In the Know...

Ozone expert Peter Aldis demystifies Ozone Technology and discusses the best laundry disinfection system on the market - OPURA!

Ozone – All around us and Better all-round

We are all familiar with Ozone, it's produced in abundance by lightning during a thunderstorm, resulting in that beautiful fresh smell afterwards. Less helpfully, office photocopiers can produce ozone, and those working with arc welding systems for example are frequently exposed to elevated levels of ozone gas.

Ozone is simply a molecule of oxygen with three atoms instead of two. It's less common in the air than oxygen because once created its unstable and quickly disappears or simply reverts back to oxygen.

Natural Action - by Oxidation

Its ability to oxidise other molecules is harnessed in commercial ozone systems to break-down polluting molecules, unwanted smells and most significantly to disinfect. Disinfection with ozone operates by oxidising and splitting-open the cell wall of bacteria and breaking-up the molecular structure of viruses. In this regard it can act differently to other means of disinfection, such as heat (thermal disinfection), or chemical agents such as chlorine. In either case, if the heat is not hot enough or the concentration of the chlorine is too low, then the bacteria or virus may only be partially damaged and quickly recover or develop a degree of resistance...unlike ozone where this does not happen.

Disinfecting with Ozone

Ozone has a long history of use in treating drinking water, where dissolving ozone in the water kills bugs as well as removing undesirable taste, odour, colour and residual chemicals. It was quickly recognised that ozonated water would be good for rinsing fish, meat, poultry and vegetables, killing bugs on the surface as well as anything washed-off into the rinse water. The use of ozone in the laundry followed this as a natural progression and has been perfected and developed into the compact and highly efficient Opura system by Advance Laundry Equipment.

Ozone is ideal for laundries, not only does it disinfect the clothes themselves, it also disinfects the wash water, preventing bugs and infection passing through from one persons clothing to another. Ozone has been used in cold drinking water for over 100 years, and so doesn't need hot water to operate in a laundry, and because it is nature's natural cleaning agent, the amount of detergent and chemical required in the Opura Laundry System are similarly reduced.

Opura Ozone

Better all-round

Ozone - The Low-Carbon Solution

Unlike manufactured chemicals, Ozone is not produced in a chemical factory, then packaged and transported over great distances to the laundry. Ozone is produced at the point of use by the Opura System and because ozone allows reduced usage of energy for heating and drying, and chemical usage, Opura plays a unique role in reducing the carbon footprint of the laundry.

Greener Effluent

As ozone breaks down pollutants or reverts back to oxygen, the used water discharged from an Opura Laundry System carries less environmentally damaging substances than chemical-only laundry systems. Similarly, because the Opura system operates at lower water temperatures, wasted heat in the effluent water is considerably reduced.