

Press Release:

Gonzales company innovates COVID- disinfection of public places.

As CEO Jerry Fenley of Gonzales, LA manufacturer CleanerBlast Systems says, “We’re in the innovation business.” Fenley and his team define innovation as the process of analyzing machine design and process implementation to increase efficiency, simplify processes and eliminate weaknesses to enable practical, consistent, and problem-free solutions to critical cleaning tasks. That spirit of innovation drove CleanerBlast to develop a new solution to customers’ frustrations as they scrambled to find and employ practical surface disinfection equipment mitigate the spread of SARS-COV-2, the virus that causes COVID-19 disease.

Defining the urgent task of chemical spray equipment

According to studies, SARS-COV-2 can survive up to 4 hours on copper, remain viable up to 24 hours on cardboard, and live up to 3 days on plastic and stainless steel. It can survive even longer, up to 9 days on some surfaces. It can travel 13 feet through the air and be carried around on people’s shoes. Compounded by the fact that each of us is relying on everyone else who passes through a common area to have disinfected themselves and their belongings before passing through, that can be unnerving.

University of Arizona Dr.Gerba notes, “if you touch one contaminated surface and the next time you touch your eyes, nose, or mouth, you could infect yourself with a disease your body might not be prepared to combat... If just a single doorknob or table in a public place is contaminated, viruses can spread through office buildings, health care facilities and hotels within hours... In fact, 40% to 60% of workers and visitors in the building could be contaminated in just 2 to 4 hours.”

Virtually any surface you touch could harbor the SARS-COV-2. Switches, buttons, handles and knobs, elevators, playground equipment, pencil sharpeners, sanitizer and paper towel dispensers, coffee machines, shipping and storage boxes, desks and tables, office supplies, leaning areas like walls, rails and counters, exercise equipment, sinks, shower enclosures. and armrests in common areas are touched multiple times in a single day. Besides human touch, keys, cash, and the bottoms of purses, lunch boxes and water bottles can also collect pathogens to contaminate any surface they contact, including carpeted flooring – which can hold up to eight times its weight in dirt and dust and may be dirtier than a city street.

CDC stresses increasing the frequency of cleaning and disinfecting surfaces in common areas and public spaces as a vital role in limiting the transmission of SARS-COV-2; the more people using a space, the more frequent the regimen should become. To enable practical implementation of more intense surface decontamination protocols, many facilities turned to powered chemical sprayers to reduce time and labor allocation to clean and disinfect surfaces (including hard to reach places) in common areas, where not only the size, but also responding to the complexity of different material types, is a challenge.

Assessing the fitness of chemical spray equipment

Conventional (literally garden-variety) powered chemical sprayers (commonly used by homeowners to kill insects) are easy to use, but are not designed to provide the even, seamless coverage required to target viruses. Large droplets from these machines waste chemical product through drips and cause wet mess in some areas while leaving gaps in surface coverage in others. The heavy droplets slide or drop off surfaces to curtail contact time between the chemical product and the target surface. Without proper dwell time, disinfectants can't do their job. Over-spraying to compensate is a bad idea, since it wastes chemical product, and damage materials.

Over-spraying also exposes humans and the environment to a higher volume of toxic chemicals than is absolutely required. Because SARS-COV-2 surface disinfection regimens require frequent disinfection, cumulative overexposure should be an important consideration

Electrostatic sprayers, which atomize droplets through an electrode, generate heat that can break down or cause off gassing of chemical disinfectants (a negative affect on disinfectant potency). Because electrostatic sprayers create charged atomized droplets, the Faraday Cage effect can cause problems when spraying into corners or recessed areas. Charged atoms are attracted to the grounded area closest to the applicator. This means when atomized chemical product is sprayed on a complex shape, it has a tendency to coat the target areas' edges (closer to the applicator), but not to go into recessed areas. Adjustments in spray volume may or may not compensate for this.

The activity of aiming the nozzle or wand is disturbed each time the operator has to reach back to the machine to adjust spray volume to respond to a transition between surface materials with different chemical tolerance. Since this can affect coverage, the operator must either stop to visually ensure no gap in coverage is inadvertently created in the transition during the change in spray volume. or reapply chemical across the transition area (which is inherently over-spraying).

During the process of chemical application (whether using a garden-variety sprayer or an electrostatic sprayer), connecting valves and gaskets for large, bulky nozzles and long wands are failure points for leaks and drips that wasted chemical product and create points of unwanted chemical exposure.

Innovating chemical spray equipment to suit the task

CleanerBlast utilized its extensive engineering knowledge of precision engineered vapor equipment to create a new type of chemical sprayer designed for commercial and industrial disinfection applications – the CBT-2020. This mechanical atomizing sprayer creates an atomized vapor that provides seamless, controlled coverage across a wide range of angles and shapes, without an electrode, and without heat.

CBT-2020 inherits power and precision from the tried and true Turbulator technology CleanerBlast's advanced vapor blasting machines. Turbulator technology describes an ultra-high efficiency system that minimizes air pressure loss and maximizes consistency. The Turbulator technology in CBT-2020 was modified to accommodate standard 5-gallon disinfectant volume and fortified with specific chemical-resistant components to allow the same cool, atomized vapor spray and tight, even spray coverage when applying chemical disinfectants in commercial settings.

The patent-pending Vapo-Miser handle of the CBT-2020 was the greatest breakthrough, however. Unlike any other in the chemical application equipment market, the application nozzle is compact

and built into the handle for direct, easy targeting using an ergonomic pistol grip designed for optimal maneuverability and intuitive use. This design eliminates drippy valves and gaskets.

It also eliminates process problems. The volume adjustment dial right on the Vapo-Miser handle allows users to infinitely tune and set spray volume up or down without changing hand position for instant, seamless, uninterrupted response to the differing needs of neighboring, eliminating any need for compensating overspray.

“State of the art CBT-2020 is the best chemical spray equipment for disinfecting public or common areas”, says CEO Jerry Fenley, “we listened to the people on the ground and worked hard to remove the sticking points, problems and frustrations they encountered in other sprayers.”