CHEMGUARD

A Tyco International Company

SABERINDO PACIFIC

CHEMGUARD

1 Foam Concentrate

3% AFFF
3 parts AFFF concentrate
to 97 parts water
-UL Listed
-UL Canada Listed
-FM Approved

6% AFFF
6 parts AFFF concentrate
to 94 parts water
-UL Listed- Foam Liquid Concentrates
-UL Canada Listed

3% FLUOROPROTEIN
3 parts AFFF concentrate
to 97 parts water
-UL Standard 162
-FM Approved
-ISO 9001:2008

3% ULTRAGUARD AR-AFFF
3 parts AFFF concentrate
to 97 parts water
-UL Listed- Foam Liquid Concentrates
-FM Approved
-European Standard

3% AR-AFFF
3 parts AR-AFFF to 97 parts water
-UL Listed, Foam Liquid Concentrates
-FM Approved

3% - 6% AR-AFFF
3 parts AR-AFFF to 97 parts water
(on hydrocarbon fuels)
6 parts AR-AFFF to 94 parts water
(on polar solvent/water miscible fuels)
-UL Listed, Foam Liquid Concentrates
-FM Approved

2 Foam Hose Reel Stations

The Chemguard Foam Fire Fighting Station is a self contained unit that relies only on water flow and pressure to place the system into operation. It is designed to be installed in a fixed location such as processing, storage or handling areas where it is used to control fires or spills of flammable or combustible liquids. The unit is constructed in such a manner that one person may operate it to its full potential with the speed and effectiveness necessary in an emergency situation when foam is necessary.

FEATURES

- **USCG Approved**
- Nozzle is a non air-aspirating type, which has a better stream and gives a constant flow whether on straight stream or fog patterns. Nozzle flow rate is 95 gpm @ 100 psi
- Foam concentrate storage tank is manufactured of type 316 stainless steel
- Galvanized hose reel is mounted on top of tank (60-Gallon Units Only)
- Fiberglass hose box is mounted on top of the tank (36-Gallon Unit Only)
- Tank is supplied with ½" drain plug and 4" fill opening on top of tank
- Tank can be refilled during operation of the unit
- In-line eductor pickup tube has manual ball valve that can be closed s that unit can be used with water only.
- In-line eductor has variable metering valve 1% - 3% - 6%. Coastguard approved units for helidecks fixed at 3%
- Brass manifold with full-port ball valves
- Suitable for use with any type foam concentrate

3 Balance Pressure Proportioning Pump skid

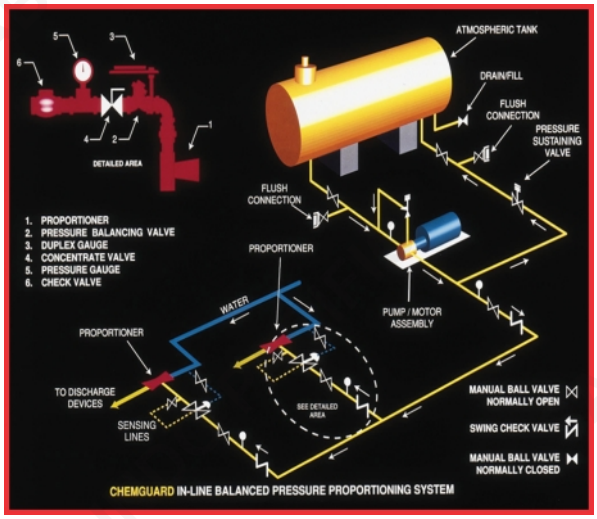
Chemguard Balanced Pressure Proportioning Pump Skids are designed to accurately proportion the foam concentrate into the water stream. The systems operate over a wide range of flows and pressures and do not require any manual adjustment.

FEATURES

- Six proportioner options to cover a wide range of flow requirements.
- Accurate proportioning is achieved by using a diaphragm type-balancing valve.
- Schedule 40 black iron pipe is standard for all interconnecting piping.
- Options using brass or stainless steel are available.
- Compatible with all Chemguard foam concentrates.
- Nametags used for all valve identification.
- Four lifting lugs provided for easy movement of the skid.
- Pump skid supplied with manual override capabilities.
- All Chemguard skids are fully tested and shipped from the factory ready to install.
- Choice of color and finish is available for all environments using either epoxy or enamel paint.

4 In-Line Balanced Pressure Proportioning Units (ILBP)

Chemguard In-Line Balanced Pressure Proportioners (ILBP's) are used with positive displacement foam concentrate pumps and atmospheric foam concentrate storage tanks to form an in-line balanced pressure proportioning system.
The Chemguard ILBP is designed to balance the incoming foam concentrate pressure with the incoming water pressure and meter the correct proportion of foam concentrate into the water stream over a wide range of flows and pressures.

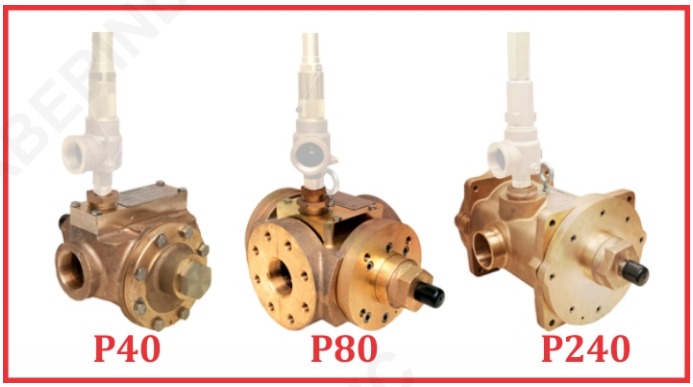


FEATURES

- **UL Listed** (All models with 3% AFFF, 4" & 6" models with 3%/6% AR-AFFF @ 3%)
- 5) Standard Sizes available. Three styles are available for each, standard arrangement, straight and manual override straight arrangement
- 2-1/2" Proportioning Controller has female NPT threaded inlet and male NPT threaded outlet connections
- 3", 4", 6" & 8" Proportioning Controllers are designed to fit between two 150 lb. ANSI flanges
- Balancing diaphragm valve ensures accurate proportioning over a wide flow range
- Compatible with all Chemguard foam concentrate
- All Brass construction with flexible stainless steel braided sensing hoses. Hoses have stainless steel fittings

5 Foam Concentrate Pump

Chemguard foam concentrate pumps are constructed of corrosion resistant brass and stainless steel, and are designed for use with all types of fire fighting foam concentrates. The pumps are Listed by Underwriters Laboratories as meeting the stringent requirements of "UL 448C, the Standard for Stationary, Rotary-Type, Positive-Displacement Pumps for Fire Protection Service", and Factory Mutual Listed class 1313 and are furnished complete with pressure relief valves which also meet the requirements of these standards.



FEATURES

- Single shaft seal as opposed to dual.
- Internal rotary gear pump
- Fewer moving parts reduces maintenance & wear.
- Integral relief valve port on all pump sizes to simplify installations allowing return to tank operation capability.
- Shaft lip seal is mounted in removable gland for ease of replacement without major pump disassembly.
- Electric motor and diesel engine drives available.
- UL and FM tested for liquids ranging from water up to 4600 cps.
- No special material changes for using fluoroprotein concentrates.
- Pump shafts are supported by multiple Carbon-Graphite and/or Graphaloy bushings eliminating the possibility that failure of one ball bearing will result in complete pump failure.
- To meet UL & FM Listings, pumps must be shipped to include drive motor (electric or diesel), listed controller and PRV along with certificates of flow and pressure testing.

6 Foam Chamber

The Chemguard Foam Chamber consists of a foam expansion chamber and an integral foam maker. The foam chamber is installed on a flammable liquid storage tank just below the roof joint. The foam solution is piped to the chamber from outside the hazard area. Upon entering the chamber, the foam solution is expanded and then discharged against a deflector inside the storage tank. The deflector directs the foam against the inside wall of the storage tank. This reduces the submergence of the foam and agitation of the fuel surface. (NFPA Type II Application)

FEATURES

- **U. L. Listed**
- **FM Approved**
- (4) models available to cover all flow requirements.
- Top of chamber has handle, which simplifies inspection access to the vapor seal.
- Frangible glass vapor seal is provided. The glass is scored on one side and designed to break at a minimum 10 psi but not greater than 20 psi.
- Chamber manufactured in ASTM A36 carbon steel with a 304 stainless steel screen covering the foam maker air inlets.
- All foam chamber inlets and outlets are flat faced and drilled to ANSI 150 lb. standard. Flange gaskets are provided.
- Choice of two styles of deflector is available (split or solid).
- Finished with durable red epoxy paint.
- A stainless steel inlet orifice is supplied. Chemguard sizes the orifice based on the foam solution flow requirements and the foam solution inlet pressure available at the base of the foam chamber.

7 Vertical and Horizontal Bladder tanks

The Chemguard Horizontal Bladder Tank is one component in a balanced pressure foam proportioning system. It requires no external power, other than the water pressure to ensure correct operation.
The horizontal bladder tanks are designed and constructed in accordance with the latest revisions to ASME code, Section VIII for unfired pressure vessels with a working pressure of 175 psi and tested to 1.3 times this pressure.

FEATURES

- **UL Listed**
- **FM Approved**
- Bladder is manufactured of a vinyl based polymer, or a polyester reinforced copolymer (The bladder material shall have an ASTM D-142 Tensile Strength of at least 3000 psi and an ASTM D-624 Graves Tear).
- Strength of at least 420 lbs./in. Tanks are supplied with permanently mounted brass trim valves with Teflon seats.
- All valves are labeled showing normal working position and function.
- Lifting lugs are permanently welded to the tank with eyes of approximately 2” diameter.
- Both the vertical and horizontal tanks contain a perforated PVC center tube that assures maximum agent discharge.
- All tanks are approximately 10% oversized to allow for any thermal expansion of the foam concentrate.
- All tanks are supplied with a label, which identifies the type of foam.
  concentrate the system is designed for, the percentage ratio and the tank size.
- Tanks are painted red enamel.

8 Pump Relief Valve

Chemguard can supply the pump, controller and PRV assembly as required by UL & FM as being listed or the complete skid assembly that will include all integral piping for ILBP or Balanced pressure system.

FEATURES

- UL Tested to the latest UL 448C standard for positive displacement pumps
- FM Approved per class 1313 & 1359
- Bronze construction viton seats
- Factory set pressure @ 10% above pump's maximum design pressure
- Reseat pressure at 90% of set pressure
- Leak free at 85% of set pressure
- Factory set, labeled, and tested
- No field adjustment allowed
- Discharge must be piped back to foam concentrate tank using same pipe size as outlet or greater with no shut off valves in discharge line.