

# COMPRESSED AIR FOAM SYSTEM (CAFS)

## FIXED TYPE

### DESCRIPTION

The SHIELD 400 Gallons/500 Gallons Compressed Air foam Fire Suppression System uses compressed air to propel firefighting foam. Thousands of tight radius bubbles quickly cool and smother a fire by providing a thick Vapor-sealing blanket of foam that virtually eliminates re-ignition. The foam will adhere to horizontal and vertical surfaces. This system allows the operator to seal a fuel spill and flammable Vapors with foam thus reducing or eliminating a potential fire. The system will discharge the foam approximately 25-30 meters in a no wind condition allowing fire-fighting personnel without protective clothing to avoid thermal injuries. Trained personnel can accomplish all maintenance except hydrostatic pressure testing of the Air Cylinders, Premix Tank, and the Discharge Hose.



### SYSTEM COMPONENTS

- **PRESSURE GAUGE** for air cylinder indicates the pressure in the high cylinder when the cylinder valve is opened prior to operation of the unit.
- **PRESSURE GAUGE** for foam tank indicates the pressure inside the foam tank.
- **SELECTOR KNOB** is used to select the foam discharge mode of two options namely, Dry Foam & Wet Foam
- **AIR CYLINDERS** are high pressure air cylinders tested at 250 bar. The System has 6 Air Cylinders.
- **AIR CYLINDER VALVE** is used to adjust the air flow from the Air Cylinder for the unit. It has a special adapter to make it convenient for easy dismantling and refilling of the cylinder with compressed air.
- **FOAM DISCHARGE GUN** is 1" \* 1½" suitable for wet or dry foam flow.
- **PRESSURE RELEASE CONTROLLER** is located on the control panel, used to depressurize the premix tank after use of the unit.
- **DISCHARGE CONTROLLER** is opened by operating lever in the control panel for flow of the foam towards the discharge gun.
- **FOAM DISCHARGE HOSE** is 1" & 1½" x 30 m lay flat fire hose with storz coupling
- **LEVEL INDICATOR** is located in the control panel for low or high level indication of foam solution in the tank.

### TRANSPORTING

The SHIELD CAFS 400 Gallons/500 Gallons should be thoroughly secured when transporting in trailers and vehicle. The lifting eye was fixed on the top of the skid exclusively to handle and external lift operations. Other sections of the system should not be used for these purposes.

### TECHNICAL DATA

Extinguishing Agent	CAFS Special Foam	CAFS Special Foam
Capacity (gallon)	400 gallons	500 Gallons
Foam Selection	Dry/Wet	Dry/Wet
Working Pressure for foam Cylinder	8/10 bar	8/10 bar
Cylinder Material	Stainless Steel, Grade 316 L	Stainless Steel, Grade 316 L
Test Pressure	30 bars	30 bars
Filling Pressure of Air Cylinder	150 bars	150 bars
Range Of Discharge	22-25 m	22-25 m
Discharge Duration	8 min.	10min.
Hose size & Length	1" or 1½" x 30 m	
Operating temperature limits	+5° C to +60° C	+5° C to +60° C