

INCH-POUND

A-A-52029  
9 May 1991

## COMMERCIAL ITEM DESCRIPTION

CONTAINER, CARGO,

SIDE OPENING

The General Services Administration has authorized the use of this commercial item description

This item description covers 20 foot, reusable, ISO ICC, side opening, cargo containers for the transportation, distribution, and storage of military supplies.

Salient characteristics

Description. The containers shall be noncollapsible, of a permanent character and suitable for repeated use. The container shall be a steel 8 foot 6 inch ISO ICC container with full length side opening doors. The container shall comply with the requirements of ISO 1496/1.

Weight, ratings and dimensions. The tare weight of the container shall be the minimum practical but shall not exceed 6100 pounds. The gross weight rating shall be 52,910 pounds. Dimensions, tolerances, and diagonal differences of the container shall meet the requirements for a 20 foot nominal length containers as specified in ISO 668.

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

Material. Material shall be as specified herein. Used, rebuilt or remanufactured components, pieces, and parts shall not be incorporated into the container. Materials not specified shall be in accordance with Federal, Military, or National Technical Society, Association or Institute specifications or standards.

Material 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.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and other data which may improve this document should be sent by letter to: Commander, US Army Belvoir Research, Development and Engineering Center, ATTN: STR8E-TSE, Fort Belvoir, VA 22060-5506.

A/C N/A

FSC 8115

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

Identification of materials and finishes. The contractor shall identify the specific material, material finish or treatment for use with component or subcomponent, and shall make information available upon request to the contracting officer or designated representative.

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

Doors. An unobstructed door opening with minimum dimensions of 84 inches high and 221 inches wide shall be provided. Four equally sized doors shall be hung within the side of the container to provide access to the interior of the container. The doors shall be hinged together to make two pairs. Each pair shall be hinged to a corner post. Heavy duty hinge pins, recessed within the corner post shall be provided on each door allowing the door pair to open a minimum of 170 degrees. Steel hinges shall have corrosion resistant steel pins. Each door shall be provided with not less than two heavy-duty, handle operated cam locking devices with anti-rack provisions which through lever type action aid in releasing the door seal from the door frame. Each locking device handle must be capable of accepting a padlock and security seal. Means shall be provided to hold the doors in the full open position and shall be of a material which will not scrape or chafe the container when the doors are closed. The doors, when closed, shall be sealed in such a manner as to prevent moisture entry into the container. All moving parts of the door locking mechanism and door hinges shall be permanently lubricated.

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

Floor. The floor shall be fabricated of marine grade hardwood. The floor shall be attached to the crossmembers by countersunk fasteners, 1/4 inch minimum head diameter, either of the self-tapping screw type, or machine screws with self-locking nuts and shall be installed so that each head is 0 to 1/16 inch below the board surface and at least 1 inch from the board edge. Screws shall be used on 10 inch centers on each cross member. The floor shall be installed to permit lateral variations in floor board width due to swelling. The floor shall be watertight. All wood components shall be chemically treated in accordance with the regulations as stated by the "Commonwealth of Australia Department of Health." A data plate shall be affixed to the container indicating the immunization code used in the treating process.

Understructure. All crossmembers shall be of the same configuration and strength and shall have a maximum center to center distance of 12 inches. After painting of the metal surfaces, the entire underside of the container floor, including crossmembers, corner fittings, side rails, and end frame

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members shall be coated with a bituminous undercoat applied to a minimum dry film thickness of 6 mils (150 microns).

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 pockets (unloaded pockets) the following warning shall be stenciled in minimum 3 inch white letters: "EMPTY LIFT ONLY".

Roof. The roof shall be self draining. Corrugated roofing construction is permitted. If roof bows are provided and are fastened to the roof sheet, they shall be bonded by a suitable bonding agent. If the roof bows are not fastened to the roof sheet, anti-chafing material shall be affixed to the roof bows on the surfaces facing the roof sheets. The roof sheet, top side rails, and top end frame members shall be a minimum 1/4 inch below the top surface of the corner fittings. The roof sheet shall be not less than 1/4 inch thickness within 12 inches from the top rail at each end of the container. A rain gutter shall be provided to divert moisture away from the door side of the container.

Corner fittings. Corner fittings shall conform to the requirements of ISO 1161.

Anti-pilferage provisions. Hinge-pins and 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, 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.

Interior marking. The container owner's code and serial number shall be stamped or bead welded in characters not less than 1/2 inch high on the interior surface of the door top rail. The number shall be located within an area of 18 inches from the left vertical frame member where it will not be obscured.

Placard holder. Four stainless steel placard holders conforming to DOT, BOE-6000, part 172, appendix C, shall be provided. One placard holder shall be located on each end and each side of the container. Placard holders shall be permanently attached.

Approval plates. An International Convention for Safe Containers (CSC), Transport International des Routiers (TIR), Union International Chemins de Fer (UIC), Timber Treatment Requirements of the Australian Department of Health (TCT) plates or plaques 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. Any additional requirements of the approval authority shall be met. Each container shall be affixed with the seal of the approval authority.

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

Interior cargo securing devices.

Closed side wall. The container shall be fitted with eight lashing rings at the junction of the closed side wall and bottom rail; one ring in each corner of the side rail and six evenly spaced along the side rail. The lashing rings shall be vertically mounted so as not to impinge on the loading area of the container. Rings shall be fully welded to the bottom side rail. Each ring shall be able to withstand a pull of not less than 6000 pounds at 45 degrees from the vertical. The lashing rings shall be able to handle 2 inch wide steel strapping.

Door opening side. The door opening side of the container shall be fitted with eight flush fitting lashing rings countersunk through the floor or bottom side rail immediately inside the inner face of the container doors when in the closed position. The lashing rings shall be positioned corresponding to those mounted on the closed side wall and be fully welded to the junction of the bottom side rail and floor support bearer. Each lashing ring shall have a pull strength at 45 degrees from the vertical of not less than 6000 pounds. Restraint fittings shall be able to handle 2 inch wide steel strapping.

Surface preparation. All steel components both inside and out, shall be abrasively blasted to a near white Steel Structure Painting Council (SSPC) -10. 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 of surface area shall be free of all visible residues and the remainder shall be limited to the slight discoloration mentioned above.

Primer coat. The container shall be primed with either zinc rich or zinc chromate primer.

Top coat. The top coat shall be enamel, alkyd, semi-gloss. The exterior finish color shall be in accordance with FED-SID-595, color number 24084 (olive drab). Interior finish color shall be light grey. The final coating thickness shall be not less than 135 microns dry film thickness.

Marking. The container shall be identified and marked in accordance with ISO 6346.

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

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space shall be free from sharp protrusions that could damage cargo or personnel.

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

Bolted and riveted connections. Bolt and rivet holes shall be accurately punched or drilled and shall have the burrs removed. Washers, lockwashers, 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.

Regulatory requirements. In accordance with Federal Acquisition Regulation, section 23.403, the Government's policy is to acquire items composed of the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition without adversely affecting performance requirements or exposing the supplier's employees to undue hazards from the recovered materials.

Metric products. Products manufactured to metric dimensions will 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, and all other requirements of this Commercial Item Description are met.

Contractor certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this commercial item description, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

Preservation, packing and marking. Preservation and packing are not required. Marking shall be as specified in the contract or order.

Notes. The procuring agency should specify the preferred options permitted herein and include the following information in procurement documents:

1. Title, number, and date of this item description.
2. Owner's code and serial number for each container.
3. When this commercial item description is used for procurement, the commercial item certification clause must appear in the solicitation.

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Department of Transportation (DOT), Code of Federal Regulations, 450 and 451 and DOT, Bureau of Explosives, BOE-6000, part 172, appendix C are available from the Superintendent of Documents, Government Printing Office, Washington, DC 20202.

ISO 1496/1, ISO 1161, ISO 668, ISO 6346 are available from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

SSPC-10 is available from the Steel Structures Painting Council, 4400 Fifty Avenue, Pittsburgh, PA 15213-2683.

The contracting officer should require that three complete sets of approved blueprints/design drawings as stamped by the approval agency and shall accompany all proposals submitted. A stamp of approval by the approval agency which is subject to satisfactory prototype test is acceptable.

The contracting officer should require that three complete sets of fully approved design drawings as stamped by the approval authority must be submitted prior to the start of production. Recommend all changes be approved by the contracting officer in addition to the approval authority.

The contracting officer should require that three complete sets of specifications accompany all proposals submitted; and three complete sets of specifications, fully approved, be submitted prior to the start of production. Recommend all changes must be approved by the contracting officer.

The contracting officer should require three copies of the container finishing and surface protection treatment offered accompany proposals submitted.

The following are suggested sources of supply (competition is not limited to these sources):

Container Concepts Inc., 7501 Lemont Road, Suite 230, Woodridge, IL 60517.  
Telephone: (708) 985-5850.

Containertechnik Hamburg GmbH & Company, Heilwigstrasse 107, 2000 Hamburg 20, Federal Republic of Germany. Telephone: (40) 46 10 69.

Energjo Invest R.O. Vaso Miskin Crni, Davrovalaca Krvi br4, 71000 Sarajevo, Yugoslavia, Telephone: (71) 526 322.

Ganz Danubius Trading Co Ltd., POB 118, H-1325 Budapest, Hungary. Telephone: (1) 149370.

Graaff GmbH, P.O. Box 160 + 180, Heinrich-Nagel-Strasse 1, D3210, Elze (Hanover), Federal Republic of Germany. Telephone: (0) 5068-18-281.

HIM Containers Ltd, Old Post Office, Calcutta 700 001 India.  
Telephone: (33) 28-7856.

Hung Myung Industrial Company Ltd., 115 Sangak-Dong, Choong-ku, 4-5 Floor, Kyunggi Bldg, Seoul, Republic of Korea. Telephone: (2) 733-5931.

Inta-Eimar Holding, Contespan-Eimar SA, Poligono Industrial de Malpica, Calle H No 12, 50016, Zaragoza, Spain. Telephone: (76) 574662.

Rautaruukki Oy, Oulu Works, P.O. Box 217, 90101, Oulu, Finland. Telephone: (81) 382-453.

Sicom SpA, Via Casassa, Regione Oltre Tanaro, 1262 Cherasco (CN), Italy.  
Telephone: (172) 48215.

Swedecon Mekaniska AB, Box 5044, S-831 05 Osternund, Sweden. Telephone: (63) 11 76 30

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Tiphook Modular Systems, Station Road, Reddish, Stockport, Cheshire SK5 6LJ, England. Telephone: (061) 432 0211

Tokyu Car Corporation, Container Sales Department, Yaesu-Mitsui Bldg, 7-2, 2-chome Yaesu, Chuo-ku, Tokyo 104, Japan. Telephone: (3) 272-7061.

Trans Freight Containers Ltd., 72-73 Nariman Bhavan, Nairman Point, Bombay 400 021, India. Telephone: 202 2172 and 202 4116.

The preparing activity for this item description is the US Army Belvoir Research, Development, and Engineering Center, ACUN: STREE-TSE, Ft. Belvoir, VA 22060-5606.

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