



How ZYLYM™ Water Technology Works: Inspired by Nature, Powered by Innovation

What ZYLYM™ Does

ZYLYM™ provides specialized water conditioning that prevents scale build-up on pipes and equipment and effectively conditions water used in agricultural irrigation. ZYLYM™ technology specializes in environmentally beneficial water conditioning solutions for the hard calcium carbonate mineral deposits (“limescale” and “hardpan”) found in most water sources worldwide. The hard deposits pose multiple problems by slowing and sometimes stopping water flow in water-using equipment and soil. Research shows deposit build-up wastes energy, requires more equipment maintenance, can shorten equipment life from corrosion, can lessen profits, and sometimes wastes water. Instead of such lost productivity, the highly effective ZYLYM™ descaling helps equipment work much more efficiently. ZYLYM™ cost-saving results include preventing large deposit build-ups and dissolving existing deposits providing water conservation and increased yield and productivity through more effective irrigation in agriculture.

Inspired by Nature

ZYLYM™ is inspired by the flexibility of the mineral calcium carbonate (CaCO_3) in nature to have remarkably different forms and functions while still remaining CaCO_3 -- such as in marble, limestone, seashells and eggshells. Calcium carbonate is so versatile, it is used in diverse products like cement or soft powdered health food supplements. A basic premise of ZYLYM™ functioning is that the structure of calcium carbonate is capable of change.

How ZYLYM™ Works

The innovative ZYLYM™ unit is 100% made in America to work with calcium ions and carbonate ions naturally found in most water sources. The ions typically develop into hard calcium carbonate deposits that attach to pipes, machinery, and soil pores. Instead, ZYLYM™ allows calcium and carbonate ions already in the water to meet on the catalytic, non-sacrificial, non-magnetic ZYLYM™ core, where they can develop into a softer, smoother, non-scaly calcium carbonate micro crystal that is now suspended in water. Utilizing several well documented scientific processes such as lattice matching, the core of a ZYLYM™ unit provides millions of carefully engineered sites. On these ZYLYM™ sites

(with a type of scientifically planned pattern), ions develop into a soft, spherical shaped form of calcium carbonate that does not make hard bothersome deposits. Water exiting the unit is ZYLYM™ conditioned water. Once water is ZYLYM™ conditioned, it stays conditioned and can be efficiently used later. ZYLYM™ is powered by an innovative integration of well-known scientific processes. Examples include the process of creating a turbulent water flow within the ZYLYM™ unit that assists incoming water to more fully contact the proprietary ZYLYM™ core, a reduction in water surface tension for improved permeability, lattice matching to grow the desired micro crystalline form of CaCO_3 , the natural change of assisted nucleation on the lattice structure, and epitaxial processes and mineral resorption for restructuring what already exists.

What ZYLYM™ is Not

- ZYLYM™ is not a filter (as it does not remove anything, instead it facilitates changing and restructuring the calcium carbonate crystalline form).
- ZYLYM™ is not a magnet (it is not a temporary fix lasting only a few hours or a few feet).
- ZYLYM™ is non-polluting (ZYLYM™ adds nothing to the water and uses no chemicals in daily operation).
- ZYLYM™ uses no electrical hook-ups, no wires, no grounding, no batteries, does not require you to use any electrical current whatsoever (further user-friendly, sustainable, and cost-saving safety features).
- ZYLYM™ is not a water softener (water softeners remove beneficial calcium and magnesium, typically replacing these elements with an increase in water sodium or potassium chloride levels, which can be harmful to people and plants.) ZYLYM™ conditioned water has the big advantage of calcium and magnesium remaining in water).
- ZYLYM™ treated water provides significant improvement in plant yield and plant quality while utilizing less water.

ZYLYM Technologies
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