.

## 100% Sustainable

Bladder vessels are a self regulating system which means that there is **no need for electricity**,

- Fluid is contained inside the Butyl bladder which means there is no corrosion and in turn ensures long life of the vessel.
- Bladders are manufactured from heavy duty butyl rubber which is suitable for drinking water

## Approvals

- WRAS Approved
- Registered on the Achilles
- British Standard 5500

