



Advanced testing facilities

Designed to reproduce real conditions of modern water distribution systems the CSA testing facility is able to assess the dynamic performances of automatic control valves, direct acting pressure control valves, air valves and anti water hammer valves.

Provided with a high capacity booster pumps station, and linked to an advanced high frequency pressure transducers and flow meters, the testing rig allows for a real time visualization of pressure and flow evolutions. Water hammer events can also be simulated and recorded to prove the efficacy of CSA fast acting relief valve, in addition to level control for which, using an auxiliary stilling tank, a part of the pipeline system is entirely dedicated.

The PLC and control station allows for the operation of step by step and solenoid operated valves to determine the sensitivity of such kind of application and pressure management solutions. Thanks to this important and powerful tool valves can be customized, simulated and set according to the project requirements assuring the perfect performance and accuracy.

The testing process

All our valves undergo severe tests according to EN standards to ensure they are mechanically resistant, watertight, and high performing. After testing every valve is identified by means of a metallic tag or sticker, and duly registered and certified.





CSA s.r.l. - Strada San Giuseppe, 15 - Località Ponteghiara 43039 Salsomaggiore Terme (PR) - Italy TEL. +39.0524.523978 - FAX +39.0524.524031

www.csasrl.it - info@csasrl.it

Water under control



The company was founded in 1987 by transforming the former CSA, which was a trading company dealing with pipes and valves for water networks, into a manufacturing company, through the research and realization of pillar fire hydrants.

The history of our company is characterised by years of technical and commercial research, which have enabled us to offer a complete range of valves designed for controlling, regulating and protecting the pipelines under pressure in both waterworks and sewage lines.

Our many industrial patents and innovative technical solutions, the modern and attractive style of design, together with flexibility and reliability have been the key points of the rapid growth of CSA over the last few years and have allowed us to become a point of reference in our sector.

Aware that we are managing the world's most precious resource and motivated by the responsibility towards our customers we have dedicated ourselves to constantly improving our products, placing them at the highest levels of quality.







Water and wastewater air valves



Water air valves FOX and LYNX series

Combination double or triple function air valves which allow evacuation of air and its entrance in case of filling in water pipelines.

Body in ductile cast iron epoxy coated, sealing seat in stainless steel, float in polypropylene. Connections: flanges DN50-DN400, EN1092/2 or ANSI 150; female threads 1"-2" BSP or NPT. Pressure standards PN10-PN64. Options: materials, connections, rapid filling prevention and anti-shock systems, conveyance system, versions for air discharge or entrance only, models for underground installation (Saturno series), etc.

Air valves for industry and seawater in stainless steel GOLIA series

Combination double or triple function air valves which allow evacuation of air and its entrance in case of filling in industrial pipes systems or aggressive environments. Body and sealing seat in stainless steel, duplex or superduplex, float in polypropylene. Connections: flanges DN50-DN250, EN1092/2 or ANSI; female threads 1"-2" BSP or NPT. Pressure standards PN10-PN40. Options: materials, connections, rapid filling prevention and anti-shock systems, conveyance system, versions for air discharge or entrance only, etc.



Air valves for industry and wastewater in stainless steel SCS series

Combination double or triple function air valves which allow evacuation of air and its entrance in case of filling for use with aggressive fluids or with solids in suspension. Body and float in stainless steel. Threaded connection male 2" BSPT or NPT. Pressure standards PN10 or PN16. Options: materials, connections, anti-shock system, versions for air discharge or entrance only, etc.



Air valve for water and irrigation ARGO series

Model made in glass reinforced polypropylene for applications in waterworks and irrigation.



Wastewater air valves SCF series

Combination double or triple function air valves which allow evacuation of air and its entrance in case of filling in pipelines for wastewater or with solids in suspension. Body in ductile cast iron epoxy coated, sealing seat and float in stainless steel. Connections: flanges DN50-DN200, EN1092/2; female thread 2" BSP or NPT. Pressure standards PN10 or PN16. Options: anti-shock system, conveyance system, versions for air discharge or entrance only, model for underground installation, etc.





Downstream pressure reducing-maintaining valves VRCD, VRCD FF, RDA series CSA direct acting reducing valves reduce and stabilize the downstream pressure to a constant pre-set value, regardless of flow rate and upstream pressure variations. For use with fluids and air. Body in ductile cast iron epoxy coated, internals in stainless steel. Connections: flanges DN50-DN150 EN1092/2. Pressure standards PN10-PN40, version PN64 (RDA). Model VRCD FF in stainless steel PN64 with female threads 1/2"-2" BSP or NPT. Options: other materials and connections, wide springs selection for different pressure regulation ranges, etc.



Upstream pressure relief/sustaining valves VSM series

CSA direct acting sustaining valves maintain the upstream pressure to a minimum pre-set value, regardless of flow rate and downstream pressure variations. Body in ductile cast iron epoxy coated, internals in stainless steel. Connections: flanges DN50-DN150 EN1092/2. Pressure standards PN10-PN40. Options: other materials and connections, various springs for different pressure regulation ranges, etc.



selection for different pressure levels, etc.

Float level control valves Athena series body allows both the installations an angle and globe pattern. materials and connections, float rod length, etc.



Automatic control valves

Fast acting anti-water hammer relief valve Mod. VRCA

It prevents pressure surge in pressurized water pipelines discharging the excessive volume of water directly into the atmosphere.

Body in ductile cast iron epoxy coated, internals in stainless steel. Connections: flanges DN50-DN200 EN1092/2. Pressure standards from PN10 to PN25. Options: other materials and connections, springs

Direct acting level control valve with balanced single seat. Its three ways Body in ductile cast iron epoxy coated, internals and float in stainless steel. Connections: flanges DN40-DN300 EN1092/2; female thread 1" or 1" 1/4, BSP or NPT. Pressure standards PN10-PN16. Options: other

Automatic control valves XLC 300 and 400 series

Diaphragm actuated valves with pilot circuit for automatic regulation of pressure, flow, tank level and pumps, relief, on/off and step by step operation and remote control by solenoids, with numberless combinations of functions and versions.

Body in ductile cast iron epoxy coated, internals in stainless steel. Connections: flanges DN50-DN800 EN1092/2 or ANSI 150. Pressure standards PN10-PN25, version PN40 until DN200. Options: other materials and connections, systems for anti/cavitation and low flow stability available.



Downstream pressure reducing-maintaining valves XLC 310 and 410

These models reduce and maintain a downstream pre-set pressure value regardless of flow rate and upstream pressure variations, thanks to a pressure reducing pilot valve.



Upstream pressure sustaining valves XLC 320 and 420

These valves maintain an upstream minimum pre-set pressure, regardless of flow rate and downstream pressure variations, thanks to a pressure sustaining pilot valve.



These models automatically limit the flow to a pre-set constant value thanks to a pilot connected to an orifice plate assembly.



Valves for minimum-maximum level control XLC 340 and 440 or constant (proportional) level control XLC 360 and 460 For regulation of water level in tanks by means of pilots with float connected to the circuit of the valve.



Step by step solenoid control valves XLC 353 and 453 For remote control of pressure, flow or level by means of two solenoids included in the circuit of the valve.

The possibilities of control and the combinations of functions we can offer are almost numberless!



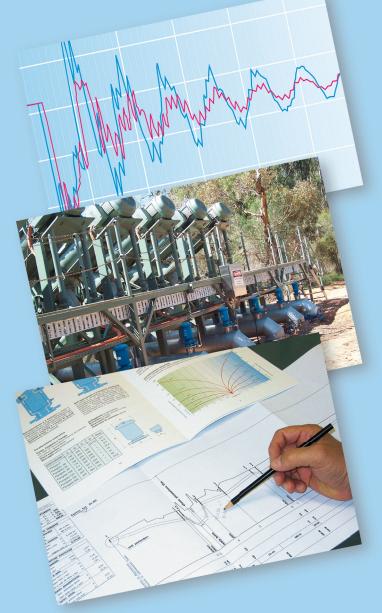
Water hammer analysis

CSA Hyconsult

CSA Hyconsult was founded to provide designers and consultants, involved in the design of water distribution and sewage systems, with accurate and unique technical support.

CSA Hyconsult has specialized in hydraulic modelling and transients analysis, entirely through the use of modern computational tools and advanced algorithms. Simulations are essential to predict system responses to events under a wide range of conditions without disrupting the actual system.

Using simulations, problems can be anticipated in possible or existing situations, and solutions can be evaluated in order to invest time, money and material in the most productive manner.





Air vented anti-surge tank A.V.A.S.T.

The innovative anti-surge tank A.V.A.S.T. has been designed to contain the devastating effects of water hammer, more precisely the transients coming from the sudden pump failure both for water and sewer systems.

The device, fully automatic, proved to be an innovative and reliable solution thanks to the absence of air compressors, electricity, panels, bladders, pre-charges.

A.V.A.S.T. is the ideal solution to avoid damages sometimes fatal for our systems as a consequence of uncontrolled overpressures and negative pressure waves.

Available two versions with bladder for PN25 applications.