



- Foam and Water Firefighting System
- Cooling Systems



شرکت مهندسی اردال  
ARDAL ENGINEERING CO.

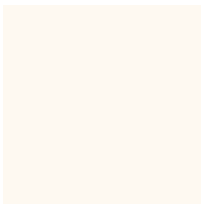
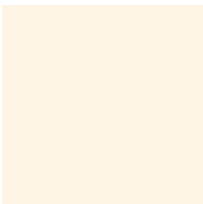
**BLADDER TANKS - DIPLACEMENT LIQUID FOAM PROPORTIONERS FOR VARIABLE FLOW RATES**

Most Reliable way to make the foam and water solution with admixing Percentage of 3% and 6% is the bladder tank, The engineered bladder tanks are not always under pressure therefore the features enables the low costs for the maintenance of the this equipment.



**FOAM CHAMBERS and FOAM POURERS**

Foam chambers are the best solutions to protect Fixed Roof Hydrocarbon Storage Tanks, the vapor seal (rupture disc ) keep the hydrocarbon vapor inside the tank, In Case of a Fire when the Foam Solution Pressure reaches a specific point the rupture disc is broken and the foam will discharge in to the Tank. The Flow Rates are from 200 lpm to 2500 lpm.



**HIGH BACK PRESSURE FOAM GENERATOR FOR SUB SURFACE FOAM INJECTION**

Best solution to protect floating roof hydrocarbon tanks, the High back pressure foam generators with a vapor seal in addition to a check valve which will be installed on the downstream pipe will ensure the customer that there is no chance of vapor or Hydrocarbon liquid coming through this equipment to make any risk of fire.

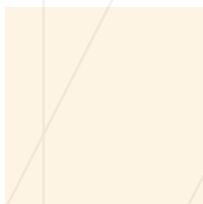
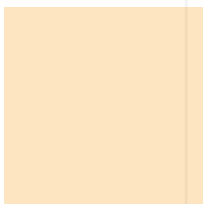
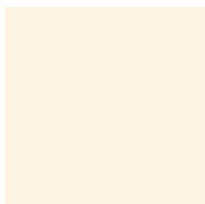
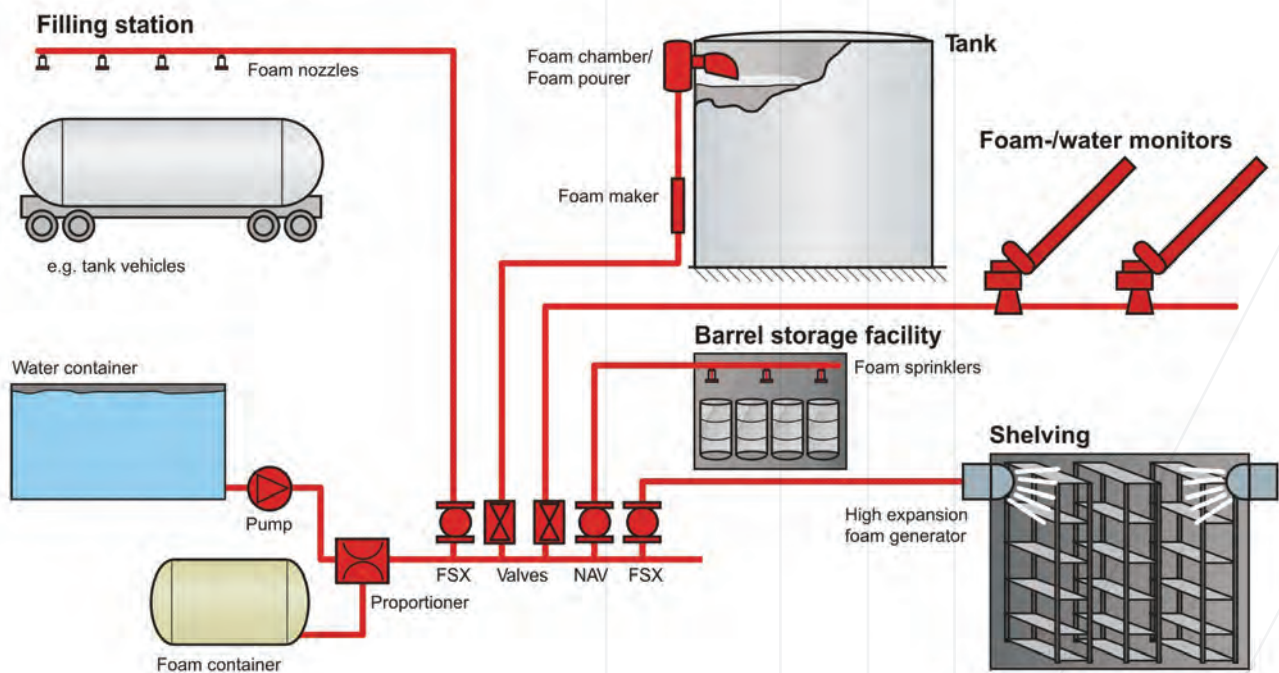
**High Expansion Foam Generators**

With the expansion rate of 1:1100 this sophisticated engineered foam generators are the best way to protect airplane hangars, Big Storage spaces, Paint shops , etc.





Combinations of the equipment of Prominent Suppliers makes us able to Engineer the best solutions that is tailored to your needs.



## Fire Water Control Valves



**PREACTION**



**IDROMEMBERANA**  
Normal Deluge valve WP16 bars



**HYDROMODULE**  
High pressure Deluge valve  
WP 40 bars

We present firefighting control valves that are manufactured according to EN regulations and, it is EC approved by ICB quality. With the control valves from the steamed Manufacturer and diverse types of spray nozzles we are proud to be able to tailor the best solution for your application, to prevent fire and in some cases suppress fire in the early staged of appearance.

- dry pipe Valve
- Deluge and pre action
- hydrant networks and water storage and supply.

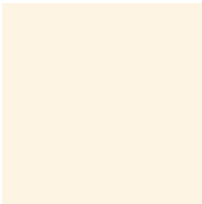
IDROMEMBRANA®

The TECNIDRO IM-F Series are hydraulically operated diaphragm valves, suitable for use in Firefighting Systems up to 16 [bar].

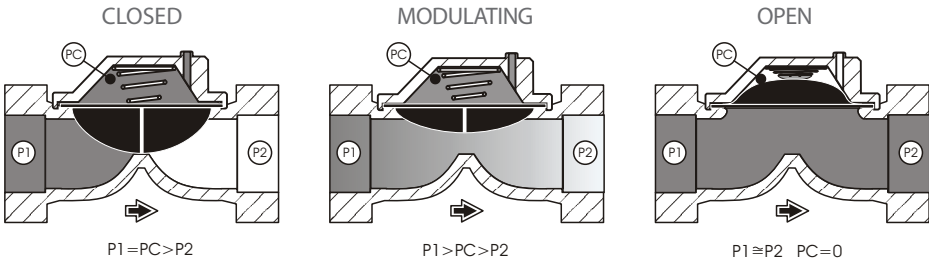
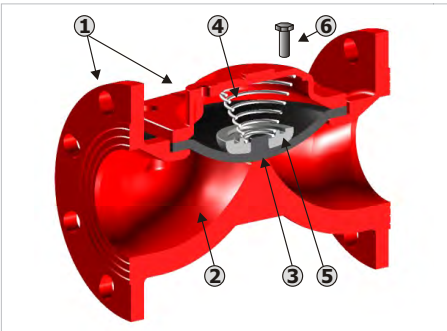
The basic valves bodies are available in a variety of executions and can be equipped with several control options to satisfy a wide range of applications



Pressure	Working	Max. 16 [bar] - 232 [psi] (PN16)
	Test	1,5 x PN (24,0 [bar] - 348 [psi])
Fluid	Type	Water, Sea Water, Foam (*)
	Temperature	0,5 ÷ 50,0 °C 33,0 ÷ 122,0 °F
Connections	To the Pipe Line	Flange ISO PN16 - ANSI #150RF BSP - NPT or Grooved (**)
	To the Circuit	1/4" F BSP (**)



item	Description	Material Standard
1	Body and Cover	EN ISO 185:2005
		GG25- Cast Iron
2	Coating	Epoxy-Polyester
		Min 150 micron
3	Diaphragm	NR Nylon Reinforced
4	Spring	AISI 302
5	Spring Support	Polypropylene
6	Bolts	Stainless Steel



- P1

Upstream pressure
- P2

Downstream pressure

- P3

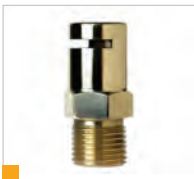
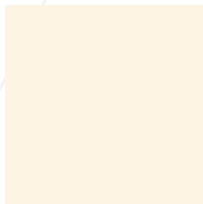
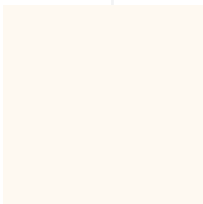
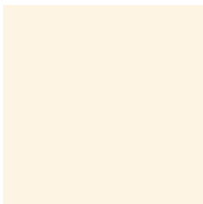
Chamber pressure
- ➔

Flow direction



TECNIDRO operates following the Quality and Environmental Integrated system EN ISO 9001 and EN ISO 14000 and is certificated for "CE" marking according to the European Directive 97/23/EC (P.E.D.).

- Refineries, fuel deposits and off-shore platforms
- Chemical, pharmaceutical and paper industries
- Railway stations, airports and heliports
- Pumping stations and motor pumps
- Malls, industrial plants and warehouses
- Tunnels and mines
- Oil tankers, merchant and passenger ships
- Military bases, hangars and explosives storages



**Cone Jet Spray  
Nozzles**

**Flatjet Spray  
Nozzles  
Normally 140°**

**Full Cone  
Spray Nozzles**

# Integrated Fire Safety and Security Solutions

---



شرکت مهندسی اردال  
ARDAL ENGINEERING CO.

تهران ، خیابان خالد اسلامبولی ، خیابان پنجم ، پلاک ۲۳  
تلفن : ۸۸۷۱۰۸۰۹-۱۰ ، ۸۸۷۲۷۰۹۱-۲  
کد پستی : ۱۵۱۳۷-۱۹۳۳۴ فاکس : ۸۸۷۲۷۱۶۷

NO.23 , Fifth St. , Khalid Islamboli Ave.  
Tehran 15137-19334 – Iran Fax:(+9821) 88727167  
Tel:(+9821) 88710809-10 , (+9821) 88727091-2

[www.ardalengineering.com](http://www.ardalengineering.com)  
[info@ardalengineering.com](mailto:info@ardalengineering.com)  
[ardal@dpimail.net](mailto:ardal@dpimail.net)