

#### SUSTAINMENT, LOGISTICS AND ADVANCED SERVICES

# FRC

# **Flatrack Refueling Capability** Flexible, Highly Deployable Field Fuel Distribution Solution

The Flatrack Refueling Capability (FRC) system provides the capability to transport, filter and distribute fuel, and provides for tactical refueling of aircraft or vehicles in an expeditionary environment. Mounted on an ISO frame with flatrack base, the FRC can be rapidly emplaced, operated, maintained and recovered. It is compatible with the Heavy Expanded Mobility Tactical Truck, Load Handling System, the Palletized Load System truck and trailer and the United States Marine Corps Logistics Vehicle System Replacement. The FRC is mobile when it is full, partially full or empty, and can be used at any location, even without the availability of construction

or material handling equipment. Using its 9,464-liter / 2,500-gallon tank, diesel engine-driven 946 liters / 250 gallons-per-minute pump, and ancillary equipment, the FRC is capable of fueling and defueling kerosene-based fuels to one aircraft or fueling two ground vehicles simultaneously.



### **HIGHLIGHTS**

- Minimum operator training for quick setup and operation
- · Self-contained, ruggedized unit
- Prime movers: Logistics Vehicle System Replacement (LVSR), Heavy Expanded Mobility Tactical Truck (HEMTT), Load Handling System (LHS), Palletized Load System (PLS) and trailer
- · Operates on or off prime mover
- · Standard size ISO frame with flatrack base
- 9,464 liters / 2,500 gallon capacity
- Diesel engine-driven self-priming pump
- Aircraft pressure refueling and defueling with deadman control
- Tactical vehicle refueling: two vehicles simultaneously
- Emergency refueling/defueling using 170 lpm / 45 gpm positive displacement electric pump
- · Filter separator and relaxation vessel



### **PERFORMANCE FEATURES**

#### GENERAL SPECIFICATIONS

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Operational concept	The FRC system can transport, filter and distribute fuel and provide for tactical refueling of assets in an expeditionary environment; supports vehicle, ground equipment and aircraft fuel requirements
Transportability	HEMTT, LHS, PLS and trailer, USMC LVSR, C-130, CH-47, C-141B, and C-5, ISO/convention for safe containers certified 192,000 kg / 423,000 lbs.
Major components	ISO frame with flatrack base per ISO/NATO standards STANAG 2413 and DIN 30722 for demountable cargo bodies, EPA Tier III compliant diesel engine, self-priming centrifugal pump, filter separator, relaxation vessel, baffled stainless steel storage tank with off-road proven mounting technology, 170 lpm / 45 gpm positive displacement electric pump, D-3 nozzle, one overwing nozzle, two open-port nozzles, NATO adaptor with 7.62 cm / 3 inch dry-break connection
Performance	Receives, stores and issues JP-8, JET-A1, DF2 kerosene-based fuels. Dispensing flow rates: One ground fuel hose line: 500 lpm /132 gpm. Both hoses operating simultaneously: 212 lpm / 56 gpm, 3.81 cm / 1.5 inch hose and 450 lpm / 119 gpm, 6.35 cm / 2.5 inch hose. One aviation hose line: 833 lpm / 220 gpm at 3.79 bar / 55 psi at the nozzle at a vertical height of 3 m / 10 feet. Emergency dispense, positive-displacement electric pump: 144 lpm / 38 gpm, one hose; 76 lpm / 20 gpm each, two hoses. Defuel kit: 151 lpm / 40 gpm defuel rate using positive displacement electric pump. 12-hour run time on a single fuel tank
Environmental capabilities	Storage: -45°C to 71°C / -50°F to 160°F, operation: -32°C to 52°C / -25°F to 125°F, operates in rain, snow, hail, ice, fog, dust, sand, high humidity, solar radiation, extreme temperatures, ozone exposure and electromagnetic interference / electromagnetic pulse exposure
System weight	Empty: 6,985 kg / 15,400 lbs. full: 15,150 kg / 33,400 lbs.

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