

Intelagard has been building proprietary, multipurpose Compressed Air Foam Systems (CAFS) for more than **20 years**. Reach out to us today to learn more.

CONTACT US

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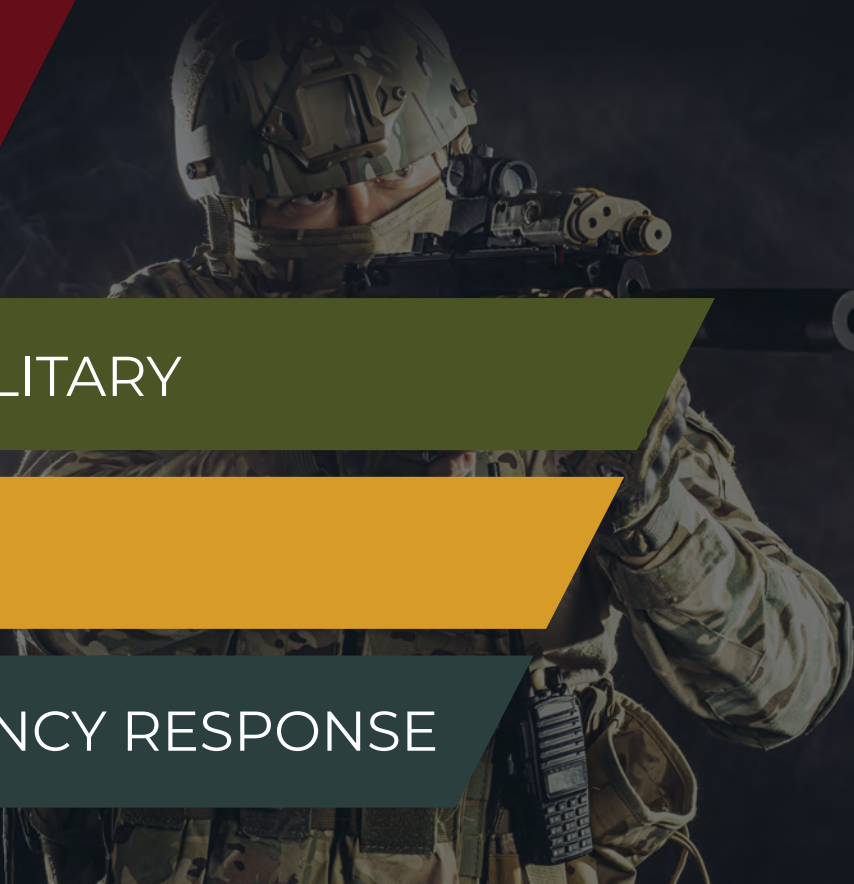
Innovative systems and solutions for CBRN decontamination, fire suppression, hazmat, and remediation industries.



MILITARY

FIRE

EMERGENCY RESPONSE





# THE LEADING MANUFACTURER

## Compressed Air Foam Systems

## ABOUT US



The leading manufacturer of compressed air foam systems from man-portable to truck-mounted units. Intelagard has the systems and solutions for CBRN, fire suppression and protection, hazmat and remediation industries.

For over two decades, Intelagard has manufactured tactical, multipurpose compressed air foam systems for first responders, military, industry, homeland security and domestic preparedness personnel. Intelagard systems are designed for rapid multi-hazard response. **The same unit can be used for chemical and biological decontamination, fire suppression, hazardous material clean-up, crowd control and vapor suppression** – all by simply changing the formulation as appropriate.

Patented Intelagard technology produces a superior foam bubble structure that adheres to the most challenging of surfaces - even to glass and inverted metal. Economical and easy to operate and maintain, all Intelagard systems can deploy commercially available foams and decontamination agents. Versatile and dependable, the Intelagard family of products provides cost-effective and powerful emergency response solutions.

In 2006, Intelagard acquired Envirofoam Technologies, Inc. (EFT), original licensee of Sandia National Laboratories' DF200. This formula was developed for the US Department of Defense as a broad-spectrum decontaminant against chemical and biological agents. EFT markets this formula as EasyDecon DF200 and Crystal Clean. Registered by the EPA, EasyDecon DF200 has passed extensive testing by the US military and is being used today by numerous US federal and international government and military agencies.





# MILITARY

Intelagard's Compressed Air Foam Systems (CAFS) have been used by the US military and other governments around the world for over two decades and are ideal for the application of CBRN decontaminants such as EasyDECON® DF200 as well as firefighting formulas. Intelagard systems have been deployed by the US military in-theater in Kuwait and Iraq and outfit many bases around the world. Intelagard's multi-purpose systems provide a single resource for multiple missions that include IED fire suppression and chemical and biological agent decontamination.

Proprietary components of Intelagard systems lead to the production of superior, long-lasting foam that clings vertically and horizontally to surfaces for comprehensive surface coverage. Intelagard's engineering teams continue to evolve its technology, constantly developing next-generation systems and solutions for the warfighter. Ranging in size from man-portable to truck-mounted units, Intelagard offers fire suppression and decontamination systems that fit the needs of many military operations.



## Military Acknowledgments

- Sandia National Laboratories named the Macaw® Backpack as their deployment system of choice for chemical biological decontamination.
- In 2003, the US Military contracted Intelagard to design and build (34) wide area decontamination trucks and trailers for deployment to the US Army in Kuwait and Iraq.
- The Macaw was chosen as the 'new standard of Portable Fire Suppression equipment' by the US Army after a nine-year down-select process. Intelagard's multi-tasking CAFS provide a single resource for multiple missions.
- 2019-2020 US Army selected the VMDS for all wide-area decontamination in South Korea and Japan.

## Intelagard's Military Deployment Systems

### Applications:

- Crowd Control
- Covert Missions
- Hazmat Cleanup
- Vapor Suppression



### The VIPER™ STEALTH

The Viper Stealth duplicates the technological features of the Macaw Backpack but it is much smaller and lighter: it actually fits in a backpack. This diminutive yet powerful system was developed specifically for use in covert operations and crowd control. The compact design, lightweight and inconspicuous appearance make it appropriate for covert rapid response in emergency situations.



Applications:

- Fire Suppression
- Hazmat Cleanup
- Chemical and Biological Decontamination
- Vehicle Fires

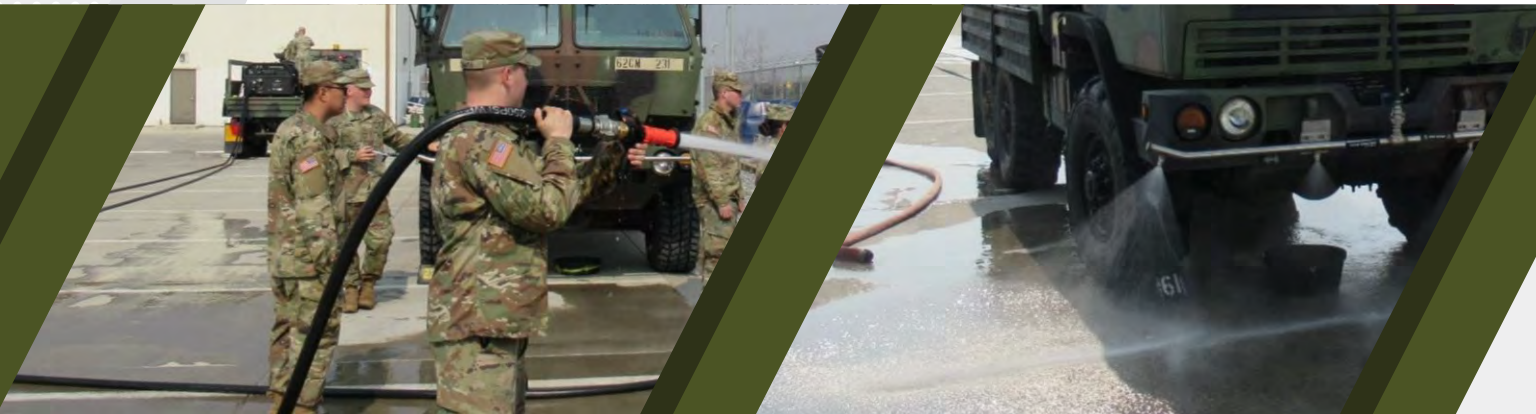


The MACAW® BACKPACK

The Macaw is a man-portable compressed air foam system (CAFS) designed to provide power anywhere the operator can travel on foot. A single-cell liquid storage tank can be filled with Class A, B and combination fire solutions, as well as EasyDECON DF200 for equipment and area decontamination of chemical and biological threats.

Applications:

- Large Scale Decontamination
- Terrain Decon
- Hazmat Control/Cleanup
- Industrial/Chemical Plants



The VMDS™

The Vehicle Modular Decontamination System (VMDS) is a high mobility chemical and biological decontamination system designed for use on light to heavy vehicle platforms, with the mission of providing large scale terrain and hardened military equipment decontamination.

The VMDS Power Module incorporates a diesel engine and compressor for reliable and capable functionality that requires little maintenance and is easy to operate. Customizable liquid storage tanks range in size from 100 to 1000 gallons and stainless-steel plumbing and fixtures assure compatibility with the most corrosive decontamination solutions. An umbilically attached trailer-mounted tank unit can expand decontamination capabilities, as does the drafting capability of the VMDS.

Additional plug-and-play options such as a remote-controlled monitor, front and rear spray bars, a variety of nozzles and multiple hose configurations are available.

Call Intelagard to customize your wide-area terrain vehicle.

*\* For a comprehensive listing of systems, review the Features and Technical Specifications section.*





## FIRE INDUSTRY

When Intelagard was founded in 1991 the company designed stationary compressed air foam (CAF) systems to protect homes in high risk areas from wildfires. Intelagard developed a proprietary method of creating compressed air foam, resulting in a very uniform bubble structure allowing the foam to adhere better and “live” longer.

When asked by firefighters if the system could be made smaller, Intelagard started miniaturization of the technology that was and still is unparalleled in the industry. This miniaturization resulted in the Macaw® Backpack. Although designed for wildland firefighting, the Macaw proved extremely versatile and was chosen as the ‘new standard of Portable Fire Suppression equipment’ by the US Army. Intelagard’s multi-tasking Compressed Air Foam Systems provide a single resource for multiple missions.

### Intelagard CAFS:

- Create a superior bubble structure that blocks oxygen to the fuel, suppresses vapors, and provides a cooling effect.
- Are compatible with all fluorine-free foams.
- Have up to 75:1 expansion ratio.
- Can run dry without damage to the unit.
- Our patented technology creates foam that clings horizontally and vertically, perfect for saturating the ceiling, eaves and windows.

## Intelagard’s Compressed Air Foam Systems

### Applications:

- Spot Fire Containment
- Industrial Area Fire Control
- Wetline Construction
- Hazmat Cleanup



### The MACAW® BACKPACK

More powerful than standard extinguishers, the multipurpose Macaw can be used for fire suppression, exposure protection, mop-up, hazardous materials cleanup as well as decontamination. **The perfect tool for the first responder waiting for the pumper truck to arrive.**

The **Macaw multiplies its five gallons (18.9L) of solution into as much as 175 gallons (66.2L)** of finished foam through Intelagard’s proprietary Enviroshield® expansion technology.

The Macaw can shoot a stream of foam up to 30 feet (9.2m) enabling the user to maintain a safe distance from the target. With the Enviroshield® technology the foam is able to cling to the ceiling with minimal run-off enabling firefighters to have more control over the hottest part of the fire.



Applications:

- Fire Protecting
- Firefighting
- Hazmat Response Missions
- Chemical and Biological Decontamination
- Facility Disinfecting



The MERLIN® HANDCART

The Merlin Handcart is a powerful multi-purpose system ideally suited for immediate response to fire and/or chemical and biological emergencies at fixed sites. This twin tank Compressed Air Foam System (CAFS) generates up to 490-gallons (1854 L) foam using a single liquid fill and air cylinder. The twin tanks are so beneficial when two different kinds of solutions are needed. The cart-based system is easily maneuvered to incident sites and can be placed into operation within seconds. The 20 ft (6.1m) discharge hose and 45 ft (13.7m) throw-range combined with the maneuverability of the unit make it an incredibly powerful response system.

The Merlin's removable power module has both high- and low-pressure ports as well as drafting capability for extended use capabilities.

Applications:

- Fire and Vapor Suppression
- Fuel Spills
- Farm and Ranch Applications
- Hazmat Remediation
- Decontamination



THE SWIFTCAF® ATV

The SwiftCAF ATV was designed with the Wildland Firefighter in mind. The 14-gallon (53 L) system is designed for small vehicle transport into rugged and restricted areas where pumper trucks are unable to operate.

This compressed air foam system has a single-cell liquid storage tank for Class A, B or combination fire solutions, or can be filled with EasyDECON DF200 for equipment and area decontamination.

The SwiftCAF ATV is powered by stored air energy held in a 2216 - 4500 psi (150-310 bar) SCBA air Cylinder, but its low-pressure port gives the option of extended use. A compressed air foam expansion dial allows the operator to choose the expansion ratio. 14 gallons (53 L) of foam concentrate/water solution may be expanded into as much as 490 gallons (1854 L) of foam. Its extremely high performance to weight ratio turns a small vehicle into a powerful response platform.

\*For a comprehensive listing of systems, review the Features and Technical Specifications section.



Benefits:

- Applied as Liquid, Foam or Fog
- Easy to mix and apply
- Reduces Remediation Costs
- Inherently Biodegradable



CRYSTAL CLEAN®

Crystal Clean is a powerful and effective commercial methamphetamine decontaminate. It consists of three separate components that when combined, break the bonds between methamphetamine contaminants and affected surfaces, allowing for easy removal.

Crystal Clean's powerful, patented technology enables remediators to apply the product in the form most appropriate for the surface being cleaned, whether that be as a liquid, foam or fog. This increases the ability of the user to reach all areas effectively and ensures proper coverage and saturation within a quick and efficient application. Test results show that after the appropriate 'dwell time', freshwater rinse and wipe down, extraction or vacuuming with a wet/dry vac will remove all contaminated substances.



EASYDECON® DF200

Available ONLY through Intelagard and its authorized distributors, EasyDECON DF200 is a full spectrum decontaminating and disinfecting solution developed to combat biological and chemical weapons of mass destruction. EasyDECON DF200 is a single solution for remediation of numerous dangerous and persistent hazards, thereby reducing risk, saving time and money, and solving the problem the FIRST time. Successfully tested in use against anthrax and other deadly threats by the US Military, EasyDECON is the proven choice for decontamination operations.

EasyDECON has been tested and proven effective against:

Aspergillus Niger	Erwinia herbicola	Plague - U. Pestis
Avian Flu H5N8	Escherichia Coli	Pseudomonas A
Avian Flu H5N1	Feline Calicivirus	Pseudomonas F.
Bacillus anthracis	Foot & Mouth (FMD)	Pseudomonas P.
Bacillus subtilis	Hemorrhagic Fever (VHFs)	Rhinovirus-Mult. Strains
Bovine coronavirus	Hepatitis A (HAV)	Ricin toxin
Candida bombicola	HIV Type 1	Salmonella enterica
Cholera	Influenza A	Salmonella choleraesuis
Citrus Canker	Listeria monocytogenes	SEB (Staph Toxin)
Clostridium botulinum	Mycobacterium bovis	Staph A (MRSA)
Norovirus	Smallpox	Yellow Fever Virus
Clostridium sporogenes	Penicillium digitatum	Tularemia

Using EasyDECON with an Intelagard foaming system has even more advantages. First of all, foam allows the user to see exactly where the product has been applied, assuring an even and complete application. Secondly, foam dramatically increases contact time of disinfectants on all types of surfaces, especially vertical ones. Thirdly, the Macaw Backpack foaming system can turn 2 gallons of EasyDECON solution into 40 gallons of finished foam. This expansion rate saves money on material and labor hours, and gives more area coverage in less time.



## SPECIFICATIONS

All Intelagard fire suppression and decontamination systems are “solution neutral.” These systems were developed to optimize the performance of Class A, 3F, AFFF, AR-AFFF, protein, fluoroprotein, decontamination foams, pepper spray and EasyDECON® DF200.

## Features and Technical Specifications

Intelagard has been building systems and solutions for fire suppression and chemical and biological decontamination for over 2 decades. All Intelagard products are made in the USA.

## Features and Technical Specifications



### The MACAW® BACKPACK

The Macaw® operates utilizing air energy stored in a 4500\* psi SCBA air cylinder; one air cylinder will empty the 5-gallon (19 Liters) payload up to four times. The CAF expansion dial allows the operator to choose the expansion ratio. 5 gallons (19 L) of solution can be expanded into as much as 175 gallons (662 L) of foam, and the Macaw® will project that foam 25-30 feet (7.6 – 9 meters). Nozzle changes and expansion ratio changes can be made on the fly.

#### Macaw Features

- Totally portable for rapid response
- Fully independent of hoses or other umbilical support systems
- Quick-change nozzle coupler
- Pistol-grip handset – simple one-hand operation
- Comfortable for a wide range of body types
- Dependable performance, high-quality construction
- Adaptable – utilizes a wide range of air cylinders
- Affordable and easily refillable

#### Macaw Technical Specifications

- System Dimensions: 26.5 in (67.31 cm) H x 17.3 in (43.94 cm) W x 13 in (33.02 cm) D
- System Weight Dry (w/o cylinder): ~17.5 lb (7.9 kg); w/empty air cylinder add~12 lb (5.44 kg)
- System Weight Full (w/5 gal. (19 L) liquid & full air cylinder): ~72 lb (32.66 kg)
- Single pump system sprays foam up to 30 ft (9 m) @ 100 psi
- 5-gallon (19 L) liquid storage tank
- Compressor Port
- Foam expansion up to ~35:1 with standard nozzle
- Foam expansion up to ~70:1 with Mid-X nozzle (optional)
- 4500 psi (310 bar) CGA or DIN valve equipped
- Carbon fiber wrapped air cylinder (optional)
- 5 ft (1.5 m) heat/chemical resistant discharge hose





THE VIPER™ STEALTH

The compact design, light weight and inconspicuous appearance make it appropriate for covert rapid response in emergency situations.

Viper Stealth Features

- Multi-use, self contained, extremely portable CAF system
- Designed for covert use
- Fully plumbed, removable and refillable bladder
- On demand, adjustable foam expansion control
- Dependable and easy to operate and maintain

Viper Stealth Technical Specifications

- System Dimensions: 15 ¾ H x 4 ¾ W x 11 D
- Operating Pressure: ~100 psi (6.9 BAR)
- Projection Distance: ~30 ft (9.14 m)
- Foam Expansion: ~35:1
- Liquid Bladders available in a variety of sizes



The SWIFTCAF® SPRAYER SYSTEMS

The SwiftCAF Sprayer System is a low-pressure unit developed specifically for remediation. This system is designed to be used with a compressor and is a low cost and powerful remediation and decontamination tool.

SwiftCAF® Sprayer System Features:

- Low-Pressure System
- 20ft discharge hose with handset
- Suction line
- Bucket caddy with 5 gallon bucket
- Smoothbore and fan spray nozzle standard

SwiftCAF Sprayer System Technical Specifications:

- Case Dimensions: 7.85 in (20 cm) H x 10.75 in (28 cm) W x 4.4 in (11.2 cm) D
- Operating Pressure: 100 psi (6.9 BAR)
- Projection Distance: Up to ~30 ft (9.14 m)
- Weight: 5.66 lb (2.5 kg)



THE SWIFTCAF® ATV

The 14-gallon (53 L) system is designed for small vehicle transport where the pumper trucks are too large and cumbersome to operate through the rugged landscape.

SwiftCAF ATV Features:

- Rugged utility frame
- Rear horizontal and vertical tool holder
- Pistol grip trigger-action handset
- Quick release CAF module mount
- SCBA cradle & stainless steel securing hardware
- Low and high air compatible

SwiftCAF ATV Technical Specifications:

- System Dimensions: 16 in (40.6 cm) H x 42 in (106.7 cm) W x 25 in (63.5 cm) D
- Operating Pressure: 100 psi (6.9 BAR)
- Liquid Capacity: 14 gal (53 L)
- Projection Distance: Up to 35 ft (10.7 m)\*
- Foam Expansion: Up to 35:1\*
- System Weight Dry (w/o cylinder): 65.5 lbs (27.8 kg)
- System Weight Full (w/cylinder): 198 lbs (89.8 kg)
- Hose: 7 ft (2.1 m), 3/4 in (1.9 cm) diameter
- Nozzle: Intelagard Smooth Bore



The MERLIN® HANDCART

The cart-based system is easily maneuvered to incident sites and can be placed into operation within seconds. The 20 ft (6.1m) discharge hose and 45 ft (13.7m) throw-range combined with the maneuverability of the unit make it an incredibly powerful response system. Its removable power module has both high- and low-pressure ports as well as drafting capability for extended use capabilities.

Merlin Handcart Features:

- Portable and fully independent of umbilical support
- Low-pressure connection for use with compressor power
- Zero-prime drafting of fluids from external liquid tanks
- Flow balancing controls
- Versatile operation, ergonomic controls
- Drain plugs for easy cleaning
- Visual fill level monitoring
- Variable foam composition between twin tanks
- Ideal for static/fixed site protection

Merlin Handcart Technical Specifications:

- Dimensions: 49.25 in H x 19.25 in W x 23.75 in D (125 cm x 48.9 cm x 60.3 cm)
- Binary tank system with twin 7 gal. (26.5L) liquid tanks
- Dual pump system –projects foam 45 + ft (13.7m)
- Operates using a single 4500-psi air cylinder
- Dial-adjustable foam expansion
- Expansion Rate: Up to ~35:1 with smoothbore nozzle, and ~70:1 with Mid-X nozzle
- 20 ft. (6.1m) handset hose; optional longer lengths available
- \*Dependent upon user settings and nozzle





THE VIPER™ RECOVERY

The inspiration of the Viper **binary applicator** was the desire to provide a smaller, lighter, yet enhanced Macaw-like capability for responders wearing breathing air systems. While the Viper™ Recovery can be worn as a backpack *it can be used as a roller-bag with an extendable handle and side-mounted wheels* or be mounted to a motorcycle for locations where traffic is a problem for first responders.

- Viper Recovery Features:**
- Construction: Nylon/Cordura® harness and body  
Features roller frame and adjustable backpack harness
- Smooth bore nozzle standard
  - Standard 17 cu ft air cylinder, CGA or DIN equipped
  - Optional air cylinders: 2216 –4500 psi (150 –300 bar)
  - 5 ft (1.52 m) L x 1/2 in (1.27 cm) discharge hose & trigger handset

- Viper Recovery Technical Specifications:**
- System Dimensions 25.9 in (65.8 cm) H X 15 in (38.1 cm) W X 10.2 in (25.9 cm) D
  - Unit weight, dry, w/o air cylinder or liquid bladders: ~19lbs (8.6 kg)
    - Units weights, full with (STD) 17 cu. ft. air cylinder:w/2 gal (7.58 L): ~43.5 lbs (19.7 kg)
    - w/3 gal (11.38 L): ~51.5 lbs (23.4 kg)
    - w/4 gal (15.14 L): ~ 59.5 lbs (27 kg)
  - Operating Pressure: ` 100 psi (6.9 bar)

THE SWIFTRUNNER® SRII

The SwiftRunner® SRII turns your utility terrain vehicle, truck or trailer into a powerful and highly mobile firefighting tool. The standard system is powered by a 14 HP gasoline engine (diesel configuration available). Optional high-pressure air power increases the SwiftRunner's adaptability. The SwiftRunner's fluid tank is internally baffled to decrease fluid shift for optimal vehicle stability on uneven terrain. Its rugged air pump is capable of operating with saltwater and gray water, and it can pass sand and grit up to a quarter inch. Adjustable air injection allows the user to select foam expansion tailored for mission-specific response. Drafting and 35 ft (10.7 m) vertical lift capabilities add to the SwiftRunner SRII's impressive scope of performance.

- SwiftRunner SRII Features**
- Binary tank option for EasyDECON DF200 use
  - Electric start
  - Multipurpose – fire, decon, hazmat
  - High pressure air powering option
  - Skid mounted for easy slip in and out, use on multiple vehicles, trailers
  - Adjustable air injection for wetter/drier foam
  - Baffled water tank reduces load shift
- SwiftRunner SRII Technical Specifications**
- System dimensions: 50 in L x 43 in W x 30 in H (1.27 m x 1.09 m x .76 m)
  - Operating Pressure: 100 psi (6.9 BAR)
  - Liquid capacity: ~ 50 gal (189.3 L)
  - Compressor: 30 CFM
  - Engine: 14 HP gasoline, single slant cylinder, air cooled standard (diesel configuration available)
  - Projection Distance: Up to ~45 ft (13.7 m)\*
  - Foam Expansion: Up to 35:1\*
  - System Weight Dry: ~ 500 lbs (227 kg)
  - System Weight Full: ~ 920 lbs (417 kg)
  - Standard Hose: 50 ft (15.24 m), .75 in (1.9 cm) ID
  - Standard Nozzle: 12mm Intelagard Smooth Bore
  - Handset: Intelagard High Performance Handset



THE H1 INTERCEPT®

The H1 Intercept is a vehicle-transportable skid system that can be configured to be powered by either diesel or gasoline. This compressor powered skid also functions as a mobile air compressor station for maintenance and service operations, and for the filling of inflatable shelters, showers and bladders in the field. The Intercept can be configured with tanks ranging from 100 to 500 gallons (378L to 1892L), transported using a truck or trailer, and removed for storage. The Intercept is fully draft compatible, enabling it to feed directly from bulk containment of firefighting and decontamination solutions or other resources for efficient long term operations.

- H1 Intercept Features:**
- Brass/stainless steel plumbing and components
  - 2 line discharge
  - Baffled tank(s) reduce load shift
  - Drafting capability; 20 ft (6.1 m) lift
  - Adjustable automatic proportioning suitable for many formulations
  - Visual tank level sight tubes
  - Foam cell for reclamation of unused formula concentrate
  - Customizable tank(s) and skid size
  - Mounted on durable polypropylene skid platform

- H1 Intercept Technical Specifications:**
- Power Unit Dimensions (L x W x H): ~ 48 in (121.92) x 26.5 in (67.31 cm) x 38.25 in (97.15 cm)
  - Operating Pressure: ~100 psi (6.9 bar)
  - Liquid Capacity: 100 gal (~380 L) - 500 gal (~1890 L)
  - Projection Distance: Up to ~ 80 ft (24.4 m)\*\*
  - Foam Expansion: Up to ~30:1\*\*
  - Power Unit Weight Dry: ~800 lb (363 kg)
  - Standard Hose: 100 ft (30.5 m) 1 in (2.54 cm) - 1.5 in (3.81 cm) flat lay
  - Standard Bail/Nozzle: 1 in (2.54 cm) - 1.5 in (3.81 cm) NST(NH) Bale with 15/16 in (2.38 cm)



THE VMDS™

The Vehicle Modular Decontamination System (VMDS) is a developmental high mobility CBRN decontamination system designed for use on multiple light to heavy vehicle platforms, with the mission of providing large scale terrain and hardened military equipment decontamination. Mounted on co-poly skid units, each modular unit is easily moved and mounted for customized powerful and effective mission response.

The VMDS™ has additional plug-and-play options such as a remote-controlled monitor, front and rear spray bars, a variety of nozzles and multiple hose configurations available.

- VMDS Features**
- 3 ea. 1.5 in. line discharge
  - 3 ea 1 in. line discharge
  - Baffled tank(s) reduce load shift
  - Zero prime drafting with up to ~20 ft (6.1 m) lift
  - Diesel Engine: 24.8 hp @ 3600 rpm
  - Compressor CFM ~95, 100 psi
  - Dial Adjustable Foam Proportioning: wet/dry
  - Mounted on durable polypropylene skid platform

- VMDS Technical Specifications**
- Power Module Dimensions (L x W x H): ~ 48 in X 27.5 in X 38.25 in
  - Operating Pressure: ~100 psi (6.9 bar)
  - Liquid Capacity: 100 gal - 1,000 gal
  - Projection Distance: Up to ~ 90 ft
  - Power Unit Weight Dry: ~985 lb
  - Standard Hose: 2 ea 100 ft in flat lay with EZLink connectors at each end; 20 ft. X 1in. Draft hose with stainless steel basket
  - Standard Bail/Nozzle: 1.5 in. NST(NH) Bale

\* Call Intelagard to customize your wide area terrain vehicle.



