

## Scandia PowerZone Series

### Revolutionary Automatic Cleaning System

Mold, mildew, bacteria and that ubiquitous musty smell are a thing of the past. Chlorine, chemicals and scrubbing are also eliminated with the Power-Zone 400. Designed specifically to remedy the on-going sanitary concerns of the commercial sauna and steam room, using the principals of corona discharge. The Power-Zone 400 is the industries first sauna and steam automatic sanitization system. This system is environmentally friendly and reduces the use of toxic chemicals and costly man-hours dedicated to cleaning saunas and steam rooms.



### Research, Development and Evolution

Scandia is a world leading manufacturer of sauna and steam room equipment. As one of the largest global suppliers to the hospitality and recreation industries, Scandia continually invests in product development that result in longer lasting, energy-



*Advanced Hybrid Steam Room*

Introducing the Advanced Hybrid steam-room system. Uses 50% less energy than traditional tile rooms and eliminates the following common problems:

- Mold, mildew and bacteria.
- The ever-present musty smell.
- Daily use of harsh cleaning chemicals.
- Annual re-grouting between tiles.
- Re-tiling every 2-5 years.
- Large steam boiler systems.
- Constant customer complaints.

### What is Ozone ?

Ozone (O<sub>3</sub>) is also known as "Activated Oxygen". Containing three atoms of oxygen (O<sub>2</sub>), as opposed to the two atoms we normally breathe. Ozone which exists in our earth's atmosphere is a protective layer that protects us from harmful UV rays of the sun.

### How does Ozone being created naturally and synthetically?

Ozone is formed naturally by the Ultra-Violet Rays from the sun and by lightning. Ozone can also be created synthetically by passing air through a corona discharge ozone chamber (electrical reaction) or Ultra-Violet lamp (photochemical reaction). Some of the oxygen molecules split into two separate oxygen atoms. These single atoms then

form semi-unstable bonds with the oxygen molecules (O<sub>2</sub>+O<sub>1</sub>=O<sub>3</sub>/Ozone). These oxygen molecules are highly reactive. This reactivity is because of the third atom of oxygen, also known as a 'Hungry Atom'. This atom being very eager to break away from this unstable bond and react with any oxidizable compound (organic or inorganic). The Ozone created by POWERZONE 400 (corona discharge method) is significantly more concentrated than natural ozone created by ultra-violet rays.

### What is the life span of Ozone?

Ozone is extremely unstable and has a short lifespan. It will break up into oxygen in 20 to 30 minutes (depending on the temperatures of the environment). It is very susceptible to heat, as the ozonated atmosphere is being heated, ozone will convert back into oxygen quickly. Ozone cannot be stored and must be generated on site and used instantly.

### What is the smell of Ozone?

Ozone has a natural grassy/herby smell. The 'fresh, clean' smells that we notice after a thunder storm is actually the nature's creation of ozone. Ozone is the nature's way of purifying and disinfecting the air of our environment.

### Is Ozone safe to use?

Ozone is the safest and most powerful oxidant known today. It performs 3,000 times faster than chlorine as a bactericide and 5 times faster than ultra-violet ray for air and water treatment. Ozone as an oxidant decomposes contaminants or chemically alters them so that they can be harmless to humans.

\*Consult operational manual for use and restrictions\*

restrictions\*

### How does Ozone act as disinfectant?

Ozone is extremely active. When it encounters bacteria, Ozone will interfere with the metabolism of bacterium-cells, through inhibiting and blocking the operation of the enzymatic control system. A sufficient amount of ozone will break through the cell membrane and leads to the destruction of the bacteria. Thereafter, the rest of ozone naturally reverts to oxygen very quickly.

### Is Ozone harmful to humans?

Ozone is non-cancer-causing, but it may affect the respiratory system when the concentration is too high. However, once we move out from Ozone concentration compound immediately, the discomfort feeling of respiratory system will immediately disappear. The AM-FINN sauna or steam room should not be entered until 30 minutes after the POWERZONE 400 has cycled off. The POWERZONE 400 cannot operate while the sauna or steam room is occupied.

## ECO-SAUNA

