

A YardGuard Mini-Gun System (MGS) For Inside Institution Uses

Preliminary

- Rapid and effective riot control
- Safe operation
- Fully automatic
- Optimized nozzle
- Simple clean-up
- Biodegradable/Environmentally Friendly

Description

The success of the original YardGuard providing positive inmate control in outdoor areas has led to many requests for a YardGuard system that can be utilized within indoor areas. In response to these requests we have developed the new RoomGuard system, specifically designed to use the successful YardGuard features in an inside room or exercise yard.

RoomGuard is a self-contained high pressure, low velocity water system capable of shooting short water pulses at targets up to 80 feet away. The short water pulses release a minimum amount of solution while being completely saturated with pepper spray. The water pulse, when contacting the target, saturates the target's clothing and atomizes to saturate the air around the target. Each pulse uses approximately two gallons of water with pepper spray. This small amount of material is easy to clean up. The water pulse "bullet" is traveling at approximately 120 miles per hour and is safe to targets beyond a minimum distance of 10 feet.

RoomGuard is completely contained in an enclosure that can be wall, ceiling or post mounted. The complete system, less control panel, is contained in an enclosure 2 feet wide by 2 feet deep by 4 feet in height. The RoomGuard nozzle is a straight bore type specifically engineered to provide a pulse (bullet) of water with minimal side spray. A special valve on the end of the nozzle caps the nozzle when not in use and prevents dripping.

Operation is simple. When an incident occurs, the operator simply grabs the control stick. The system automatically starts and a warning tone is generated. Within one second, the system is ready to fire. When the firing button is pressed, a two-gallon water "bullet" is released. The system can be fired at a rate of one shot every second if additional pulses are necessary to control a riot situation. The RoomGuard nozzle is optimized to provide straight water pulses with a minimum of spray. RoomGuard releases a water "bullet" that hits where it is aimed.

After an incident, clean-up is easy. The chemical is water-based and can easily be cleaned with simple tools. The pepper spray and water combination consists of food grade pepper extracts and water. The material contains no harmful chemicals and rapidly degrades in open air. The chemical formulation is not volatile as soon as the chemical has fallen out of the air.

Maintenance normally only consists of installing additional chemical when necessary. The pepper spray chemical is contained in a replaceable cartridge. Chemical filling is as easy as installing a new cartridge.

Power requirements are standard 220 VAC single phase electrical service readily available throughout the institution. The water reserve tank contains 30 gallons, enough for 15-20 pulses with no refilling. When the recommended minimum 25 GPM refilling line is included, the system will never run out of water pulses.

Specifications

Maximum shooting distance:	80 feet	Injection pump horsepower	.5 HP
Shooting pulse:	1.5-2 gallons	Water flow rate:	60-80 GPM
OC concentration per shot:	.18% (27,000 SHU)	Dimensions:	24" wide, 24" deep, 48" tall
Amount of OC per shot:	.25 quart	Electrical power requirement:	240 VAC, single phase, 30 amperes
Water tank size:	30 gallons	Approximate weight (net less solutions)	200 lbs.
Chemical cartridge size:	2 gallons	Estimated weight (fully charged)	450 lbs.
Recommended water refill rate:	25 GPM		
Water pump horsepower:	5 HP		