

INCH-FOUND

A-A-52033
29 May 1991

COMMERCIAL ITEM DESCRIPTION

CONTAINER, CARGO,

HALF HEIGHT

The General Services Administration has authorized the use of this Commercial Item Description.

This item description covers a 20 foot, reusable, ISO 1CX, half height, cargo container for the transportation, distribution, and storage of military supplies.

Salient characteristics

Description. The container shall be noncollapsible, of a permanent character and suitable for repeated use. The container shall be a steel 4 foot 3 inch external height ISO 1CX container with a drop end door at one end. The container shall comply with the requirements of ISO 1496/1.

Weight, ratings and dimensions. The tare weight of the container, including tarp and rod bows, shall be the minimum practical but shall not exceed 5000 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 container as specified in ISO 668. 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 inches, consistent from the floor surface to a height of not less than 41 inches above the floor surface.

Standard product. Except as otherwise specified herein, the container shall be the standard product of the manufacturer. 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.

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: SIRBE-TSE, Fort Belvoir, VA 22060-5606.

AMSC N/A

FSC 8115

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

A-A-52033

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.

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 shall protrude beyond the outside surfaces of the corner fittings.

Door. A drop end door shall be hung within the rear end frame and shall provide a clear opening conforming to ISO 668. 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 raised figures on the top surface. The door shall be capable of withstanding a load of 8000 pounds per tire footprint (16,000 pound axle load) over a contact area of not more than 22 square inches 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).

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

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 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 letter stenciled or letter decals in minimum 3 inch high white letters: "EMPTY LIFT ONLY".

A-A-52033

Roof. A minimum of nine roof bows shall be provided. Roof 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. A plastic sheathed steel TIR cord shall be provided. The tarp, plastic sheathed steel cord and container shall satisfy TIR requirements. The roof, with tarp, roof bows, and plastic sheathed steel TIR cord installed shall be self draining.

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 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 left side 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. International Convention for Safe Containers (CSC), Transport International des Routiers (TIR), Union International Chemins de Fer (UIC) 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.

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 used if approved by the contracting officer. 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 organic zinc rich or zinc chromate primer.

A-A-52033

Top coat. The top coat shall be enamel, alkyd, semi-gloss. The exterior finish color shall be in accordance with FED-STD-595, color number 24084 (olive drab). Interior finish color shall be light grey. The final coating thickness shall be not less than 5.3 mils (135 microns) dry film thickness.

Marking. The container shall be marked in accordance with ISO 6346. Each exterior wall of the container shall be marked, "PROPERTY OF U.S. ARMY", in minimum three inch high letters. All markings shall be white letter stencils or shall be white letter decals. All markings shall have a minimum five year life.

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 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 damage 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.

A-A-52033

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.

FED-STD-376 and FED-STD-595 are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

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, and 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 Fifth Avenue, Pittsburgh, PA 15213-2683.

The contracting officer should require that three complete sets of approved blueprints/design drawings as stamped by the approval authority shall accompany all proposals submitted. A stamp of approval by the approval authority 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 shall be submitted prior to the start of production. All changes shall 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. All changes shall 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.

A-A-52033

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

Balmer Lawrie & Company Ltd, Freight Containers Division, Industrial Development Area, Aroor 688543 (near Cochin), Kerala, India Telephone: 806406/7/8/9

BN Constructions Ferroviaires et Metalliques, Vaartdijkstraat 5, 8200 Bruges 2, Belgium Telephone: (50) 38 37 51

Cobra Containers SpA, Strada Roccadebaldi, P.O. Box 53, 12084 Mondovi, Italy Telephone: (174) 681101

Comet Trailer Corporation, 501 South 1st St, P.O. Box 460, Selah, Washington 98942, USA Telephone: (509) 697-4800

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

Containertechnik Hamburg GmbH & Co, Heilwigstrasse 107, 2000 Hamburg 20, Federal Republic of Germany Telephone: (40) 460 20 31

D M International, P.O. Box 84, Wayne, Nebraska 68787, USA, Telephone: (402) 375-5561

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

Evergreen Heavy Industrial Corporation, 16 Sung Chiang North Rd, Chung-li, Taiwan Telephone: (3) 4511111

Ganz Danubius Trading Co Ltd, POB 118, H-1325 Budapest, Hungary Telephone: (1) 1496370

Henred Fruehauf (Pty) Ltd, Private Bag 5, Bergvlei 2012, Sandtron, Transvaal, South Africa Telephone: 786 3500

HIM Containers Ltd, 6 Old Post Office St, 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

Hyosung Metal Products Co Ltd, CPO Box 8705, 15F Insong Bldg 194-15, 1-Ka Hoehung-dong, Chung-ku, Seoul, Republic of Korea Telephone: 779 0948

Metalsines-Companhia de Vago es de Sines, SA, Apartado 18, 7521 Sines Code, Portugal Telephone: (69) 63 30 81/4

Morteo SpA, Corso Andrea, Podesta 8, 16128 Genoa, Italy Telephone: (10) 53891

Nathan Steel Ltd, Marine Container Division, Vidyavihar, Bombay 400 086, India Telephone: (22) 5115111

Sicom SpA, Via Casassa, Regione Oltre Tanaro, 12062 Cherasco (CN), Italy Telephone: (172) 48215

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

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", Nariman Point, Bombay 400 021, India Telephone: 202 2172

Union Container Industries Ltd, 4F, 502 Fu Hsin North Rd, Taipei, Taiwan Telephone: (2) 501 8282

Yorkshire Marine Containers Ltd, Belprin Rd, Beverley, North Humberside HU17 0JZ, England Telephone: (0482)869286

A-8-50033

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

Custodian:
Army - ME

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