

The **Fire & Hazard Control (FHC)** engineering team can quickly engineer a custom monitor tower for your specific industrial hazards!

The vertical tower is engineered with bolted construction so that it can be inexpensively shipped in a crate unassembled; then erected on any site with a ordinary hand tools and a small crane.

Safety is engineered into every structure! The assembly will incorporate all safety standards for climbing, elevated work platforms, non-slip steps and surfaces, and full safety railing enclosures.

Due to the various size and types of monitors, **FHC** engineers have per-determined supply piping options to feed various types and sizes of monitors. The monitors can be supplied from various global manufacturers in both manual and electronic drive systems. Explosion proof electrical boxes and wiring are also available.

Corrosion protection is standard – with shot blasting of all components prior to application of epoxy paint.



ELEVATED MONITOR STRUCTURE

Elevated Monitor Structure

VERTICAL TOWERS

- Steel angle: 100mm x 100mm x 6mm (4" x 4" x .250") HRS ASTM A-36
- Full length vertical outside structural angles
- Cross-sectional "X" gusset reinforcement angles
- All bolted construction – 12mm (.500") Grade 8 course thread with lock washers
- Tower Dimensions: 6M high x 1M square (19' x 3')
- 3D drawings and full bill of materials

PAINT AND PROTECTION

- Shot blasted prior to final assembly
- Chemically cleaned, primed, and epoxy painted after assembly
- Corrosion resistant materials used throughout construction
- Available in multiple colors

SAFETY REQUIREMENTS

- Vertical personnel enclosure around ladder – all welded steel
- Ladder steps – non-slip type
- Railings, steps, and ladder enclosure painted Safety Yellow

PLUMBING AND PIPING

- 100mm (4") vertical water supply piping, Schedule 40, black iron, single piece
- 100mm (4") bolted flange at bottom and platform
- Epoxy painted Red inside and outside

ASSEMBLY AND ERECTION

- Base mounting plates 200mm square x 12mm (8" x .500") thick
- Bottom attachment has (16) 25mm (1") Grade 8 bolts with locking nuts
- Pre-engineered concrete footer



PLATFORM CONSTRUCTION

DESIGN FEATURES

- Non-slip abrasive coating of 4mm (.188") steel surface, welded to sub-frame, angle support brackets to tower
- Steel I beam construction – all bolted construction 200mm x 100mm (8" x 4")
- Dimensions: 2M x 3M (6'x9')
- Tubular 50mm (2") steel safety perimeter railings, two levels, with (7) vertical posts (bolted in place)
- Hinged tubular steel safety gate with locking device
- 100mm (4") High floor perimeter safety kick plate
- All railings coated with Safety Yellow epoxy coating
- Rated for a minimum of 600kg (1,300lbs).



WATER FLOW COMPONENTS

In combination with a well engineered elevated steel monitor structure, FHC offers a wide range additional components to meet your system needs. The “entire system” will be configured, tailored, and programmed to suit your individual hazard requirements. Complete documentation, certification, and installation conformity information shall be provided for the entire system.

FHC has the ability to manufacture and assemble all components at our factory in Saudi Arabia and on-site assembly allows us to control the entire manufacturing process. This gives FHC accountability for the design, as well as the total quality control assurance for an error-free installation.

MANUALLY OPERATED

- Water Flows Up to 7,500L/min (2,000GPM)
- Gear or direct handle controlled
- Aluminum or brass construction
- 4-bolt flange mounting
- Platform or ground operation

MASTER STREAM NOZZLES

- 2,000 to 7,500L/min (500 to 2,000) GPM
- Fixed GPM or variable GPM settings
- Self-educing type nozzles
- Stacked tips and shaper tube available



ELECTRICALLY / HYDRAULICALLY OPERATED MONITORS

- Class 1 Division 2 explosion proof applications
- 12/24V Low or 240/360/440V line voltage
- Electronic drive allows for exceptional integration with electronic controls
- Modular, self-contained pump units with corrosion resistant actuators
- Local or remote control

CONTROL VALVES

- Brass or stainless steel, ball type, gate screw valves or butterfly
- Hand wheel gear, manual quarter turn handle, electric or hydraulic



PROJECT SUPPORT



- | | |
|----------------------------|---|
| Engineering: | Bill-of-Materials and 3-D Drawings |
| Design: | Fabrication and Construction |
| Programming: | Electronic Wiring and Control Integration |
| Installation: | Testing and Certification |
| Instructions and Training: | After Service and Parts Supplier |

Elevated Monitor Structure

ELECTRONICS AND SYSTEM INTEGRATION

OPERATOR CONTROLS



- Flexible control options which can be specified for your application
- Suitable for hazardous classified environments
- Continuous oscillation and/or event-response

MOTOR CONTROLS



- Suitable for hazardous classified locations
- Modular designs can be scaled for your needs
- CE certified, including ATEX

M-LINK CONTROLS



- Combines a master control with a graphic user interface
- Convenient interface to plant SCDA
- Merges multiple data streams into 1 visual format
- Scalable and expandable as needs change

COMMUNICATION INTERFACE



- Reduces complexity and installation cost
- Allows two-way communication of status information
- Hardware, discrete, network or wireless protocols

