

INCH-POUND

A-A-52033A

May 14, 2003

SUPERSEDING

A-A-52033

29 May 1991

COMMERCIAL ITEM DESCRIPTION

CONTAINER, CARGO, OPEN-TOP, HALF HEIGHT

The General Services Administration has authorized the use of this commercial item description, for all federal agencies.

1. **SCOPE.** This commercial item description (CID) covers a 20 foot (ft) (6.1 meter (m)), reusable, International Organization of Standardization (ISO) ICX, cargo, open-top, half height container for the transportation, distribution, and storage of military supplies.

2. SALIENT CHARACTERISTICS.

2.1 **Materials.** Unless specified herein (see 7.1), materials shall be in accordance with the manufacturer's material specifications. The use of recovered material made in compliance with regulatory requirements is acceptable providing that all requirements of this CID are met (see 4).

2.1.1 **Materials deterioration, prevention and control.** The container shall be fabricated from compatible materials, inherently corrosion resistant or treated to provide protection against the various forms of corrosion and deterioration that may be encountered in any of the applicable operating or storage environments to which the container may be exposed.

2.1.2 **Steel requirement.** The container shall be constructed of a high-strength low alloy (HSLA) structural steel conforming to ASTM A588, grade A, HSLA structural tubing conforming to ASTM A847, and sheet steel conforming to ASTM A606, type 4 (see 7.2.1).

2.1.3 **Dissimilar metals.** Dissimilar metals shall not be used in intimate contact with each other unless protected against galvanic corrosion.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent by letter to: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/ESA, 6501 E. 11 Mile Road, Warren, MI 48397-5000

AMSC N/A

FSC 8115

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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2.1.4 Identification of materials and finishes. The contractor shall identify the specific materials, material finishes or treatments for use with component or subcomponents, and shall make information available upon request to the contracting officer or designated representative. Materials not specified shall be in accordance with federal, military or national technical society, association or institute specifications or standards.

2.2 Description. The container shall be noncollapsible, of a permanent character and suitable for repeated use. The container shall be a steel 4 ft 3 inch (in.) (129.5 centimeters (cm)) external height (includes roof bows), 8 ft (2.44 m) external width, ISO ICX container with a drop end door at one end. The container shall comply with the requirements of ISO 1496/1 (see 7.2.3).

2.2.1 Standard product. Except as otherwise specified herein (see 7.1), the container shall be the standard product of the contractor. The container shall be new and unused.

2.2.2 Weight, ratings and dimensions. The tare weight of the container shall be the minimum practical and shall not exceed 5500 pounds (lb) (2495 kilograms (kg)). The gross weight rating shall be 52 910 lb (23 999 kg). Dimensions, tolerances, and diagonal differences of the container shall meet the requirements for a 20 ft nominal length container as specified in ISO 668 (see 7.2.3). When viewed from the door end, the cross sectional profile of the interior cargo space shall provide a true rectangular envelope without obstruction, having a minimum width of 89 in. (226 cm), consistent from the floor surface to a height of not less than 41 in. (104 cm) above the floor surface.

2.3 Construction. The container shall be constructed so as to be free of any recesses or voids in which contraband can be concealed or where moisture can accumulate. No part of the container shall protrude beyond the outside surfaces of the corner fittings.

2.3.1 Door. A drop end door shall be hung within the rear end frame and shall provide a clear opening conforming to ISO 668 (see 7.2.3). The drop end door shall be capable of opening a minimum of 180 degrees. The internal surface of the door shall be plated with rolled steel having non-skid rail figures on the top surface. The door shall be capable of withstanding a load of 8000 lbs (3628.7 kg) per tire footprint, 16 000 lb (7257.5 kg) axle load over a contact area of not more than 22 square inches (in.²) (141.9 square centimeters (cm²)) per tire footprint. When closed, the door shall be sealed in such a manner as to prevent moisture entry into the container. The door structure shall satisfy the requirements of Transport International des Routiers (TIR) (see 7.2.4).

2.3.2 Side walls, end wall and door. The steel side walls, end wall and door may be of the interior or exterior post type, corrugated or of smooth skin construction. The side walls, end wall and door shall withstand loading in accordance with ISO 1496/1, except that the end wall and door each shall withstand an internal loading equal to the full uniformly distributed payload.

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2.3.3 Floor. The floor shall be fabricated of rolled steel having non-skid raised figures on the top surface floor and shall be welded to the bottom side rails and crossmembers of the container. The floor shall be watertight.

2.3.4 Understructure. All crossmembers shall be of the same configuration and strength and shall have a maximum center to center distance of 12 in. (25.4 cm). After painting the metal surfaces, the entire underside of the container floor, including crossmembers, corner fittings, side rails, and end frame members, shall be coated with a bituminous undercoat applied to a minimum dry film thickness of 6 mils (150 microns).

2.3.5 Forklift pockets. Forklift pockets for handling loaded and unloaded containers shall be furnished. Forklift pockets shall conform to the requirements of ISO 1496/1. Above the inside of the “unload pockets”, locate in white stenciled letters or letter decals of 3 in. (7.6 cm) high minimum, the following warning:

“FOR EMPTY LIFT ONLY”

2.3.6 Covering. A minimum of nine roof covering bows shall be provided. Bows shall be removable to allow unrestricted top entry into the container. A waterproof polyvinyl chloride coated tarp shall be provided. The tarp shall have a minimum strength of 14.25 lbs/square foot (lb/ft^2) ($69.57 \text{ kg/square meter (kg/m}^2\text{)}$). A plastic sheathed steel TIR cord shall be provided. The tarp, plastic sheathed steel cord and container shall satisfy requirements. The roof covering assembly of tarp, roof bows, and plastic sheathed steel TIR cord installed, shall be self-draining. On the door, wall ends, and sides, mark in the center of each with 3 in. high letters:

“NOT STACKABLE WITH TARP COVERS IN PLACE”

2.3.7 Corner fittings. Corner fittings shall conform to the requirements of ISO 1161 (see 7.2.3).

2.3.8 Anti-pilferage provisions. Hinge-pins, screws, bolts, and other fasteners used for securing the hinges and closing devices to the container and for holding the essential parts of the sides, ends and roof covering, shall be welded or otherwise secured in such a manner as to prevent access to the interior of container without leaving visible signs of tampering. Where such welding destroys protective coating on the items being welded or on other container parts, the weld and surrounding area shall be thoroughly cleaned, treated, and painted. All locking device handles shall be furnished with provisions for padlocking and customs sealing.

2.3.9 Metal fabrication. Metal used in the fabrication of equipment shall be free from kinks and sharp bends. The straightening of material shall be done by methods that will not cause injury to the metal. Shearing and clipping shall be done neatly and accurately. Corners shall be square and true. Flame cutting, using a tip suitable for the thickness of the metal, may be employed instead of shearing or sawing. Burned surfaces or flame-cut material shall be free of slag. All bends of a major character shall be made with controlled means in order to insure uniformity of

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size and shape. Precautions shall be taken to avoid overheating, and heated metal shall be allowed to cool slowly.

2.3.10 Bolted and riveted connection. Bolt and rivet holes shall be accurately punched or drilled and shall have the burrs removed. Washers, lock washers, or lock nuts shall be provided where necessary, and all bolts, nuts, and screws shall be tight. Rivet heads, when not countersunk or flattened, shall be uniform in size and shape for the same diameter of rivet concentric with the rivet holes, and in full contact with the surface of the member.

2.3.11 Placard holder. Four stainless steel placard holders conforming to Department of Transportation (DOT), Bureau of Explosives (BOE) 6000, part 172, appendix C, shall be provided (see 7.2.5). One placard holder shall be located on each end and each side of the container. Placard holders shall be permanently attached and shall be located a minimum of 3 in. (7.6 cm) away from all other container markings.

2.3.12 Surface preparation. All steel components both inside and out, shall be abrasively blasted to a near white per the Society for Protective Coatings (SSPC) Guide-10 (see 7.2.6). Equivalent chemical cleaning may be proposed. The cleaned surface shall be free from oil, grease, dirt, mill scale, rust, corrosion products, oxides, paint or any other foreign matter. Very light shadows or very slight streaks caused by mill scale, oxides or other slight discolorations on the finished surface shall be acceptable. At least 95 percent of each square inch (6.5 cm²) of surface area shall be free of all visible residues and the remainder shall be limited to the slight discoloration mentioned above.

2.3.12.1 Primer coat. The primer coat shall be with either organic zinc rich or zinc chromate. and shall contain anticorrosive properties, which shall retard the corrosion of the steel. The primer coat shall be applied to a dry film thickness recommended by the primer manufacturer.

2.3.12.2 Top coat. The top coat shall be compatible with the applied primer coat. The exterior finish color shall be in accordance with FED-STD-595 (see 7.2.7), color number 24084 (olive drab) unless otherwise required (see 7.1). Interior finish color shall be light gray or white. The final coating shall be not less than 5.3 mils (135 microns) dry film thickness.

2.3.13 Identification and markings. Identification and markings shall be permanent and legible and shall include as a minimum, the manufacturer's identification code (CAGE), the contract number and the part number (see 7.1).

2.3.13.1 Interior marking. The owner's code and serial number shall be stamped or bead welded in characters not less than 1/2 in. (12.7 mm) high on the interior surface of the left side top rail (see 7.1). The number shall be located within an area of 18 in. (45.72 cm) from the left vertical frame member where it will not be obscured.

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2.3.13.2 Exterior marking. The container shall be marked in accordance with ISO 6346 (see 7.2.3). Each exterior wall of the container shall be marked with a minimum 3 in. high letters, the following:

“PROPERTY OF U.S. ARMY”

In addition, the upper quadrant of each exterior wall shall be marked with a United States flag, with minimum dimensions of 8 in. (20.3 cm) in height by 12 in. (30.5 cm) in length. All markings shall have a minimum five year life.

2.3.13.3 Approval plates. An International Convention for Safe Containers (CSC) (see 7.2.8), Transport International des Routiers (TIR), and Timber Component Treatment Requirements of the Australian Department of Health (TCT) (or equivalent) plates or plaques (see 7.2.9) shall be applied for and obtained from a designated approval authority, attached and displayed as required, by the convention in accordance with CFR 49, parts 450 and 451 (see 7.2.5). Any additional requirements of the approval authority shall be met. Each container shall be affixed with the seal of the approval authority.

3. Performance. The container shall conform to the requirements specified in ISO 1496/1 without damage or permanent deformation.

3.1 Workmanship. All parts, components, and assemblies of the container including castings, forgings, molded parts, stampings, seals and sealing agents, machined surfaces, and welded parts shall be clean and free from any defects that will reduce the capability of the container to meet the requirements specified herein. Any components and assemblies, which have been repaired or modified to overcome deficiencies shall not be used without prior specific approval of the contracting officer. External surfaces shall be free from burrs, slag, sharp edges, and corners except where sharp edges and corners are required. The internal cargo space shall be free from sharp protrusions that could damage cargo or injure personnel.

3.2 Metric products. Products manufactured to metric dimensions shall be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest revision of FED-STD-376 (see 7.2.7), and meet all other requirements of this CID.

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR) (see 2.1 and 7.2.5).

5. PRODUCT CONFORMANCE. The products provided shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance (see 7.1).

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5.1 Responsibility for inspection. The contractor is responsible for the performance of all inspections (examinations and tests).

6. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order (see 7.1).

7. NOTES.

7.1 Ordering data. The contract or order should specify the following:

- a. CID document number and revision.
- b. If materials are other than that used in commercial manufacture (see 2.1).
- c. If standard container is as otherwise specified (see 2.2.1).
- d. If the top paint color is other than olive drab (see 2.3.12.2).
- e. Owner's CAGE identification, contract, serial and part numbers on each container (see 2.3.13 and 2.3.13.1).
- f. Product conformance provisions (see 5).
- g. Packaging requirements (see 6).

7.2 Source of documents.

7.2.1 ASTM A588, "Standard Specification for High-Strength, Low-Alloy Structural Steel, with 50 KSI (345 MPa) Minimum Yield Point to 4 in. (100 mm) Thick", (DoD adopted); ASTM A606, "Standard Specification for Steel, Sheet and Strip, High Strength, Low Alloy, Hot-Rolled and Cold-Rolled, with Improved Atmospheric Corrosion Resistance", (DoD adopted); and ASTM A847, "Standard Specification for Cold-Formed Welded and Seamless High-Strength Low-Alloy Structural Tubing with Improved Atmospheric Corrosion Resistance" may be obtained from ASTM International, PO Box C700, 100 Barr Harbor Dr., West Conshohocken, PA 19428-2959 or website: www.astm.org

7.2.2 "International Convention for Safe Containers (CSC)" may be obtained from the Maryland Nautical Sales, Inc, 1400 E. Clement Street, Baltimore, MD 21230 or website: www.mdnautical.com

7.2.3 ISO 668, "Series 1 Freight Containers - Classification, Dimensions and Ratings"; ISO 1161, "Series 1 Freight Containers - Corner Fitting - Specification"; ISO 1496/1, "Containers, Series 1 Freight - Specification and Testing-Part 1: General Cargo Containers for General Purposes"; ISO 6346, "Freight Containers - Coding, Identification and Marking" may be obtained from the American National Standards Institute (ANSI), 11 West 42nd Street, New York, NY 10036 or website: www.ansi.org

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7.2.4 “Transport International des Routiers (TIR)” may be obtained from the United Nations, Economic Commission for Europe, Transport Division, Dangerous Goods and Special Cargoes Section, Palais des Nations, 1211 Geneva 10, Switzerland or website: www.unece.org

7.2.5. Code of Federal Regulations 49, parts 450 and 451 and BOE 6000, part 172, appendix C and Federal Acquisition Requirements (FAR), section 23.403 may be obtained from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402 or website: www.access.gpo.gov

7.2.6 “SSPC Guide-10” may be obtained from the Society for Protective Coatings, 40 24th Street, 6th Floor, Pittsburgh, PA 15222-4656 or website: www.sspc.org

7.2.7 FED-STD-595, “Colors Used in Government Procurement”, and FED-STD-376, “Preferred Metric Units for General Use by Federal Government” may be obtained from the Document Automation and Production Service, 700 Robins Avenue, Building 4D, Philadelphia, PA 19111-5094 or website: www.access.gpo.gov

7.2.8 “Commonwealth of Australia Department of Health” may be obtained from Commonwealth of Australia Department of Health, Central Office, GPO Box 9848, Canberra ACT 2601, Australia, Telephone: 1 800 020 103, Fax: 02 6281 6946

7.3 Key words.

Freight containers
NATO containers
Shipping containers

MILITARY INTERESTS:

Custodians:

Army - AT
Navy - AS
Air Force - 99

Review Activities:

Army - MT, SM
Navy - CG, SA
Air Force - 03, 11
Civ. - FCOE, FGI, 2FYE
DLA - DH
Misc. - MP

CIVIL AGENCY COORDINATING ACTIVITY:

GSA-FSS

Preparing Activity:

Army - AT

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