

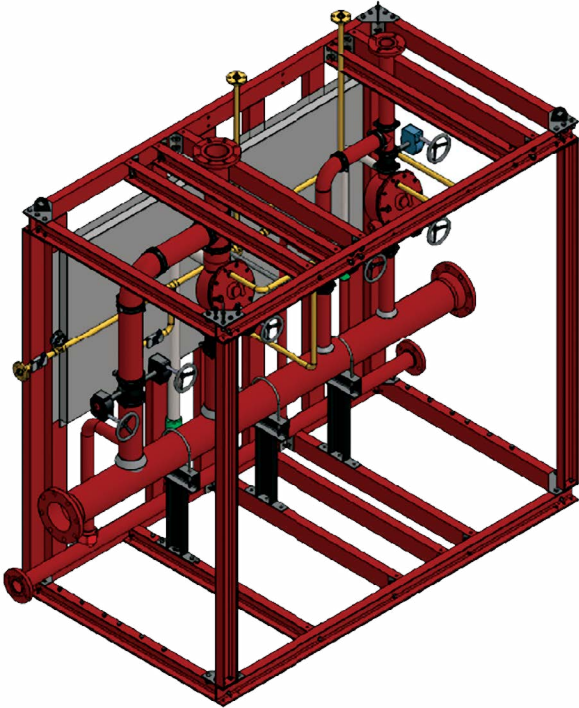


CUSTOM ENGINEERED DELUGE SKID

Fire & Hazard Control (FHC) specializes in customized manufacturing and engineering services for oil and gas as well as for the commercial market. Custom piping and deluge valve skid assemblies are its specialty. All assemblies meet applicable NFPA, EN, and strict industrial standards. Critical components such as valves and controls are UL listed and FM approved ASME-IX Standard. Welding is performed by certified welders meeting the highest quality levels. FHC has unmatched quality control systems in full compliance with NFPA and ISO 9001-2008 standards and backed with precise CAD 2D and 3D engineering drawings and modeling.

DELUGE VALVE SKID

Deluge Valve Skid



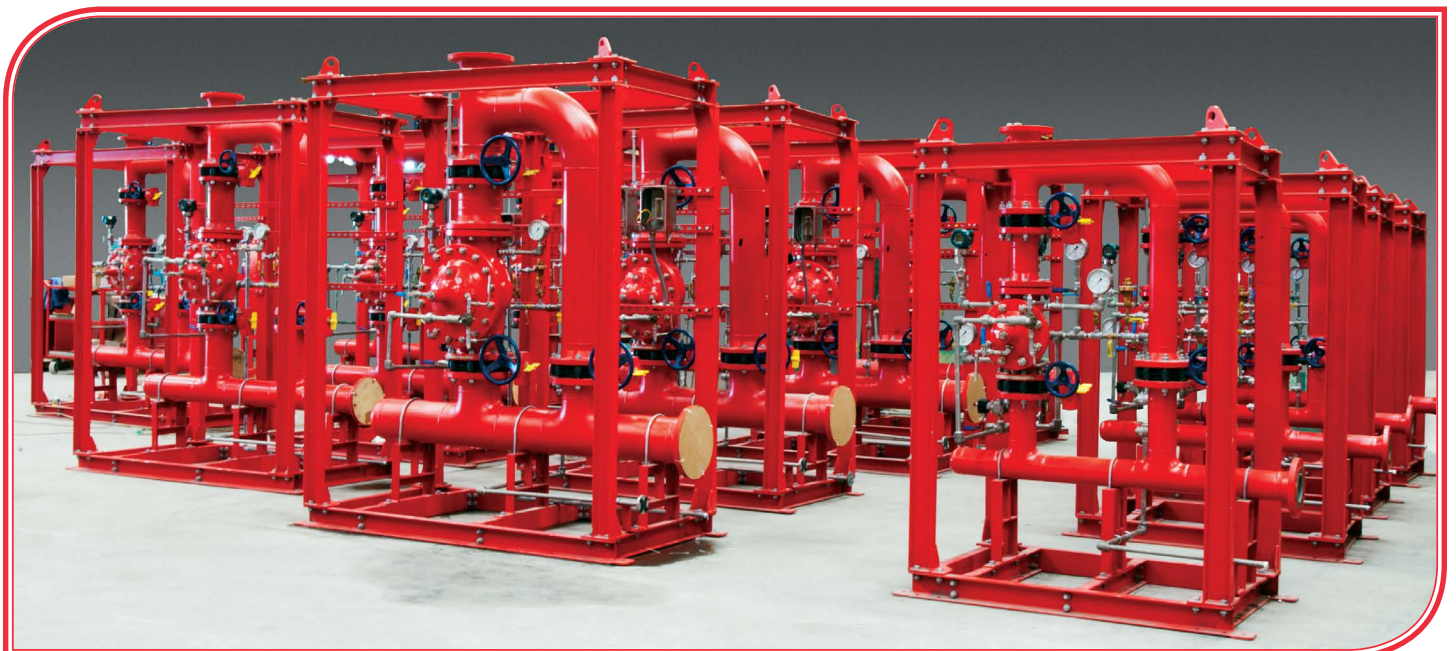
FEATURES AND BENEFITS

- Pre-assembled to Reduce Installation Time
- Factory Tested
- Custom Designed
- Assemblies Supporting Steel Framework Enclosures or Skids
- Cost Effective
- Can Adapt to Any Operation: Hydraulic, Electric, Pneumatic or Combination
- UL Listed and FM Approved Components
- Total Design Coordination with Existing or New On-site Alarm Systems and Water Supply Systems
- Custom Engineering and Product Integration Techniques Employed in Each Client Project

ASSEMBLY OPERATIONS AND ENGINEERING SERVICES

FHC offers both single and multiple outlet skids with open frame type and cabinet enclosed type. Deluge valves can be horizontally or vertically mounted depending on piping orientation. The skid design is engineered using latest 3D modeling techniques to insure that the skid footprint is minimized, without compromising on operational parameters. FHC also uses computer software for hydraulic calculation for proper sizing of the manifold piping.

The entire package is pre-wired and all inlet/outlet connections have flanged/grooved ends to facilitate easy hookup to field piping. All instruments are pre-wired to weatherproof/explosion-proof junction boxes so that the input/output signals from/to the fire and gas system can be terminated in the field. The package includes inlet/outlet butterfly or gate valves, deluge valves, bypass connection with butterfly valves, common drain manifold, junction boxes for electrical signals, and more. The entire skid is factory tested prior to shipment.



DELUGE VALVE TECHNICAL DATA

- Quick Opening Differential Diaphragm Flood Valves
- Inside and Outside Halar® Coating
- Field Replaceable Diaphragm and Seat Rubbers
- Designed for Resetting without Opening the Valve
- Compatible with Hydraulic, Pneumatic, and Electronic Detection Systems
- 17.4 Bar Working Pressure and Tested to 33 Bar
- Usable with Brackish or Salt Water
- UL Listed and FM Approved



CONTROLS, GAUGES, AND ELECTRONICS

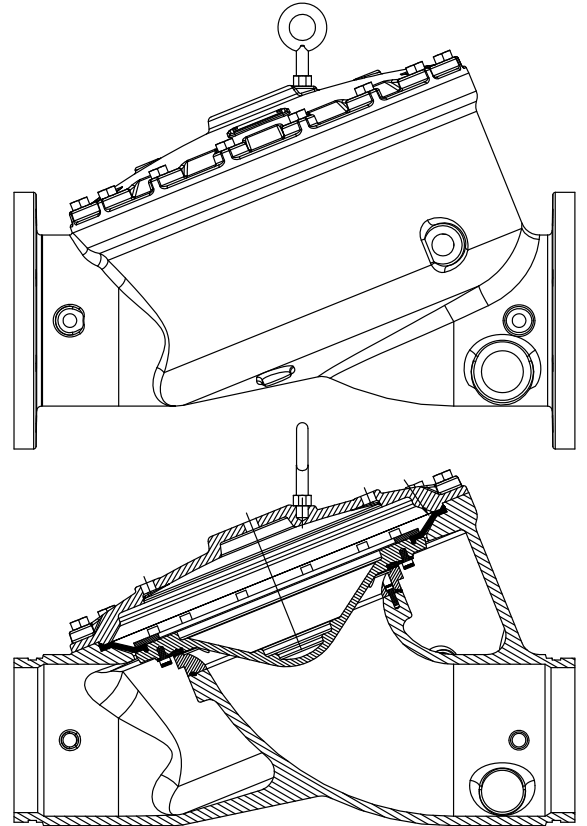
- Electronics: Integration of Electronic and Manual Gauges, Instruments, and Control Panels

MATERIALS AND CONSTRUCTION

- Deluge Valves: Ductile Iron, Aluminum, Bronze or Special Materials
- Nominal Size: 50, 80, 100, 150 and 200 mm
- Actuation: Electric, Hydraulic, Pneumatic or Combination
- Trim: Galvanized Steel with Brass Valves

- Optional: Stainless Steel #304/316 L, Monel®, or Purchaser Specification
- Service: Fresh/Sea Water, Pre-mix Foam AFFF
- Skid Frame: Carbon Steel or Hot Dip Galvanized
- Piping: Hot Dip Galvanized Carbon Steel, Carbon Steel FBE Lined Internal, Stainless Steel #316L
- Components: Deluge Valve, Check Valves, and Control Valves are OEM Supplied
- Finish: Painted, Powder Coated, Epoxy Coated, or Stainless Steel
- Testing: Hydrostatic Testing at 250 PSI as Standard or According to Purchaser Specification

Deluge Valve Skid



CUSTOM ENGINEERED ASSEMBLIES

FHC deluge skids are tested by its engineering team to insure optimum performance in any given fire scenario that requires the use of deluge valve skids. A custom engineered deluge skid is designed and piped, and then the unit is hydraulically calculated with 3-D modeling for the structure and associated equipment.

PIPING AND INSTRUMENT DIAGRAMS

