

INGENIOUSLY  
CRAFTED FOR

**ABSOLUTE  
PROTECTION**



**HD FIRE PROTECT**  
*Protecting what matters most to you*

# For over 30 years,

**HD Fire Protect** has been involved in designing, developing and manufacturing worldclass firefighting equipment and systems. We have been involved in meeting ever-changing and demanding industry standards, providing a wide range of products, from simple industrial fire protection systems to most complex firefighting skids.

Global Headquarters





Manufacturing Plant



# Our Philosophy

"Committed to protecting" are simple words, but these have a very deep meaning when put into practice. These important words represent our prime principles to which we will always be dedicated.

## Vision

To be recognised as one of the world's most trusted and innovative manufacturer of fire-fighting products by providing our customers highest quality products that combine performance and advanced technology with value pricing while achieving 100 % customer satisfaction.



## Approvals & Certifications



# Deluge Valves

## DELUGE VALVE MODEL A

- Size: 50, 80, 100, 150 & 200 mm (2", 3", 4", 6" & 8")
- Cast Iron construction
- Maximum service pressure 12kg/cm.sq (175 psi)
- Vertical inlet and Horizontal outlet
- Flanged connection dimensions to ANSI B 16.1
- Diaphragm operated with rubber to metal drip-tight positive sealing
- Reset without any tools
- Easily trimmed for actuation by manual, remote solenoid valve & with wet or dry pilot
- Internal and external surfaces epoxy coated for extra protection



## DELUGE VALVE MODELS H2 & H3

- Size: 50, 80, 100, 150 & 200 mm (2", 3", 4", 6" & 8")
- H2: Cast Steel ASTM A216 WCB construction
- H3: Ductile Iron ASTM A536 construction
- Maximum service pressure 17.5 kg/cm.sq (250 psi)
- Horizontal or Vertical mounting
- Flanged (ANSI) or Grooved Type Connection
- Diaphragm operated with rubber to metal drip-tight positive sealing
- Auto-reset type
- Easily trimmed for actuation by manual, remote solenoid valve & with wet or dry pilot
- Internal and external surfaces epoxy coated for extra protection



## DELUGE VALVE MODEL H5

- Size: 50, 80, 100, 150 & 200 mm (2", 3", 4", 6" & 8")
- Nickel Aluminium Bronze BS1400 Gr AB2 construction with suitable trim
- Maximum service pressure 17.5 kg/cm.sq (250 psi)
- Horizontal or Vertical mounting
- Flanged connection dimensions to ANSI B 16.5
- Auto-reset type
- Easily trimmed for actuation by manual, remote solenoid valve & with wet or dry pilot
- Complete trim is available in nickel aluminium bronze/monel material, suitable for sea water use







## DELUGE SKID MODEL D-PACK

- D-PACK is a pre-assembled deluge valve skid package enclosed within a free-standing cabinet designed to occupy minimum floor space and also provide an aesthetically pleasing appearance
- Suitable for all HD deluge valve models
- Cabinet available in 14 gauge steel, SS304 or SS316 material
- RED finish
- The front door of the enclosure is fully hinged to maximize access to the enclosure
- All side panels are easily removable for maintenance
- Comes with downstream, upstream and by-pass butterfly valves
- All gauges externally visible through polycarbonate window
- Pressure switches, solenoid valve pre-wired and terminated into a junction box
- Completely pre-assembled and tested in factory
- Easy and fast installation
- UL Listed modular package



## DELUGE SKID MODEL DSK

- Deluge Skid DSK is professionally pre-assembled deluge valve skid package
- Suitable for all HD deluge valve models
- Comes with downstream, upstream and by-pass butterfly valves
- Pressure switches, solenoid valve mounted, pre-wired and terminated into a junction box
- Can be custom designed and manufactured
- Cost effective
- Easy and fast installation
- UL Listed modular package

# Water Spray Nozzles

## MEDIUM VELOCITY WATER SPRAY NOZZLE (1/2")

- Size: 1/2" BSPT or NPT
- Open orifice design used in deluge water spray system
- Non-automatic fixed pattern, external deflector
- Solid cone discharge
- K-factor (Metric): 18, 22, 26, 30, 35, 41, 51, 64, 79, 91 & 102
- K-factor (US): 1.26, 1.54, 1.80, 2.10, 2.45, 2.87, 3.57, 4.48, 5.53, 6.37 & 7.14
- Spray angle: 65°, 80°, 90°, 100°, 110°, 120°, 140° & 160°
- Each Nozzle permanently marked with model number, batch number, spray angle, K-factor, UL & FM mark



- Approvals: UL Listed and FM Approved (All Models)

Lloyd's Register Type approval for marine applications

FM Approved Blow-Off Plug

## MODEL MV-A & MV-AS

- Brass construction
- Finish - Brass or Nickel Chrome



## MODEL MV-B & MV-BS

- Stainless Steel construction
- Finish - Natural



## MODEL MV-E

- Aluminium Bronze construction
- Finish - Natural
- Suitable to be used with brackish or sea water



## REVERSE ACTION NOZZLE

- Model: MV-C (SS), MV-CB (Brass), MV-CE (Al Bronze) MV-CS (SS construction with SS strainer), MV-CBS (Brass construction with Copper Strainer)
- K-factor (Metric): 30, 51, 64, 79, 102 and 18 & 22 in MV-CS & MV-CBS
- K-factor (US) 2.1, 3.5, 4.35, 5.45, 6.75 and 1.3 & 1.5 in MV-CS & MV-CBS
- Spray angle: 120° & 140°
- UL Listed



## HIGH VELOCITY WATER SPRAY NOZZLE (3/4")

- HV-AS in Brass material with Copper Strainer
- HV-BS in Stainless Steel material with Stainless Steel Strainer
- Non-automatic, open orifice, directional spray nozzle
- For high velocity water application for protection of flammable liquid and electric transformers
- K-factor: K-22 x 75°, K-18 x 80°, K-26 x 100°, K-32 x 90°, K-42 x 115° and K-23 x 120°
- Nozzle also available with blow-off cap
- Approvals: UL Listed and FM Approved



## HIGH VELOCITY WATER SPRAY NOZZLE (1")

- HV-HB in Brass material with Copper Strainer
- HV-H in Stainless Steel material with Stainless Steel Strainer
- Non-automatic, open orifice, directional spray nozzle
- For high velocity water application for protection of flammable liquid and electric transformers
- K-factor: K-48 x 100°, K-58 x 100°, K-61 x 75°, K-78 x 90°
- Approvals: UL Listed



## WINDOW / WATER CURTAIN NOZZLE MODEL CNS

- Size: 1/2" & 3/4" BSPT or NPT
- Non-automatic open orifice, fix pattern
- Used as curtain nozzle or window sprinkler
- UL Listed



## REVOLVING NOZZLE

- Size: 65, 80 or 100 mm flanged (2.5", 3" or 4")
- Model: RH
- Bronze construction
- Working pressure 2.0 to 12.0 kg/cm.sq (30 to 175 psi)
- Flow 285 to 950 lpm (75 to 251 gpm) at 2 kg/cm.sq.
- Coverage: 10 metres in diameter at 2 kg/cm.sq (30 psi)



## TANK COOLING NOZZLE MODEL TS/TSS

- Size: 1/2" & 3/4" BSPT or NPT
- Non-automatic open orifice, fix pattern
- Used for Tank cooling applications
- UL Listed



## JUMBO CURTAIN NOZZLE

- Size: 65, 80 or 100 mm flanged end (2.5", 3" or 4")
- Stainless Steel construction
- Used to segregate the area by creating water curtain
- Flow 1000 to 3000 lpm (264 to 792 gpm) at 7 kg/cm.sq. (100 psi)
- Produces flat water curtain projecting upwards



# System Equipment & Valves

## BUTTERFLY VALVES

- Wafer, Lugged and Grooved Type Butterfly Valves with Tamper Switch
- Size: 2" to 12"
- Max. Working Pressure: 300 psi
- Body & Gear Box: Ductile Iron Construction (ASTM A536, 65-45-12)
- Disc: Ductile Iron with EPDM
- Drive Shaft: Stainless Steel
- Fusion Bonded Epoxy Coated
- UL Listed and FM Approved



## FLOW & PRESSURE SWITCHES

- Flow Switch
  - Size: 2" to 8"
  - Vane type water flow switch for use in wet sprinkler systems
  - Approvals: UL Listed & FM Approved
- High/Low Pressure Switch
  - Designed to detect pressure increase or decrease in fire protection systems
  - Explosion-proof model available
  - Approvals: UL Listed & FM Approved



## GATE VALVES

- OS&Y and NRS resilient Wedge Gate valves
- Size: 2" to 24"
- Max. Working Pressure: 300 psi
- Body: Ductile Iron Construction (ASTM A536, 65-45-12)
- Disc: Ductile Iron with EPDM
- Stem: Stainless Steel
- Flanged end connections are available either in ANSI/AWWA or BS PN 16
- Fusion Bonded Epoxy Coated
- UL Listed and FM Approved



## VERTICAL & WALL POST INDICATORS FOR NRS GATE VALVES

- HD-IP Vertical Post Indicator is used to identify the position of underground non-rising stem valve and provides means to operate the same non-rising stem gate valve.
- HD-WP Wall Post Indicator shows the position of non-rising stem gate valve and provides means to operate that same non-rising stem gate valve, when it is behind a wall.
- Suitable for 4"-12" size "HD" NRS Gate Valves
- Vertical & Wall Post Indicators are fusion-bond epoxy coated.
- Approvals: UL Listed & FM Approved







## SWING CHECK VALVES

- Flanged and Grooved Type
- Horizontal or Vertical Installation
- Size: 2" to 12"
- Max. Working Pressure: 300 psi
- Ductile Iron Construction (ASTM A536, 65-45-12)
- Fusion Bonded Epoxy Coated
- UL Listed and FM Approved



## Y-TYPE STRAINERS

- Flanged and Grooved Type
- Size: 2" to 12"
- Max. Working Pressure: 300 psi
- Ductile Iron Construction (ASTM A536, 65-45-12)
- Fusion Bonded Epoxy Coated
- UL Listed



## PRESSURE GAUGES

- Model HDP1 and HDP2
- Dial Size: 90 mm (HDP1) & 100 mm (HDP2)
- Range: 0 to 300 psi
- Polished Stainless Steel, weather proof case
- Bourdon Tube: Phosphorous Bronze (HDP1) & Monel (HDP2)
- Model HDP2 suitable for use with Sea Water
- UL Listed & FM Approved



## MULTI-JET CONTROL (MJC) VALVE

- Size: Inlet of 40 mm with double outlet of either 32 or 25 mm
- Bronze construction
- Max. service pressure: 12 kg/cm.sq (175 psi)
- Temperature rating 57°C, 68°C, 79°C, 93°C
- End connection BSPT (NPT optional)



## ZONE CONTROL VALVE ASSEMBLY

- Zone control manifold assembly incorporates a flow switch, test drain, system pressure gauge and pressure relief valve.
- Sizes: 2.5" to 8"
- Butterfly valve can be connected (optionally)
- Max working pressure: 175 psi



# Sprinklers

## PENDENT AND UPRIGHT SPRINKLER

- Standard and quick response with standard coverage
- Pendent or Upright mounting
- Temperature rating: 57°, 68°, 79° & 93°C
- K-factor 5.6 and 4.2
- Brass, Chrome or White / Custom colour finish
- Pendent sprinkler model available with 141°C & 182°C



## CONCEALED SPRINKLER

- Standard and quick response
- Temperature rating:
  - 57°C & 68°C for Sprinkler bulb & 57°C for Cover Plate
  - 79°C & 93°C for Sprinkler bulb & 68°C for Cover Plate
- K-factor 5.6
- Brass Sprinkler with White or Chrome finish Cover Plate

## RECESSED SPRINKLER

- Pendent or sidewall mounting
- Sprinkler comes with two-piece Recessed Escutcheon with recessed adjustment from the flush position
- Escutcheon plate in powder coated white finish or chrome finish



## HORIZONTAL SIDEWALL SPRINKLER

- Standard and quick response with standard coverage
- Horizontal Sidewall mounting
- Temperature rating: 57°, 68°, 79° & 93°C
- K-factor 5.6
- Brass, Chrome or White / Custom colour finish



## SPRINKLER GUARD

- Sprinkler guard comes in hard-wired cage design, chrome plated
- Used for encasing the sprinkler and protecting it from any inadvertent damages
- Suitable for pendent and upright mounted sprinklers



## WINDOW SPRINKLER- VERTICAL SIDEWALL

- Standard and quick response with standard coverage
- Vertical Sidewall mounting
- Temperature rating: 57°, 68°, 79° & 93°C
- K-factor 5.6 and 4.2
- Brass, Chrome or White / Custom colour finish







## EXTENDED COVERAGE SPRINKLER

- Quick response with extended coverage
- Horizontal side-wall mounting
- Temperature rating: 57°, 68°, 79° and 93° C
- K-factor 5.6
- Brass, Chrome or White / Custom colour finish
- UL Listed



## PENDENT, UPRIGHT AND SIDEWALL (K8)

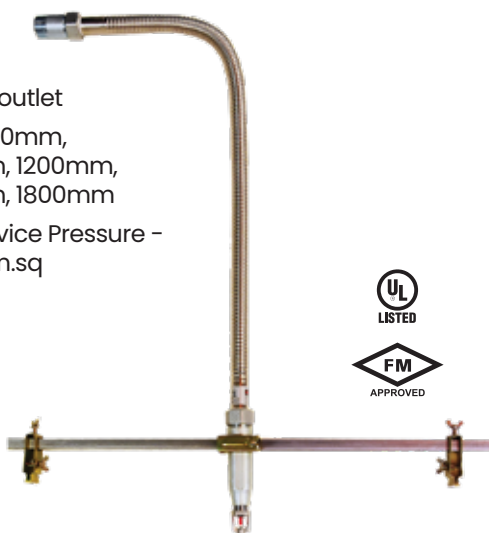
- 3/4" BSPT/NPT
- Standard and quick response with standard coverage
- Pendent or Upright mounting
- Temperature rating: 57°, 68°, 79° and 93° C
- K-factor 8
- UL Listed



## SPRINKLER FLEXIBLE DROP

- Flexible Sprinkler Connections
- Braided & Unbraided
- Complete unit, a corrugated Stainless Steel flexible with nipple, reducer, Bar and brackets

- 1/2" or 3/4" outlet
- Sizes: 700mm, 1000mm, 1200mm, 1500mm, 1800mm
- Max Service Pressure - 14 kg/cm.sq



## TEST AND DRAIN VALVES

- Size: 1", 1-1/4", 1-1/2", 2"
- Screwed and Grooved type end connection
- Max. Working Pressure 300 psi
- K-factor 5.6 or 4.2 (optional)
- Brass construction (ASTM B584)
- Integral tamper resistant sight glass
- UL Listed & FM Approved



# Alarm Valves

## ALARM VALVE MODEL H

- Size: 80, 100, 150 & 200 mm (3", 4", 6" & 8")
- Ductile Iron ASTM A536 construction
- Maximum service pressure 17.5 kg/cm.sq (250 psi)
- Vertical mounting
- End Connection: Flanged x Flanged, Grooved x Grooved, Flanged x Grooved
- Variable Pressure Trim with Retard Chamber and Water Motor Gong
- Epoxy painted internally & externally
- For use in wet pipe (automatic sprinkler) fire protection system
- Automatically actuates electrically and/or hydraulically operated alarms during steady flow of water in sprinkler systems
- Approvals: UL Listed & FM Approved



## WATER MOTOR GONG BELL MODEL GA

- Hydraulically operated mechanical bell used along with fire protection system valves
- Corrosion resistant Aluminium alloy material, epoxy coated all over
- Wall mounted (Type B) or direct online mounting type (Type A)
- Approvals: UL Listed and FM Approved



## RETARD CHAMBER MODEL RC9

- Retard Chamber is used with Alarm Valve Trim when variable pressure is anticipated in the system. It is a holding tank to prevent sounding of Sprinkler Alarm during water pressure surge
- Stainless Steel material of construction
- Connection: 3/4" BSPT (F)





# Pre-Action Systems



## HD PRE-PACK® PRE-ACTION SYSTEM

HD Pre-Pack® Pre-action system is perfect system to be used in applications where you need protection against inadvertent flooding due to sprinkler systems. Professionally pre-assembled cabinet with or without inbuilt oil-less compressor with control panel.

Trim Configurations:

- Single Interlock Pre-Action System with Supervised Wet Pilot Actuation
- Single Interlock Pre-Action System with Supervised Dry Pilot Actuation
- Single Interlock Pre-Action System with Supervised Electric Release
- Double Interlock Pre-Action System with Electric-Electric Actuation
- Double Interlock Pre-Action System with Electric-Pneumatic Actuation



# Foam Proportioners

## INLINE BALANCED PRESSURE PROPORTIONER

### MODEL PS, PB, PMS, PBS

- Size: 65, 80, 100, 150 & 200 mm size (2.5", 3", 4", 6" & 8")
- Flow ranging from 270 to 18500 lpm
- Bronze or Stainless Steel material
- Duplex Pressure Gauge
- Working pressure 2.8 to 14 kg/cm.sq (40 to 200 psi)
- Flanged or Wafer Type Proportioner
- UL Listed



## FOAM CONCENTRATE BY-PASS VALVE

### MODEL BV & BVS

- Size: 40 & 50 mm (1.5" & 2")
- Bronze or Stainless Steel construction
- Female BSP end connection
- Suitable for use in Balanced Pressure Foam Proportioning System



## INLINE FOAM INDUCTOR

- Size: 65, 80, 100 & 150 mm (2.5", 3", 4" & 6") size with fix flow of 75 to 3500 lpm
- Bronze or Stainless Steel construction
- Working pressure 6.4 to 12 kg/cm.sq (90 to 175 psi)
- Maximum back pressure as 65%
- Each unit is calibrated and factory tested for flow, induction rate at maximum back pressure



## PORTABLE INLINE INDUCTOR

- Size: 2.5"
- Stainless Steel construction
- 225/450 lpm constant flow
- FM Approved





# Foam Bladder Tank Proportioning System

- Capacity: 140 to 15,000 litres (36 to 4000 gal)
- Vertical or Horizontal unit
- Maximum working pressure 12 kg/cm.sq (175 psi)
- Carbon Steel or Stainless Steel Construction  
Tank made to latest revision of ASME Code Section VIII Div I
- Compatible with all foam concentrates
- Nylon reinforced Buna-n-rubber bladder
- Proportioner pre-piped on to the tank
- Bladder Tank filling kit (optional)
- ASME U Stamp / CE mark (optional)



## RATIO CONTROLLER

- Size: 65, 80, 100, 150 & 200 mm (2.5", 3", 4", 6" & 8")
- Corrosion resistant Bronze or Stainless Steel construction
- Water type design as well as Flanged type available
- Flow from 100 to 17860 lpm
- Used with Bladder Tank or Inline Balance Pressure Proportioner for variable flow
- Service Pressure: 3 to 14 kg/cm.sq (44 to 200 psi)
- UL/FM approved with Foam Bladder Tank System



## FOAM CONCENTRATE CONTROL VALVES MODELS CV & H

- Size: 25, 40 and 50 mm (1", 1½" & 2")
- Stainless Steel material
- Hydraulically controlled
- Working pressure 2.1-12 kg/cm.sq (50 to 175 psi)
- Suitable for Bladder tank and Inline balance pressure proportioning system
- Model CV is FM Approved with Foam Bladder Tank System



# Foam Concentrates & Equipments

## AFFF-C6

- HD AFFF is available as 1%, 3% and 6% concentrate

## AR-AFFF-C6

- HD AR-AFFF is available in type 1 X 3%, 3 x 3% and 3 X 6% concentrate

## FP-C6

- HD FP is available as 3% and 6% foam concentrate

## FFFP

- HD FFFP is available as 3% foam concentrate

## AFFF 3FZ-C6

- AFFF Foam concentrate suitable for storage and use at low temperature up to -18°C (0°F)

## NFFF

HD NFFF alcohol resistant non-fluorinated foam concentrate is available in 3x3% models

- Compatible with complete range of HD foam equipment
- Can be used with fresh water as well as seawater
- All Foam Concentrates available in freeze protected range
- ICAO Approved AFFF foam for aviation sector
- Approvals: UL Listed & FM Approved

## FOAM-WATER SPRINKLERS MODEL FI & H

- Size: 1/2" BSPT / NPT
- Air aspirating type
- Stainless Steel (FI) or Bronze (H) construction
- Working pressure 2 to 4 kg/cm.sq (30 to 60 psi)
- K- Factor: 42
- Pendant mounting
- UL Listed & FM Approved



## FOAM CONCENTRATE STORAGE TANK

- Capacity: 200 to 15000 liters (53 to 4000 gal.)
- Horizontal unit
- Stainless Steel 304/316 material
- Comes with ladder, sight glass and air vent
- Expansion dome of 2% tank capacity
- Flat end or dome end
- Natural, Custom or Red RAL 3000 epoxy painted
- Tank can be custom made with inline inductor mounted on the tank







## FOAM CHAMBER MODEL FCA & FCA-S

- Size: 50, 65, 80, 100 and 150 NB (2", 2.5", 3", 4" and 6") inlet
- Flow from 150 to 3300 lpm (26 to 873 gpm)
- Carbon Steel or Stainless Steel material
- Working pressure 2.8 to 7 kg/cm.sq (40 to 100 psi)
- Epoxy painted
- Stainless Steel orifice plate fitted with foam chamber
- Frangible glass vapour seal
- Solid or split deflector
- UL Listed & FM Approved



## RIM SEAL FOAM POURER MODEL RPA & RPA-S

- Size: 65 NB (2.5")
- Flow 50 to 550 lpm (13 to 146 gpm)
- Rim Seal Pourer is designed to discharge foam gently as it expands and slides down inside of the tank shell and directly in the rim seal area
- Carbon Steel or Stainless Steel Construction
- Epoxy painted
- UL Listed & FM Approved

## FOAM MAKER MODEL FMA & FMA-S

- Size: 50 & 65 NB (2" & 2.5")
- Flow 75 to 550 lpm (20 to 146 gpm)
- Carbon Steel or Stainless Steel construction
- Working pressure 2.8 to 7 kg/cm.sq (40 to 100 psi)
- Epoxy painted
- Stainless Steel orifice plate fitted with foam maker
- UL Listed & FM Approved



## FOAM BRANCH PIPE

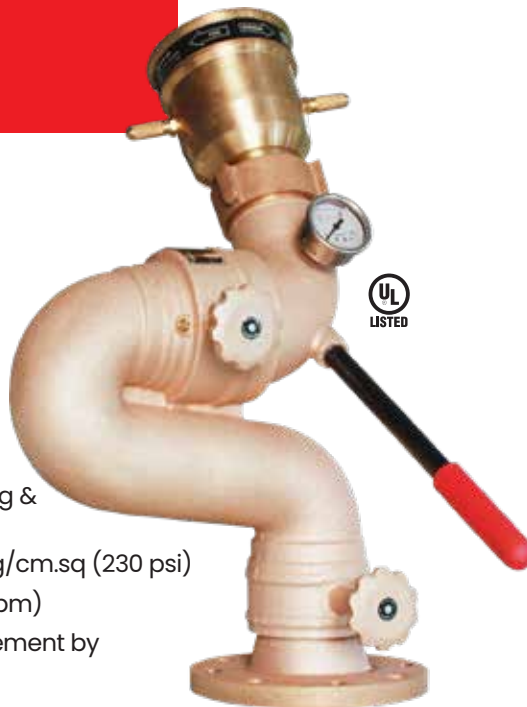
- Hand held foam branch pipe for long range performance
- Size: 60 NB with 2.5" inlet
- Aluminium construction
- FM Approved



# Monitors

## MONITOR VAJRA 331

- Cast Bronze Construction
- 360° continuous horizontal rotation and +90° & -45° vertical elevation or optional +85° & 0°/-15°/-30° vertical elevation
- Double Row of SS ball bearing & grease fittings
- Max operating pressure: 16kg/cm.sq (230 psi)
- Flow up to 1000 gpm (3800 lpm)
- Vertical and horizontal movement by handle and manual lock
- UL Listed



## MONITOR VAJRA 433

- Cast Bronze Construction
- Fully enclosed gear
- Double row of Stainless Steel ball bearing with grease fittings
- Max operating pressure: 12 kg/cm.sq (175 psi)
- 115 mm waterway with 100 or 150 mm (4" or 6") flanged inlet and 4" BSP male threaded outlet
- 360° continuous horizontal rotation, +90°, -45° vertical elevation
- Red finish
- FM Approved



## WATER POWERED OSCILLATING MONITOR VAJRA 331-S

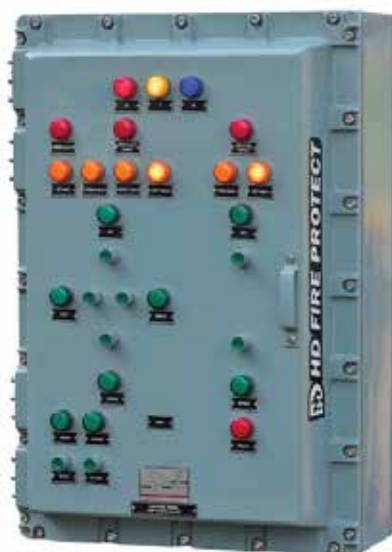
- Cast Bronze Construction
- 0 to 120° Oscillating Angle, adjustable in 6 set points
- Water driven wheel drives the oscillating mechanism
- No external wiring or hydraulic control required
- Double row of SS ball bearing & grease fittings
- Max operating pressure 12 kg/cm.sq (175 psi)
- Flow up to 1000 gpm (3800 lpm)
- UL Listed





## REMOTE CONTROLLED MONITOR VARUN443-ER AND VARUN643-ER

- Stainless Steel waterway
- 100 or 150 mm (4" or 6") inlet for 443 and 150 or 200 mm (6" or 8") inlet for 643 models
- Explosion proof motors for electric remote-controlled operation
- Supplied with explosion proof Control Panel
- Maximum operating pressure: 12 bar (175 psi)
- Supplied with variable-flow/fixed-flow water-foam nozzles with flow of 500/750/1000 and 1000/1500/2000 gpm for 443 and 643 models
- Available with or without jet ratio controller (JRC)
- UL Listed base monitors - VARUN443 & VARUN643





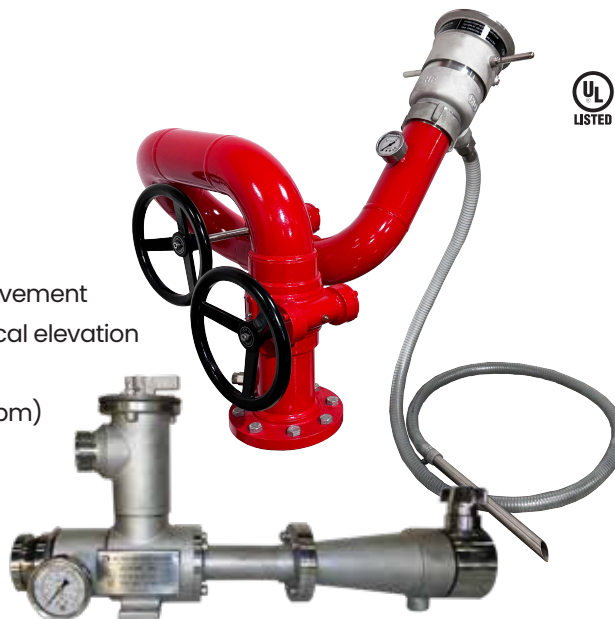
### MONITOR M 341

- Size: 80 mm (3") waterway with flanged inlet of 80 or 100 mm (3" or 4") & outlet threaded to 3" BSP male
- Stainless Steel construction
- Easy deployment by one person
- Bronze swivel joint with double row of Stainless Steel ball bearing with grease fittings
- Maximum operating pressure 12 Bar (175 psi)
- FM Approved



### MONITOR VARUN 443

- Size: 100 or 150 mm (4" or 6") flanged inlet with 4" BSP male threaded outlet
- Low profile design
- Stainless Steel waterway
- Fully enclosed worm gear for horizontal and vertical movement
- 360° continuous horizontal rotation and +90°, -65° vertical elevation
- Maximum operating pressure 12 kg/cm.sq (175 psi)
- Variable flow with nozzle model H4V (500 / 750 / 1000 gpm)
- Fixed flow with nozzle model H4 (500 / 750 / 1000 gpm)
- With and without Jet Ratio Controller
- Approvals: UL Listed



### MONITOR VARUN 643

- Size: 150 (6") flanged inlet and outlet
- Stainless Steel waterway
- Maximum operating pressure: 12 kg/cm.sq (175 psi)
- Variable/Fixed flow with nozzle model H6 (1000 / 1500 / 2000 gpm)
- With and without Jet Ratio Controller
- Approvals: UL Listed





### MONITOR M (ISI MARK)

- Size: 63 mm (2.5") with 1750 lpm at 7 kg/cm.sq
- Size: 80 mm (3") with 2580 lpm at 7 kg/cm.sq
- Size: 100 mm (4") with 3500 lpm at 7 kg/cm.sq
- Hot dip galvanized Carbon Steel waterway
- Maximum service pressure 12 kg/cm.sq (175 psi)
- Monitor with fixed flow solid bore nozzle
- ISI Marked

### MONITOR M 311

- Size: 80 mm (3") waterway with flanged inlet of 80 or 100 mm (3" or 4") & outlet threaded to 3" BSP male
- Hot-dip galvanized Carbon Steel waterway
- Easy deployment by one person
- Bronze swivel joint with double row of Stainless Steel ball bearing with grease fittings
- Maximum operating pressure 12 kg/cm.sq (175 psi)
- FM Approved



### MONITOR MG 413

- Size: 100 mm (4") with 100 or 150 mm (4" or 6") flanged inlet with 4" BSP male outlet
- Hot dip galvanized Carbon Steel 4" waterway and Bronze swivel joint
- Double row of Stainless Steel ball bearing with grease fittings
- Fully enclosed worm gear for horizontal and vertical movement
- Maximum operating pressure 12 kg/cm.sq (175 psi)
- Flow up to 4750 lpm (1250 gpm) friction loss less than 10 psi
- FM Approved



### MONITOR VARUN 613

- Size: 150 mm (6") flanged inlet and outlet
- Low profile design
- Hot dip galvanized Carbon Steel waterway
- Bronze swivel joint with double row of Stainless Steel ball bearing
- Fully enclosed worm gear
- Maximum service pressure 12 kg/cm.sq (175 psi)
- 360° continuous horizontal rotation and +90°, -65° vertical elevation
- Flow up to 12500 lpm (3300 gpm)
- FM Approved

# Monitor Nozzles

## MASTER STREAM MONITOR NOZZLES

- Fixed flow gallonage heavy duty nozzles for use with monitors
- Excellent water stream used as water nozzle or non-aspirating foam nozzle
- Easy pattern change under flow condition, from straight stream to wide fog
- Field replaceable spinning teeth ring
- Hard anodized Aluminium, Bronze or Stainless Steel material



**MODEL VARSHA - 30**

- Factory set for fixed flow between 1500 & 2850 lpm (400 & 750 gpm) at 100 psi (7.0 kg/sq.cm)
- 2.5" BSP swivel female inlet base



**MODEL VARSHA - 40**

- Factory set for fixed flow between 1500 & 3030 lpm (400 & 800 gpm) at 100 psi (7.0 kg/sq.cm)
- 3" BSP Swivel female inlet base
- FM approved



**MODEL VARSHA - 40U**

- Factory set for fixed flow of 500, 750, 1000 gpm 100 psi (7.0 kg/sq.cm)
- 3" BSP Swivel female inlet base, 3" NH optional
- UL Listed with monitors VAJRA331 and VAJRA331-S



**MODEL VARSHA - 50**

- Factory set for fixed flow between 3030 & 7575 lpm (800 & 2000 gpm) at 100 psi (7.0 kg/sq.cm)
- 4" BSP swivel female inlet base
- FM approved



**MODEL VARSHA - 60**

- Factory set for fixed flow between 5680 & 12500 lpm (1500 & 3300 gpm) at 100 psi (7.0 kg/sq.cm)
- 150 mm (6") flanged inlet
- FM approved



## HYDRO-FOAM MONITOR NOZZLES

- Self-inducting and non-aspirating water-foam monitor nozzles
- 3% or 6% foam induction rate
- Combination of fog and straight stream without shut off
- Spinning teeth ring for full fog pattern
- Provided with clear PVC 3 mtrs. long suction hose with one end Stainless Steel dip tube
- Hard anodized Aluminium, Bronze or Stainless Steel material



**MODEL VARSHA - HF40U**

- Factory set for fixed flow of 500 or 750 gpm 100 psi (7.0 kg/sq.cm)
- 3" BSP Swivel female inlet base, 3" NH optional
- UL Listed with monitors VAJRA331 and VAJRA331-S



**MODEL VARSHA - HF4V**

- Fixed or Variable flow of 500, 750, 1000 gpm at 100 psi (7.0 kg/sq.cm)
- Stainless Steel Construction
- 4" BSP swivel female inlet
- UL Listed with monitor VARUN443



**MODEL VARSHA - HF50**

- Factory set for single fixed flow between 3030 & 4750 lpm (800 & 1250 gpm) at 100 psi (7.0 kg/sq.cm)
- 4" BSP swivel female inlet
- UL Listed with monitor VARUN443



**MODEL VARSHA - HF6V**

- Fixed or Variable flow of 1500, 1500, 2000 gpm at 100 psi (7.0 kg/sq.cm)
- 150 mm (6") flanged inlet
- UL Listed with monitor VARUN643





# Mobile Equipment

## MOBILE FOAM UNIT

- 160 litres capacity in Fiber Glass Foam Tank
- 120 to 220 litres capacity in Stainless Steel Foam Tank
- Two solid rubber wheels for easy maneuver by one person
- Mounted with Bronze or Stainless Steel foam inductor and Aluminium low expansion foam branch pipe
- Flow rate of 225/450 lpm (60/120 gpm) at 7 kg/cm<sup>2</sup>
- Provision of mounting two fire hoses
- Fire hoses and Foam concentrate supply (optional)
- FM Approved Inductor and Foam Branch pipe



## HD-CHETAK

- Rugged 2 wheeled trailer with various capacity of storage tank
- Easy maneuvered by two persons or pulled behind light truck or jeep
- 80 or 100 mm (3" or 4") monitor mounted on tank
- Over run and manual brake
- Low profile design for safety and stability
- Trailer equipped with reflector
- Provision of manifold having 2.5" or 4" BSP coupling at rear side of trailer for water supply to monitor from hydrant network

## TROLLEY MOUNTED MONITOR

- Easy maneuverability
- Trolley with two solid rubber wheels
- 63 or 75 (2.5" or 3") monitors can be mounted
- Water supply manifold with 2 or 4 inlet connections of 2.5" BSP instantaneous coupling
- Epoxy painted



# HD Inert Gas Suppression System



## HD-INERTSYS

### Inert Gas fire suppression system

- Designed for:- IG55 (Argon and Nitrogen), IG541 (Nitrogen IG100, Argon IG01 and Carbon dioxide), IG100 (Nitrogen) and IG01 (Argon)
- Cylinder Sizes: 80 and 140 litre
- Operating Pressure: 200 bar (2900 psi), 300 bar (4351 psi), depending on volume and concentration requirements
- Releasing Device: Manual, Pneumatic, Electro-Magnetic
- Diffuser nozzles: Brass construction
- Approval: VdS
- System Design Calculations performed using VdS calculation software



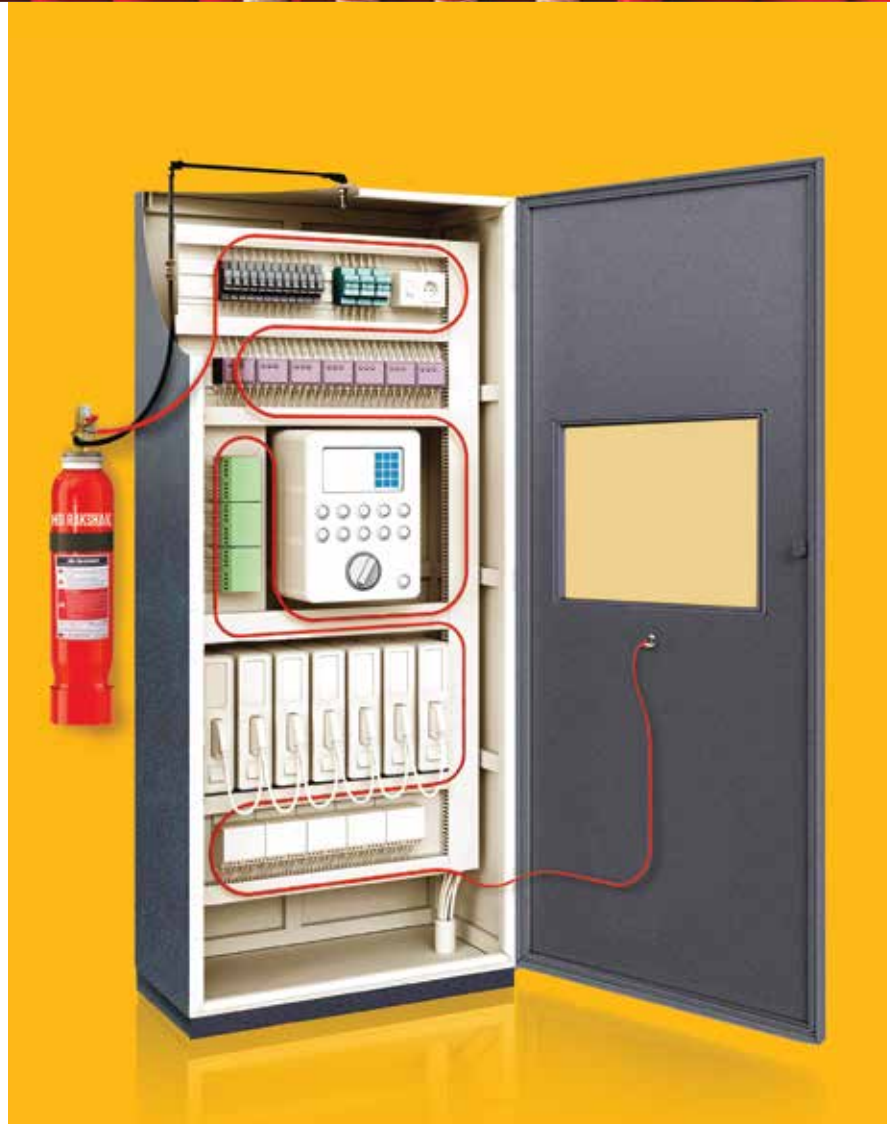
# HD IHP CO2 System



## HD-RAKSHAK IHP CO2 SYSTEM

### CO2 fire suppression system

- Cylinder Sizes: 2Kg to 18 Kg
- Operating Pressure: 60 bar
- Automatic IHP Valve in Brass construction
- Diffuser nozzles: Brass/SS construction
- Fire detection using heat-sensing tubing (UL Listed)
- The fire detection tube on charged condition automatically fills CO2 from the cylinder. This is a unique feature where one does not require additional Nitrogen cylinder to charge the detection tube



# Custom Engineered Skids

## DUAL BLADDER TANK SKIDS



- Vertical or Horizontal Dual units skid mounted
- First Bladder tank is the operating tank and the second one is standby/reserve
- Carbon Steel or Stainless Steel Construction
- Tanks made to ASME Code Section VIII Div I
- ASME U Stamp available as an option

## BLADDER TANK WITH MULTIPLE PROPORTIONERS



- Vertical or Horizontal bladder tanks
- Multiple lines connected for multiple locations
- Depending on flow, multiple lines can be operational at one time

## FOAM SKIDS



- Custom Engineered Foam skid as per project specific requirements
- Foam concentrate tank, foam pump, balanced proportioner and control panel are skid mounted
- Completely pre-assembled and tested in factory

## CUSTOM ENGINEERED DELUGE SKIDS



- Custom engineered deluge skid is designed and manufactured as per specific project requirements
- Skid can be open frame or also enclosed with insulation and temperature control function
- Can be manufactured in suitable material for corrosive and harsh environments
- Completely assembled and tested in factory



# WHY CHOOSE US?

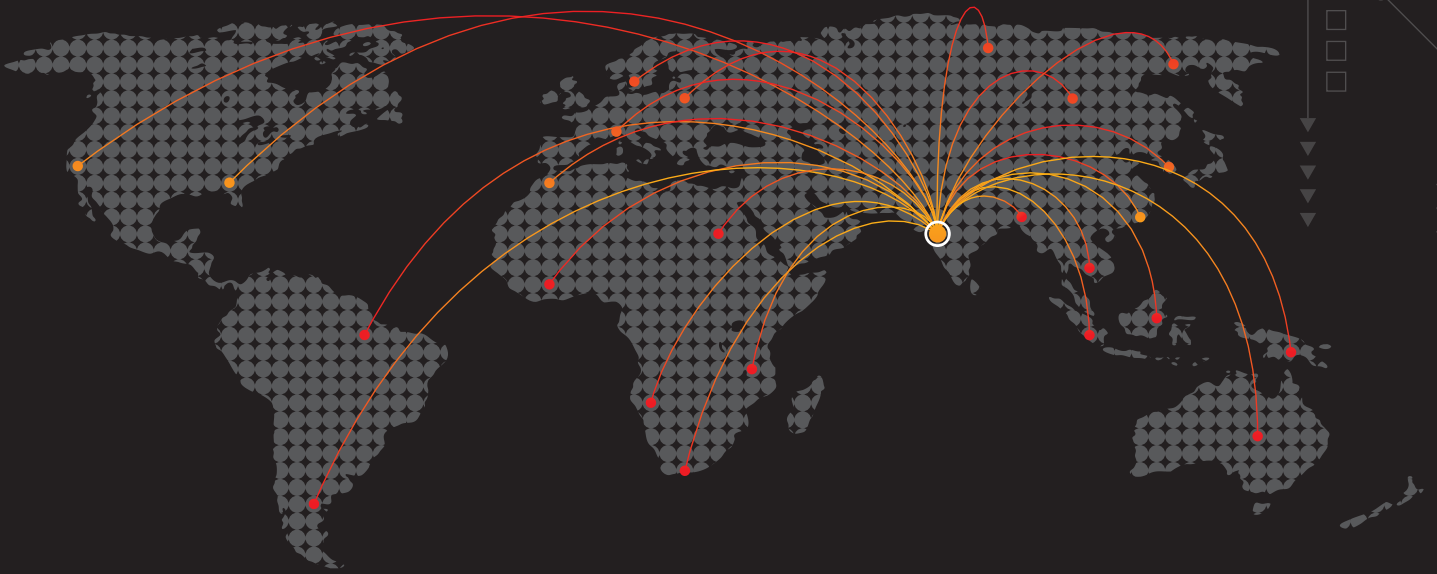


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- We embrace continuous improvement, innovation, and sustainability as part of our core strategy.
- We have an extensive range of firefighting products, suitable for many applications.
- We offer products with international approvals.
- We have state-of-the-art manufacturing plants, having ISO 9001, 14001 and 18001 approvals.
- We remain committed towards highest standards of quality and customer service.
- We offer products at competitive pricing – making our products a good value buy at reasonable prices.
- We have easy availability of much required and urgent spare parts.
- We have a worldwide product distribution network.
- We are a Star Export House and a certified AEO (authorised economic operator) Level T2.



SERVING  
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**HD FIRE PROTECT**  
*Protecting what matters most to you*

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