



## ERGIL<sup>®</sup> SURGE VESSELS

Surge vessels are important assets in the water treatment process, though incorrect maintenance and management can lead to issues in pipelines costs and the water industry millions every year, causing burst pipes, structural damage, negative pressures and colossal water wastage. Negative pressure directly contravenes Drinking Water Inspectorate (DWI) legislation due to the risk of contamination.

An Ager Brand, ERGIL is a global specialist in designing, engineering and manufacturing surge vessels with an extensive experience. ERGIL manufactures two types of surge vessels which are categorized as Bladder type and Compressor type for the water pipeline, desalination plants, crude oil pipelines and other applications. ERGIL provides surge vessels in horizontal and vertical types are available and orifice plates, butterfly valves, level instruments, pipeline etc. are provided as required.

### Features

- Reowned company understanding of surge system design
- Ensures compliance with Product Equipment Directive & ASME regulations
- Reduces water leakage
- Pipeline fatigue and bursts analyzes
- Minimizes risk of contamination in potable water pipes caused by negative pressures
- Accommodates variable pumping regimes without dumping compressed air
- Improves your company's environmental social responsibility and public image



## BLADDER TYPE SURGE VESSEL

- Vertical or horizontal types are available
- A bladder is fixed to the outlet/inlet connection orifice located on the bottom or the side of the vessel.
- The bladder is designed so it can expand to the full size of the vessel. This allows for greater drawdown volumes and less stress on the bladder.
- The air is trapped in the space between the outside of the bladder and the wall of the vessel. Therefore the liquid is not in contact with the steel walls of the vessel.
- Depending on the level of cubage in the tank it is possible to design by using minimum 3, maximum 4 legs as optional
- Design code: ASME Section VIII
- Capacities are available from 3000lt to 70000lt.
- Service Pressures Range: up to 100bar.



## COMPRESSOR TYPE SURGE VESSEL



Compressor vessels have been in operation for many years all over the world as a solution to surge problems. The system comprises of a vessel containing water and a pre-calculated volume of compressed air in order to give the required elasticity to push the water at the required rate into the system. To achieve this balance, a complicated system of control is required.

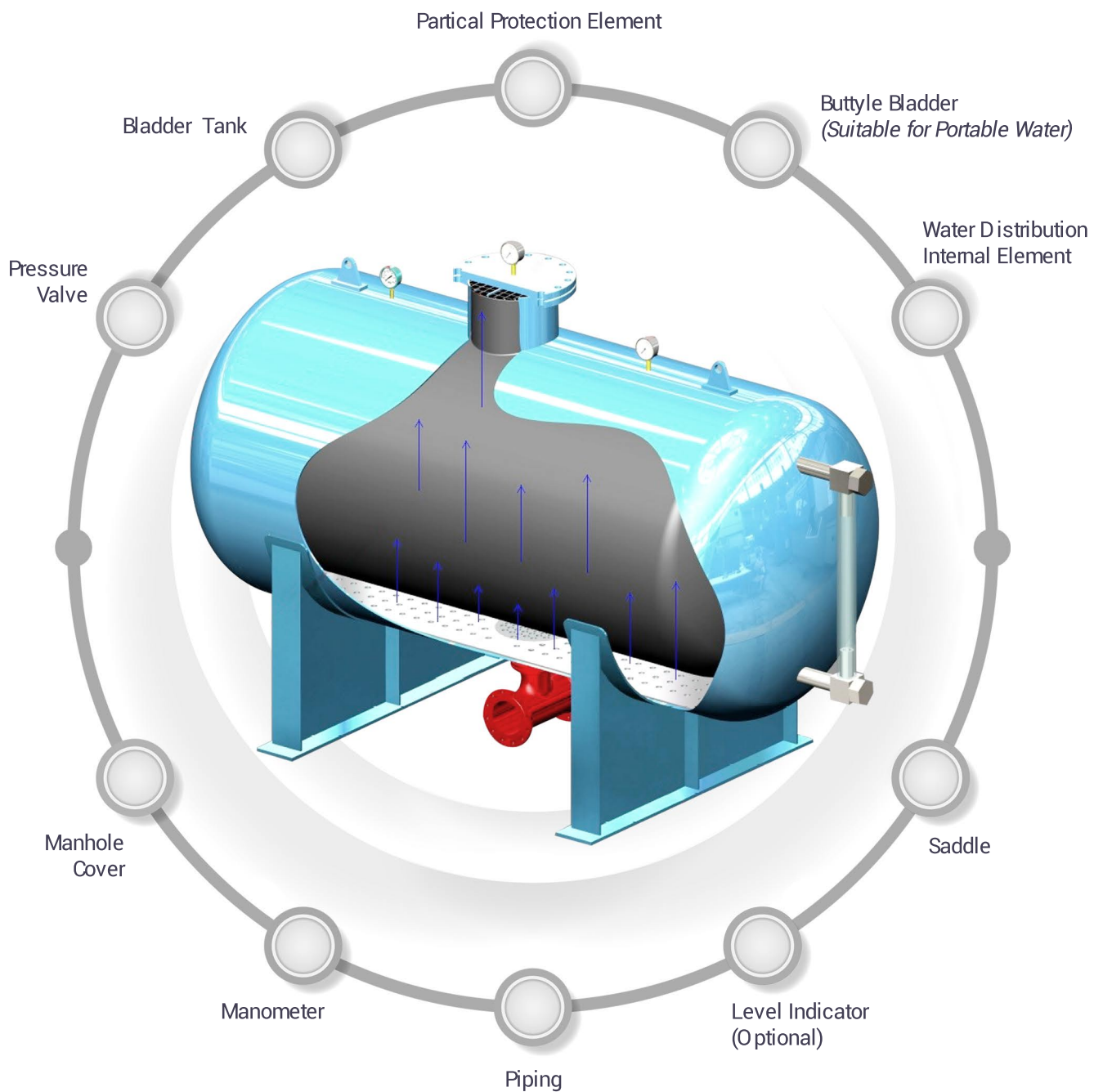
Starting with compressors, air receiver, solenoid valves, measuring equipment and of course a control panel.

As the air is continuously dissolved into the water, so the control system is activated to replenish the compressed air volume in order to maintain the required elasticity.

A number of security systems are also required in the event of system failure.

## BLADDER TYPE SURGE VESSELS

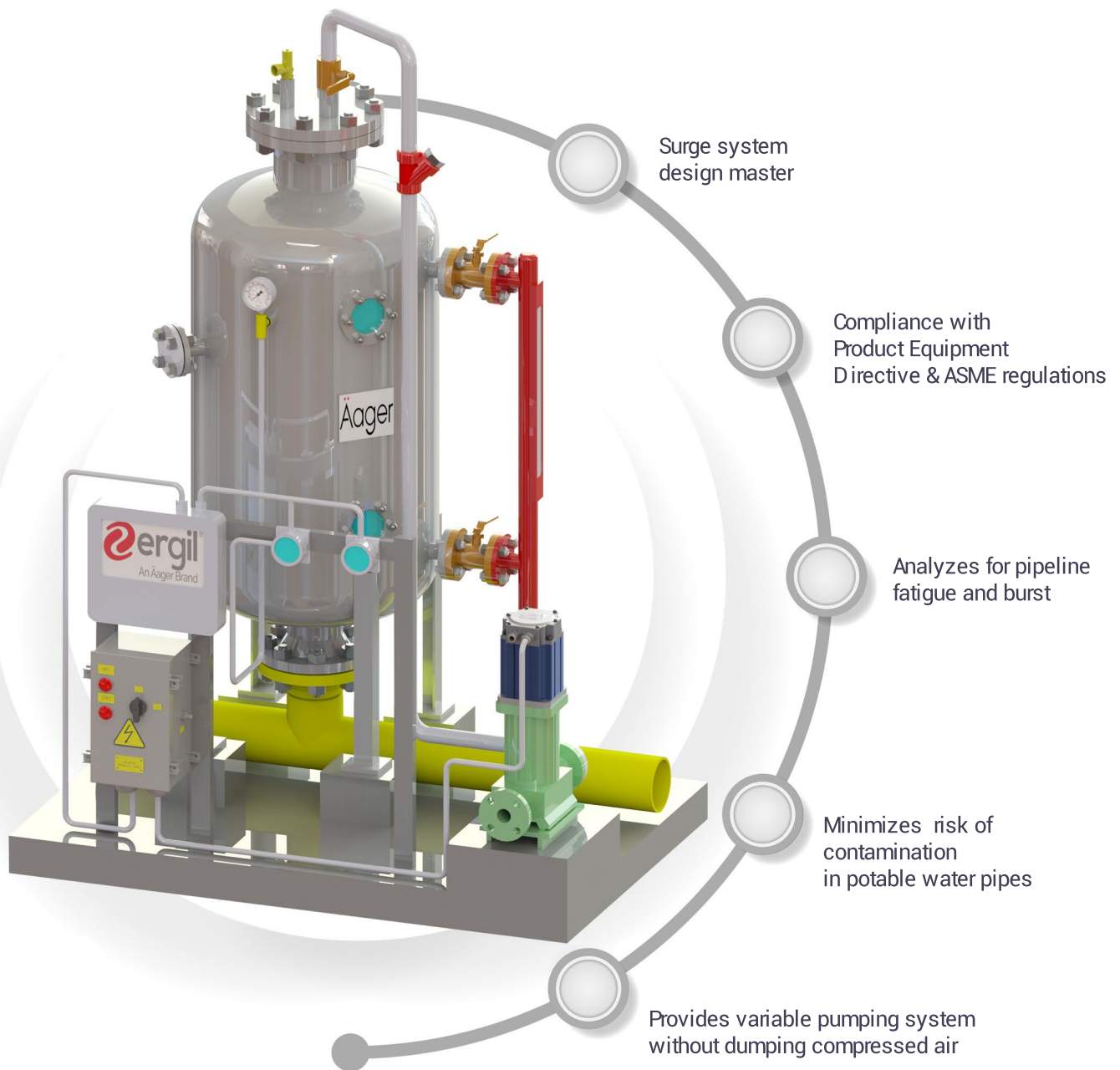
Surge Vessels is a powerful and user-friendly control system that protects your pipeline systems against waterhammer & pressure transient.





## COMPRESSOR TYPE SURGE VESSELS

ERGIL Surge Vessels are perfection of **35 years of experience**. We developed cost-effective surge control system that provides one of the best internally designed bladder pressure control system.



## Experience

The sizing, designing and engineering of ERGIL surge vessels is undertaken by specially trained and experienced hydraulic engineers equipped with advanced modeling software optimizing and controlling pressures throughout pipe systems and networks.



## QUALITY

☆ ISO 9001 version 2000 certificate

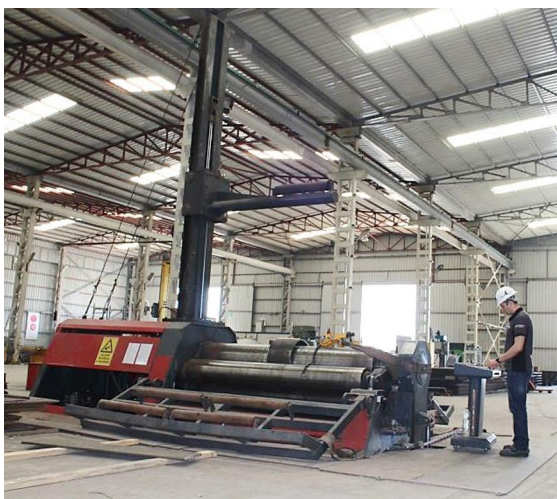
ERGIL bladder surge vessels are manufactured to ASME section VIII with the “U” stamp, **National Board Registered** and can also carry ISO 9001 version 2000 certificate.

ERGIL potable water bladder vessels are completely NSF approved for all materials, components and model names.

## TECHNOLOGY

Waste / Raw water bladder tanks (vertical only) from 50 to 20,000 gallons

Potable water bladder tanks (vertical or horizontal 26 to 32,000 gallons) Operating pressure to 1,400 psi.



## ABOUT ERGIL

Focused on high quality service and products, ERGIL is a 30 year old organization into the manufacturing of tanks, equipments and accesories for storage tank terminal, refineries, pipelines, process and industrial plants. Known as a leading engineering, procurement and construction(EPC) company, it has extensive experience in storage tank design, custom shop fabrication and field erection.

## Manufacturing Plant in Mersin, Turkey

☆ 32.000 sq/m facility

ERGIL's 32,00 sq/m facility in Mersin, Turkey and team of experienced professional engineers and management enables them to bear and meet complex projects and deliver with ease. As a modern facility it is equipped with the latest technology, including fully automated welding, rolling, CNC plasma cutting, shot blasting, heating, painting system and lifting machines. ERGIL is also capable of handling in-house pressure testing, radiography, and other non-destructive tests.



Automatic  
Shot Blasting System



CNC Machine



Automatic Column Boom  
Welding & Rolling Machines





## Thanks for choosing ERGIL<sup>®</sup>

Build the best product, cause no unnecessary harm, use business to inspire and implement solutions to the environmental crisis.

Some of our customers:



Storagetech<sup>™</sup> products are designed to safeguard the integrity of storage tanks, to serve for **extreme** conditions to provide **best safety choice** for its prestigious users to provide its clients a **competitive** pricing, outstanding performance and **environmental** protection



CAPACITY (lt)	ØD (mm)	H(mm)	B (mm)	A(mm)	C (mm)	No.of legs
3000	Ø1200	3900	1400	80	45	3
4000	Ø1200	4800	1400	80	45	3
5000	Ø1500	4100	1700	80	45	3
6000	Ø1500	4650	1700	80	45	3
7000	Ø1500	5250	1700	80	45	3
8000	Ø1500	5750	1700	80	45	3
9000	Ø1500	6350	1700	80	45	4
10000	Ø1900	4765	2100	80	45	4
10000	Ø2100	4165	2300	80	45	4
12000	Ø1900	5465	2100	80	45	4
12000	Ø2100	4465	2300	80	45	4
15000	Ø1900	6560	2100	80	45	4
15000	Ø2100	5665	2300	80	45	4
18000	Ø1900	7550	2100	80	45	4
18000	Ø2100	6465	2300	80	45	4
20000	Ø1900	7550	2100	80	45	4
20000	Ø2100	6465	2300	80	45	4
25000	Ø2100	8565	2300	80	45	4
25000	Ø2500	6475	2700	80	45	4
30000	Ø2500	9965	2300	80	45	4
30000	Ø2500	7475	2700	80	45	4
35000	Ø2500	8375	2700	80	45	4
35000	Ø3000	6435	3200	80	45	4
40000	Ø3000	7135	3200	80	45	4
50000	Ø3000	8735	3200	80	45	4
60000	Ø3000	10035	3200	80	45	4
70000	Ø3000	11435	3200	80	45	4

Fig. 4 - Size table for Surge Vessel Vertical Type

- Depending on the level of cubage in the tank it is possible to design by using minimum 3, maximum 4 legs as optional.
- Capacities are available from 3000lt to 70000lt.

CAPACITY (lt)	ØD (mm)	L(mm)	C (mm)	B(mm)	H (mm)
3000	Ø1200	3500	1500	300	3600
4000	Ø1200	4500	2300	300	4500
5000	Ø1500	3800	1600	300	3800
6000	Ø1500	4300	2100	300	4350
7000	Ø1500	5000	2400	300	4950
8000	Ø1500	5400	3100	300	5450
9000	Ø1500	5900	3600	300	6050
10000	Ø1900	4450	2100	300	4465
10000	Ø2100	3850	1500	300	3865
12000	Ø1900	5100	2900	400	5165
12000	Ø2100	4250	2100	400	4165
15000	Ø1900	6300	3600	400	6260
15000	Ø2100	5450	2900	450	5365
18000	Ø1900	7250	5000	450	7250
18000	Ø2100	6250	3800	450	6165
20000	Ø1900	7300	5400	450	7250
20000	Ø2100	6150	4300	450	6165
25000	Ø2100	8300	5400	450	8265
25000	Ø2500	6200	3100	600	6175
30000	Ø2500	9650	5600	500	9665
30000	Ø2500	7150	4100	600	7175
35000	Ø2500	8050	5300	600	8075
35000	Ø3000	6200	2900	600	6135
40000	Ø3000	6900	3500	600	6835
50000	Ø3000	8500	5100	600	8435
60000	Ø3000	9850	6100	600	9735
70000	Ø3000	11200	7500	600	11135

Fig. 4 - Size table for Surge Vessel Horizontal Type

- Depending on the length of the tank it is possible to design by using minimum 2, maximum 5 legs as optional.
- Capacities are available from 3000lt to 70000lt.



Äger

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