REFRIGERATOR CONTAINER SYSTEM (RCS) | DoD CFD

PURPOSE:

The Refrigerated Container System (RCS) provides for the safe transport and storage of perishable food items. It is an ISO-based container designed to be transportable by land, sea and air and can operate in ambient temperatures ranging from -40°F (-40°C) to 125°F (52°C). The container is designed to operate on the ground at a fixed site location. The container is also able to receive power from an external electrical source, provided that the container is located within 20 feet of the electrical source. The RCS is durable and robust, designed for use in extreme hot, cold, humid, and dry environments.

CHARACTERISTICS:

The RCS is dual powered and can be operated either through the use of the onboard 10 kW JP-8 or diesel powered tactically quiet generator (TQG) or through an external 208 V 3-phase 50/60 Hz AC power source. Either source allows for complete cooling or heating of the RCS to include, but not limited to, the Refrigeration Unit (RU). All of the walls, the ceiling, and the floor are fully insulated to minimize the heat transfer.The ribbed floor and wall spacer strips allow conditioned air to properly circulate around the cargo and provide for sufficient structure to load the container up to a maximum gross of 52,900 lbs (23,805 kg). An end-wall set of double doors provides full access to the container's interior and seals tightly against the container frame when closed. The right access door also contains an emergency escape door to prevent entrapment of personnel and can only be removed from inside the container. Floor drains are located at each corner of the ribbed floor to prevent water buildup within the RCS.

CAPABILITIES & BENEFITS:

- Is easily transportable on a military/commercial flatbed truck, railway car, ship or any other ISO transportable conveyance; 8 foot (2.44 m) height allows for transport by C-130 and larger aircraft.
- Can be stacked up to 9 high and connected in tandem for transporting or storage.
- Operates from on-board 10 kW TQG or external electrical power sources.
- The generator is mounted on roller slides to allow the users to access the back of the generator to perform maintenence.
- Has operator controlled internal lighting.
- Escape hatch permits emergency exit from container interior.
- Is equipped with a self-contained RU to provide both cooling and heating capabilities; can maintain internal temperatures of between 0°F to 40°F (-18°C to 4.5°C) in ambient temperature from -40°F to 125°F.
- Provides 798 cu ft (22.6 cu m) of single temperature storage capacity.

COMMENTS:

The RCS has been fielded since 31 July 1998.

POINT OF CONTACT:

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AT A GLANCE:

- **DIMENSIONS:**
  8 ft H x 20 ft L x 8 ft W (6.1x2.44x2.44 m)
- **WEIGHT:**
  - Container: 9,237 lbs (4,197 kg) empty or 52,900 lbs. (24,471 kg) maximum gross
  - Generator: 1000 lbs (454 kg)
- **SHIPPING CUBE:**
  1,280 cu ft (35.84 cu m)
- **CARGO WEIGHT CAPACITY:**
  43,663 lbs (19,823 kg)
- **POWER REQUIREMENTS:**
  10 kW TQG or external 208 V, 3-phase, 60 Hz
- **COOLING CAPACITY:**
  9,000 BTU/hour
- **HEATING CAPACITY:**
  7,000 BTU/hour
- **REFRIGERANT:** Non-ozone depleting 134A

UNCLASSIFIED

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.