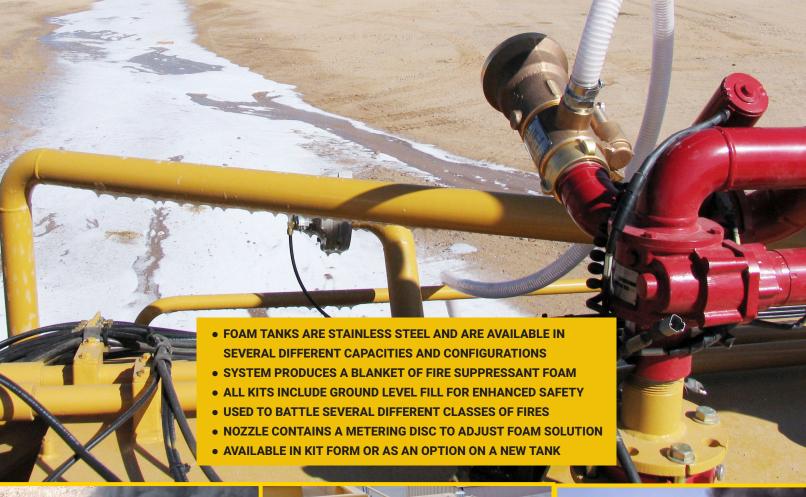


# **FOAM AGENT SYSTEM**

An effective fire suppression solution for construction and mining environments







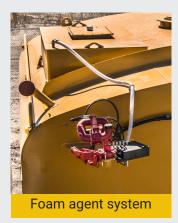


**EQUIPMENT O PARTS O SUPPORT O** 

## **Mega Foam Agent System**

The Mega foam agent system provides an effective fire suppression solution for construction and mining environments. The system is compatible with any class of foam that can be nozzle-aspirated and consists of a stainless steel (304 grade) foam concentrate tank, water cannon, and foam eduction nozzle. The foam agent system also includes sight gauges on the reservoir tank, mounting brackets and hardware, supply hose and shut-off valve, and ground-level fill. Our medium-expansion nozzles allow for adjustable foam percentages of 1%, 3%, and 6% with possible flow rates of 350, 500, and 750 GPM.

Mega's foam system can be ordered as on option on a new Mega water tank or purchased as an after-market kit for installation on a Mega tank. The kit may also be added on to other manufacture's water tanks.





# **Fire Suppression**

For decades, foam concentrates have been used extensively to combat surface fires in the mining, construction, and forestry industries. Foam concentrates change how water reacts with fuels, drastically increasing the water's effectiveness in suppressing and containing fires. The use of foam reduces water consumption, suppresses fires more quickly, and more effectively prevents the fire from spreading to nearby combustible materials. No matter how large or small the operation, the safety of everyone on site depends on adequate preparation for an outbreak of fire in any class of fuel.

# **Tire and Equipment Fires**

Tire and equipment fires are a dangerous and costly hazard in the mining and construction industries. Tire fires in particular are extremely difficult to extinguish, as the fire can smolder deep within the rubber where water cannot reach. The presence of an on-call, mobile fire suppression system is essential for the safety of any mine or construction site, to rapidly contain, mop up, and minimize the damage these fires cause. Mega's fire suppression system is designed to be installed on water trucks, creating a multi-purpose mobile fire response unit without needing to re-purpose or purchase a dedicated fire suppression vehicle.

# **Hydrocarbon Fuel**

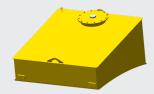
Lighter than water and highly flammable, hydrocarbons present an extreme fire hazard. Hydrocarbon fires are capable of reaching temperatures in excess of 1000°C (1832°F) in as little as 10 minutes if left unchecked. Mine and construction sites must be prepared to respond immediately in order to contain a hydrocarbon fuel fire and minimize its destructive potential.

### **Available Foam Agent Tanks**

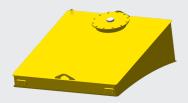
The Mega foam agent tank is a stainless steel tank mounted in the forward upper portion of the water tank. The holding tank contains a supply tube that extends to the bottom of the tank. A flexible hose is connected to the supply pipe that is routed to the foam agent shut-off valve. The tank also contains a pressure/vacuum cap which keeps foreign matter out of the tank while providing for pressure relief and air displacement during temperature changes.



60 GALLON FOAM TANK			
DISCS CONTROL SYSTEMS			
Part Number	Description		
055527	Foam Tank - Long		
055528	Foam Tank - Wide		
ELECTRO-HYDRAULIC CONTROL SYSTEMS			
Part Number	Description		
051219	Foam Tank - Long		
051229	Foam Tank - Wide		



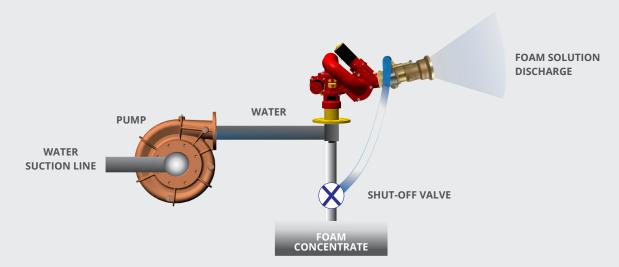
120 GALLON FOAM TANK			
DISCS CONTROL SYSTEMS			
Part Number	Description		
055529	Foam Tank - Standard		
ELECTRO-HYDRAULIC CONTROL SYSTEMS			
Part Number	Description		
051239	Foam Tank - Standard		



200 GALLON FOAM TANK			
DISCS CONTROL SYSTEMS			
Part Number	Description		
055530	Foam Tank - Left Side		
055531	Foam Tank - Right Side		
ELECTRO-HYDRAULIC CONTROL SYSTEMS			
Part Number	Description		
051249	Foam Tank - Left Side		
052394	Foam Tank - Right Side		

## **How The Foam Agent System Works**

Pressurized water flows through a narrowed section waterway in the educator integrated in the air-aspirated nozzle attached to the Mega water cannon. This creates an area of negative pressure that draws foam concentrate from a foam concentrate tank into the nozzle throat. The concentrate is mixed with water and air to create foam.



#### **Performance**

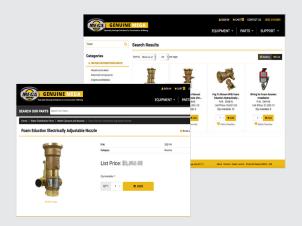
The table shows consumption rates and duration of foam suppression concentrate and water based upon a standard flow rate 1893 lpm/500 gpm and 3% foam proportioning.

FOAM CONCENTRATE LITERS/GALLONS	WATER LITERS/GALLONS	DURATION
228L/60g	7571/2000	4 minutes
455L/120g	15,142/4000	8 minutes
757L/200g	25,362/6700	14 minutes

<sup>\*</sup>Always follow the foam concentrate manufacturer's recommendations for proper storage of the foam concentrate.

# **BUY A FOAM AGENT SYSTEM TODAY!**

Mega's products are used throughout the world in a wide variety of applications and environments. Recently, Mega updated its website to increase its content and improve the user experience. Whether you are an existing customer or new, the on-line parts ordering feature is worth checking out. From spare parts to complete kits, Mega offers a wide range of parts for its products. Visit our website @ www.megacorpinc.com to buy parts online or contact us at 1-800.345.8889.





# **Class of Fire and Foam Agent**

#### What are Class A fuels?

Solid, combustible materials that are not metals are considered to be Class A fuels. Examples of Class A fuels are paper, wood, cloth, rubber, plastics and trash.

#### What is Class A foam?

Class A foam is created by mixing Class A foam concentrate with water, creating a solution of bubbles that is effective at suppressing Class A fuel fires. This solution has a lower density than water and contains "wetting agents" that reduce the surface tension of the water and increase its heat absorption potential. This allows the solution to penetrate and soak the burning fuel more quickly and efficiently than plain water. Class A foam is commonly said to "make water wetter".



## What are Class B fuels?

Combustible non-metal liquids are considered to be Class B fuels. Examples of Class B fuels are gasoline, oil, diesel fuel and grease.

#### What is Class B foam?

Class B foam is created by mixing Class B foam concentrate with water to create a foam solution effective at suppressing Class B fuel fires. Instead of soaking into the burning fuel (Class B fuels are liquids), Class B foam forms a film or blanket on top of the fuel. This suffocates the fire by depriving it of oxygen. Class B foam should not be used for pressurized gas or three-dimensional Class B fires.

Pressurized gases are often stored as liquids, but become vapors at room temperature and atmospheric pressure. Class B foam solutions are designed to blanket flammable fuel and smother the fire, but the vapor pressure of pressurized gases is much too high for this to be possible.



Three-dimensional fires are Class B fires in which fuel is discharged from an elevated or pressurized source, creating a pool of combustible fuel on a lower surface. Because of the geometry of these fires, foam solutions cannot blanket the fuel to smother the fire.