METRIC

A-A-50503A
12 June 2002
SUPERSEDING
A-A-50503
28 February 1992

COMMERCIAL ITEM DESCRIPTION

SCALE, BALANCE, BEAM INDICATING: METRIC, 2610 GRAM CAPACITY

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

1. SCOPE. This commercial item description (CID) establishes the government acquisition requirements for a 2610 gram capacity beam indicating balance scale.

2. CLASSIFICATION. The scales shall be classified by the styles listed below. The selected style to be supplied shall be specified in the acquisition order (see 7.4(b)).

Style A - Flat plate receiver
Style B - Pan type load receiver
Style C - Scoop type load receiver

3. SALIENT CHARACTERISTICS

3.1 Components. The scales shall be of the triple beam type and of the following components.

3.1.1 Base. The base shall be a sturdy metal casting with a moisture and acid resistant finish. The base shall be equipped at the beam end with a post, graduated as required, to provide a definite and clear zero position and to indicate an out-of-balance condition. The post shall be equipped with stops so located as to permit a total weight beam travel between the stops of not less than 10 millimeters (mm). The base shall be formed with smooth rounded surfaces to prevent undue accumulation of dust or spilled material.

3.1.2 Weight beam. The weight beam shall consist of three bars: a 500 gram capacity beam notched at 100 gram intervals, a 100 gram capacity beam notched at 10 gram intervals, and a 10 gram capacity, front, smooth, fractional bar graduated in increments of 0.1 gram. The individual beam shall be tiered from front to rear to increase scale readability and poise visibility. The weight beam shall be equipped with a threaded zero adjusting nut at the loading end. Means shall be provided to dampen beam oscillations after application or removal of a load.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to: Defense Supply Center Richmond (DSCR), ATTN: DSCR-VBD, 8000 Jefferson Davis Highway, Richmond, VA 23297-5610.

AMSC N/A FSC 6670

3.1.3 Pivots and bearings. Bearings shall be self-aligning and shall be hardened steel, ceramic, or polished agate. The pivot knife edges shall be sharp, straight, and shall be hardened steel. Bearings shall be protected by dust covers or equivalent enclosures to minimize contamination and corrosion of the precision bearing surface.

3.1.4 Load receivers. Stainless steel load receivers shall conform to American Society for Testing Materials (ASTM) A 167, "Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip" (DoD adopted).

3.1.4.1 Style A. The load receiver for style A scales shall be stainless steel plate type and shall be 152 ± 13 mm in diameter. The plate shall be flat except that a raised peripheral lip not exceeding 7 mm in height will be acceptable.

3.1.4.2 Style B. The load receiver for style B scales shall be stainless steel pan type and shall be 152 ± 13 mm in diameter by 25 ± 7 mm in depth.

3.1.4.3 Style C. The load receivers for style C scales shall be scoop type, not less than 254 mm long, 152 mm wide, and 65 mm in depth. The scoops shall be stainless steel or break resistant polypropylene as specified in the acquisition order (see 7.4(c)).

3.1.5 Attachment weight set. Each scale shall be furnished with a set of attachment counterpoise weights consisting of one 500 gram and two 1000 gram weights. Each weight shall be legibly marked to indicate the equivalent load capacity.

3.1.6 Cover. A translucent or opaque plastic fitted cover shall be furnished with each scale.

3.1.7 Tare weight assembly. When specified in the contract or acquisition order (see 7.4(d)), a tare weight assembly shall be furnished with each scale. The tare weight assembly shall consist of a separate tare beam and poise or a tare counterpoise weight. The tare assembly shall be adjustable within a range up to at least 200 grams.

3.1.8 Specific gravity assembly. When specified in the contract or acquisition order (see 7.4(e)), a specific gravity assembly shall be furnished with each scale. The specific gravity assembly shall consist of a stand or counter clamp and rod for supporting the scale above the counter surface at a height of at least 254 mm.

3.2 Performance. The scales shall be designed to meet the applicable performance requirements and basic acceptance tolerances of National Institute of Standards and Technology (NIST) H44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices". The scales shall be designed to support, without permanent deformation or misalignment, a 3260 gram load or a load equal to 125 percent of the nominal capacity, which ever is greater. The scales shall be capable of accurately registering weight indications regardless of repeated manipulation of any scale element, as in normal usage, including the following:

a. Repeated application and removal of maximum loads and attachment weights.
b. Repeated operation of locking services.
c. Repeated displacement of all weight beam poises to the limit of each beam scale.

3.2.1 Sensitivity. The sensitivity of the scales under all conditions of use specified herein shall be 0.1 gram or less and the sensibility reciprocal shall not exceed 3.5 grams.

3.3 Nameplate. A permanent nameplate shall be attached to the product. Unless otherwise specified in the acquisition order (see 7.4(f)), the nameplate shall display the following information:

a. Nomenclature.
b. Manufacturer's name.
c. Manufacturer's model designation.
d. National stock number.
e. Contract or order number.
f. Date of manufacture.

4. REGULATORY REQUIREMENTS

4.1 Recovered materials. 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).

5. PRODUCT CONFORMANCE PROVISIONS

5.1 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.

5.2 Market acceptability. The product offered must have been previously sold either to the government or on the commercial market.

6. PACKAGING

6.1 Packaging. The scales shall be preserved, packed, and marked in accordance with the domestic or overseas requirements of ASTM D 3951, "Standard Practice for Commercial Packaging" (DoD adopted), or as specified in the acquisition order (see 7.4(g)).

7. NOTES

7.1 Part or identification number (PIN). The following PIN procedure is for government purposes and does not constitute a requirement for the contractor.

AA50503 - X

- X — Style: A - Flat plate load receiver; B - Pan type load receiver; C - Scoop type load receiver
- AA50503 — CID number

7.2 Sources of documents.

7.2.1 FAR. The FAR may be obtained from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Electronic copies of FAR documents may be obtained from http://www.arnet.gov/far/.

7.2.2 NIST handbooks. Copies of NIST handbooks may be obtained from the Office of Weights and Measures, 100 Bureau Drive, Stop 2600, Gaithersburg, MD 20899-2600. Electronic copies of NIST handbooks may be obtained from http://ts.nist.gov/.

7.2.3 ASTM standards. Copies of ASTM standards may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. Electronic copies of ASTM standards may be obtained from http://www.astm.org/.

7.3 Sources of supply. The manufacturers and/or suppliers listed below are known to supply products that meet the salient characteristics requirements of this document. Competition is not limited to the listed firms.

Itin Scale Company, Inc. Brooklyn, NY 11223	Phillips Morris Scale Company Seattle, WA 98119
Perry Scale Company Inc. Houston, TX 77012	Ohaus Corporation Pine Brook, NJ 07058

7.4 Ordering data. Acquisition documents should specify the following information:

a. CID document number, revision, and CID PIN.
b. Style (see 2).
c. Load receiver material (see 3.1.4.3).
d. Tare weight assembly, if required (see 3.1.7).
e. Specific gravity assembly, if required (see 3.1.8).
f. Nameplate, if different (see 3.3).
g. Packaging (see 6.1).

7.5 Subject term (key word) listing.

fractional bar
pan
pivot
poise
receiver

MILITARY INTEREST:

Custodian:
Air Force - 99

CIVIL AGENCY
COORDINATING ACTIVITY:

GSA - 7FXE

Preparing Activity:
DLA - GS1

(Project 6670-0219)