

Filtersorb SP3 Anti-Scale Media & Nano Technology

What is Nanotechnology?

Nanotechnology is a multidisciplinary field in that it involves a spectrum of disciplines to include but not limited to physics, engineering, and chemistry. The science of nanotechnology enables the transformation of everyday materials into revolutionary technologies and today is used in a number of applications such as medical devices, computer devices, car converters, and water filters. In fact, for centuries the methodologies of nanotechnology have been used, such as in the creation of the colors in stained glass windows. The difference today, is that we now have greater knowledge and understanding of nanotechnology and are able to apply this revolutionary science more readily and design

How does Filtersorb SP3 Filtration Process Work?

CWG has embraced the cutting edge science of nanotechnology and through extensive research and development has developed the catalytic Filtersorb SP3 filtration media used to prevent and remove calcium scale. The overall filtration process of the Filtersorb SP3 is broken down into three phases.

In the first phase, the calcium and magnesium is removed from the water. The catalytic surface of the Filtersorb media pulls the calcium and magnesium ions from the water and converts these ions into harmless nano crystal particles. These nano crystals are so small that they are approximately one billionth of a meter; 100,000 times smaller than a single strand of hair.



In the second phase of the filtration process, the existing scale in the piping and hardware is removed. The nano crystal particles are neutral and are unable to attach to any surfaces, but due to their large surface area and nano structure, bind to the calcium ions in the scale, gradually breaking the grid structure of the calcium deposits. Over time, the calcium scale deposits within the pipes and equipment are completely removed.

In the third phase and final phase filtration process, a 3 to 5 micron protective corrosion layer is formed. This layer forms because of the reaction of the nano surface of the crystals and the metallic surface of the pipes. This is comparable to the green layer of verdigris on a copper roof. As soon as the protective layer is formed it can no longer grow bigger, but it creates complete protection.

Presently Filtersorb SP3 is successfully used in a number of applications for both residential and commercial usage. Virtually maintenance free, chemical free, and salt free, Filtersorb SP3 media has proven to be an effective environmental alternative where benefits and overall performance surpasses competitors.