

YardGuard™



- *Emergency inmate/crowd control*
- *Based on successful WRS installations*
- *All new compact enclosure design*
- *Easy to install and maintain*
- *Programmable Logic Control (PLC) System*
- *Faster target acquisition*
- *Automatic water stream adjustment*
- *Dynamic chemical injection control*

DESCRIPTION

The YardGuard™ is a second generation water restraint system. Water Restraint Systems (WRS) have been successfully controlling inmates and protecting staff since 1998. During the past five plus years' operational deployment, there have been NO injuries to staff or inmates caused by the WRS. The new YardGuard is completely self-contained and modular. The system is easy to install, simple to maintain, and provides even easier and faster target acquisition and inmate control.

SELF-CONTAINED AND MODULAR DESIGN

The YardGuard is manufactured, preassembled and tested at the Hydro Force factory. The complete system is contained in one enclosure. The unit can easily be installed on the institutions' concrete mounting pad. As an option, the YardGuard water cannon can be remotely mounted and interconnected with a prefabricated piping assembly. Multiple nozzles with multiple control points are also an option.

The YardGuard is installed in one secure cabinet manufactured of heavy gauge steel with lockable inspection panels. The unit can be installed in either secure or non-secure spaces.

Because the YardGuard system is contained in one enclosure, maintenance is performed much easier. Secure access panels are removable allowing easy access to all components.

The control system includes a mini-control panel and video monitor inside the YardGuard security enclosure for maintenance purposes.

YARDGUARD NOZZLE CONTROL

The new system utilizes the YardGuard nozzle control system. This system automatically varies the nozzle pattern from a straight stream to a fog stream depending on the shooting direction and distance. The nozzle stream is controlled by the PLC computerized control system that can be programmed to provide automatic coverage regardless of the coverage area.

Comments from officers:

"We no longer have the inmate injuries we used to have before this system installation."

"We have been able to cut the time needed to stop fighting in half with this system."

"The monthly cost of munitions used to stop inmate fighting has been cut more than half."

Comments from inmates:

"When it hit me, the water felt cool but whatever was in it took my breath away."

"It burned real bad. It did the job."

"Worked real good. It will sure make someone think before fighting."



ENGINEERING/INSTALLATION

Each YardGuard installation is custom engineered for the precise application. An experienced engineer is assigned to assist the facility with system design and installation. Drawings, operating and installation manuals, and a video are provided to assist the facility with its installation. The YardGuard system is covered by a one-year warranty. Please contact us for complete specifications.

YARDGUARD NOZZLE POSITION CONTROL

The YardGuard nozzle includes special sensors that return precise position signals to the control system.

1. As the nozzle is pointed at closer targets, the nozzle stream control is activated to provide the correct chemical coverage to the target area.
2. When wide nozzle movement is requested by the operator, the nozzle responds by automatically moving at a high rate until the nozzle is near the desired location, thereby speeding target acquisition.
3. Multiple control positions can easily be programmed.

CONSTRUCTION

Size:

<u>Base:</u>	30 inches by 36 inches Concrete base can be as small as 36 inches by 36 inches.
<u>Height:</u>	120 inches (less nozzle) 145 inches with nozzle attached
<u>Water tank:</u>	250 gallons
<u>Chemical tank:</u>	35 gallons

Power:

Electrical
208/230 VAC, 3-phase, 4-wire, 18 KVA
(50 amperes running)

Pump:

25 HP closed impeller multistage pump

PROGRAMMABLE LOGIC CONTROL

The new features most desired by existing system operators require an adaptable and flexible control system, and YardGuard delivers both.

The PLC uses hardened and redundant communications between all components ensuring error-free communications. PLC programming and troubleshooting is easily accomplished using a laptop computer or personal digital assistant (PDA).

The PLC displays English language messages on the video screen. The primary video screen is located at the control location. A secondary video screen is located at the electrical control enclosure for WRS troubleshooting.

DIRECT CHEMICAL INJECTION

The YardGuard system utilizes a direct injection system rather than the high pressure air system utilized by the original WRS. The YardGuard stores all chemical at atmospheric pressure. The control system uses pressure information to adjust the chemical injection precisely.

An optional system provides real-time chemical testing. The test data is presented on the video monitor and VCR following each chemical injection operation.

Security:

- ~ Steel cabinet with high security fasteners
- ~ All inspection panels with security locks
- ~ Designed for installation in custody or non custody areas
- ~ Built-in countermeasures (optional)
- ~ Contact the factory for drawings and installation specifications.

