FAQs

01 - How Does Water Pressure Affect My Consumption?

The higher the pressure is in a system the more water that will be 'pushed' through the system. We are seeing higher and higher city pressure readings as municipalities grow and must deliver more and more water through their existing infrastructure. The only way to deliver more water is to replace the water system with larger pipes, which in most cases is not a feasible option, or to 'crank up' the pressure.
This is a problem because water fixtures are designed for pressure no higher than 65 PSI, and even more so in older facilities where there is no pressure regulator, or water fixtures were not designed for water conservation.

02 - Is There Really Air in My Water?

There is no debate that air flows through your water line along with the water. Water systems are designed with this fact in mind to try to prevent potentially serious problems such as air blocks and hammering. The only real question is how much air? The amount is not constant and is affected by things such as system pressure, pressure fluctuations, temperature, turbulence, and by the design and condition of the water supply system. It can vary from a little to a lot at any given time

03 - How Does Air Get Into The Water Line?

As well as being released from entrainment in water, air can be physically introduced to water distribution systems. Water providers work to prevent outside air infusion; however, air is inevitably drawn into the line through:
Tiny cracks, poor or damaged joint seals and leaking flange connections. Temperature, flow rate and pressure changes can generate a significant amount of air volume. Pumps that are positioned throughout the distribution system create pockets of air in the pipeline because of the vortex action of pumps. Surprisingly common main line breakages which can introduce huge amounts of air into the water system.

"Air behaves very unpredictably in a pipeline…in the normal operation of water pipeline system, maintenance activities and fluctuating period of consumption in demand will cause air to be released from solution and accumulate in the localized piping" – A New Understanding Of Air Transfer – Clean Water Legacy, January, 2003

04 – How Am I Paying For The Air?

The most used water meters (over 99%) use a method known as Positive Displacement to measure water consumption. These meters measure the volume of fluid moving through the line. This volume measurement, however, is not limited to just water and instead measures the total volume of both water and air.

05 - How Much Money Will I Save?

The amount of money you will save is determined by several factors including:
- City pressure (PSI) and amount of pressure fluctuation
- Flow rate and flow capacity (GPM)
- The amount of air in the line at any given time
- The amount of non-volumetric water consumption

The actual savings you will experience is impossible to accurately predict and will vary with the conditions above. On average, our customers see +/- 20% savings, but we have seen users have savings as high as 35% and as low as 10%. What's important is that once you install the Smart Valve™ it begins working 24/7/365. You will realize the full amount of savings available within your water supply without having to ever think about it again, and it will keep saving you money for as long as it is installed your water line.

06 - Does Air Still Go Through The Water Meter?

The Smart Valve™ does NOT remove the air. It simply compresses the air before it reaches your meter. Once compressed, the air flows through the meter undetected. After the air passes through the water meter and the valve it returns to its original state.

07 - Will The Smart Valve\ Affect My Water Pressure?

Anytime you put something in your water line it will create some pressure drop. Even your water meter causes a pressure drop. For the Smart Valve™ to work the system must be able to tolerate at least a small drop in PSI, however, with the 2nd Generation Smart Valve™ we can control the amount of PSI drop between zero (no effect) and a significant pressure drop. In certain cases where a larger pressure drop is desirable, we can dial that in with the external adjustment feature, often by as much as 30 PSI or more.
As a rule of thumb, if you currently have no problems or complaints due to low water pressure, then your property is a suitable candidate for the Smart Valve™.

08 - Is the Smart Valve Safe and Legal to Install?

The Smart Valve is legal to install on the user side of the water meter (after the backflow preventer if one is present).
Installation must be done in conjunction with all applicable laws, codes and standard plumbing practice in your area, however, no special permits or premission should be necessary.

The Smart Vlave is constructed of extremely strong and durable Acetron GP and stainless steel, is in compliance with NSF/ANSI 61 (portable water) and NSF/ANSI 372 (lead free) and is safe for use with all potable and non-potable water applications.

09 - How Reliable Is The Smart Valve?

The Smart Valve™'s only movement function is the compression of a spring and the associated opening and closing of a gasket-less plunger and housing. The valve is made of Acetron GP and stainless steel. Acetron GP is self-lubricating and has strength characteristics close to those of steel while still being flexible and impact absorbent.

10 – What Is The Guarantee and Warranty on The Smart Valve?

- Every Smart Valve™ comes with a 90-Day No Questions Asked Satisfaction Guarantee. This is an unrestricted guarantee, unlike some others who offer a more restrictive 5% or 10% savings guarantee, then argue with you later about how much you actually saved. We have heard stories of some vendors arguing when the savings aren't there that the customer must have had a leak or just used more water. WGE solutions will not argue with you about your happiness. YOU decide if it is working to your satisfaction. NO QUESTIONS ASKED!

- Every Smart Valve™ comes with a 10-Year Manufacturer's Limited Warranty.