

[INCH-POUND]
A-A-3024
October 29, 1996
SUPERSEDING
GGG-C-751D
February 1, 1966

COMMERCIAL ITEM DESCRIPTION

CUTTER, GAGE-GLASS

The General Services Administration has authorized the use of this Commercial Item Description for procurement of type II, class 2, cutters specified in GGG-C-751D for all federal agencies.

1. SCOPE.

1.1 Scope. This Commercial Item Description covers a two-beam plier handle glasscutter.

1.2 Intended purpose. The glass cutter is used to cut gage-glass.

2. CLASSIFICATION.

2.1 Classification. Not applicable.

3. SALIENT CHARACTERISTICS.

3.1 Design. The two-beam plier handle glasscutter shall consist of a graduated cutting wheel beam, gage-glass supporting beam, stop collar, plier-type handle, cutting wheel, and axle and shall be similar to Figure 1. The glasscutter shall be capable of cutting round, heat-treated, and ordinary gage-glass having diameters of 1/2, 5/8, 3/4, and 1 inch in lengths up to and including 6 inches from the end in which the tool is inserted. The overall length shall be not less than 12-1/2 inches.



Figure 1. Glasscutter, gage-glass, two-beam, plier handle.

3.1.1 Graduated cutting wheel beam. The graduated cutting wheel beam shall be of steel and have clear and permanently marked graduations on the top side of the beam in increments of 1/16 inch over a range of not less than 6 inches. The 1-inch divisions shall be clearly and permanently numbered to indicate the distance in inches in order to measure the length of glass from the edge of the cutting wheel.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: General Services Administration, Federal Supply Service, Tools and Appliances Commodity Center, Kansas City, MO 64131.

A-A-3024

3.1.2 Gage-glass supporting beam. The gage-glass supporting beam shall be of steel and shall be provided with a fixed saddle or V-type support approximately $1/4 \pm 1/64$ inch long. The saddle or support shall be attached at the end of the supporting beam directly under the cutting wheel to act as a bearing or rest for supporting the outside wall of the gage-glass being cut.

3.1.3 Stop collar. The stop collar shall be of metal and arranged such that it shall provide a stop for the gage-glass at any desired point along the cutting wheel beam. The stop collar shall be movable along the cutting wheel beam and shall be provided with a finger-operated screw suitable for locking the collar in any desired fixed position on the graduated cutting wheel beam.

3.1.4 Plier-type handle. The plier-type handle shall be of metal and curved to afford a comfortable handgrip. The handle shall be firmly secured to the cutting wheel and supporting beams. When the end members of the cutting wheel and support beams are in contact, the end of the handle grips shall not touch each other. The handle grips on the handle shall extend a minimum of 4-1/2 inches from the joint of the handle. The handle grips shall be joined together by either a rivet or a bolt and nut. The handles shall have a suitable corrosion-resistant coating of paint, enamel, or lacquer.

3.1.5 Cutting-wheel. The glasscutter wheels shall be of hardened tool steel capable of cutting glass. The cutting-wheel shall be a minimum of 5/32 inch in diameter and readily removable and replaceable without damage to the cutting wheel beam. When specified in the contract or order, extra cutting wheels shall be furnished (see 7.2).

3.1.6 Axle. The axle shall be of steel or bronze construction and shall be of uniform quality as to insure proper and efficient operation of the cutter. The axle shall be readily removable and replaceable without damage to the cutting wheel or cutting beam. When specified in the contract or order, extra axles shall be furnished (see 7.2).

3.1.7 Coating. Metal handles shall have a corrosion-resistant coating of paint, enamel, lacquer or nickel plating. All unpainted metal surfaces shall be coated with oil or grease to provide rust prevention.

3.2 Performance. The glass cutter shall show no signs of axle wear or malfunction when a 3/4 inch diameter gage-glass is mounted in such a manner that the glass may be rotated by machine or hand at not more than 10 revolutions per minute. A pressure of 6 pounds shall be applied to the cutting wheel and 25 revolutions, the cutter shall be removed and another 3/4 inch diameter gage-glass shall be cut using hand pressure. The cutting wheel shall make a continuous clean cut on the inside periphery of the gage-glass tube. The cutting wheel may be lubricated at the start of the test, but no additional lubrication shall be applied during the course of the test.

3.3 Identification marking. The glass cutter shall be marked with the manufacturer's name or identifying symbol and the state or country of manufacture, unless otherwise specified. All identification markings shall be engraved, etched, molded, or indented directly on the item's surface in such a manner that it remains clearly legible throughout the life of the item.

3.4 Workmanship. Details of workmanship shall be in accordance with the best commercial practice. Paints, coatings, platings, and finishes shall be smooth, adherent, continuous, and not stained or discolored. External surfaces shall be free of tool and gouge marks, nicks, or other surface imperfections. The item shall be free from manufacturing workmanship defects (e.g., sharp or rough external edges, corners, or surfaces) and material workmanship defects (e.g., pits, rips, fins, burrs, tears, nodules, cracks, blisters) which may adversely impact the item's serviceability, durability, safety, or appearance.

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).

4.2 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 the tolerances specified (using conversion tables contained in the latest revision of Federal Standard 376) and all other requirements of this document are met.

If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch-pound units, a request should be made to the contracting officer to determine if the product is acceptable.

5. QUALITY ASSURANCE PROVISIONS.

5.1 Product conformance. The product provided to the Government shall conform to the contractually specified requirements. For product characteristics and requirements which are not contractually specified, the provided product shall conform to the producer's own drawings, standards, specifications, and quality assurance practices for the highest quality product commercially offered by the producer. If the product is not commercially offered by the producer, the best commercial practices shall apply. The Government reserves the right to require proof of such conformances prior to first delivery and thereafter as provided for under the provisions of the contract.

5.2 Responsibility for inspection. Unless otherwise specified, the contractor is responsible for the performance of all inspection requirements and may use any commercial facilities (including the contractor's own facilities) suitable for performance of the inspection requirements, unless disapproved by the Government. The Government reserves the right to perform any inspections deemed necessary to assure the item conforms to the specified requirements.

5.3 Bid sample(s). When a bid sample requirement is specified in the solicitation, the bid sample(s) shall be inspected for all salient characteristics by the Government. A failure of any bid sample to meet the salient characteristics shall be cause for rejection.

5.4 First article sample(s). When a first article requirement is specified in the contract, the first article sample(s) shall be inspected for all salient characteristics. A failure of any first article sample to meet the salient characteristics shall be cause for rejection.

6. PACKAGING.

6.1 Packaging. Requirements of preservation, packing, packaging, and marking of packages shall be as specified in the contract or order.

7. NOTES.

(This section contains information of a general or explanatory nature that is not mandatory.)

7.1 Addresses for obtaining copies of referenced documents:

Federal Specifications and Standards: Federal Supply Service Bureau, Specification Section, Suite 8100, 470 L'Enfant Plaza, SW, Washington, DC 20407.

Federal Acquisition Regulations (FAR): Government Printing Office, Superintendent of Documents, Washington, DC 20402-9371.

ANSI/ASQC Z1.4: American Society for Quality Control, P.O. Box 3005, 611 East Wisconsin Avenue, Milwaukee, WI 43201-4606.

7.2 Ordering data. Purchasers should select the preferred options permitted herein and should include the following information in procurement documents:

- (a) Title, number, and date of this Commercial Item Description.
- (b) When applicable, the appropriate NSN(s).
- (c) If bid samples are required, the number of samples required, and the subjective inspection requirements.
- (d) If first article samples are required and the number of samples required.
- (e) If lot sampling inspection is required and the applicable lot sampling requirements. For example:

A-A-3024

Sampling for inspection. Sampling for inspection (both examinations and testing) shall be in accordance with ANSI/ASQC Z1.4.

Inspection. Each sample tool shall be examined and tested for all salient characteristics. The Inspection Level shall be Level II with an Acceptable Quality Level of 4.0, expressed in terms of defects per hundred units.

Testing. Each sample tool shall be tested for all salient characteristics. The Inspection Level shall be S-2 with an Acceptable Quality Level (AQL) of 1.0, expressed in terms of defects per hundred units.

- (f) What preservation, packing, packaging, and marking of packages are required.
- (g) If extra cutting wheels are required (see 3.1.5).
- (h) If extra axles are required (see 3.1.6).

7.3 National Stock Numbers (NSNs). The following list of NSNs corresponds to the cutter specified in this CID. This list may not be indicative of all possible NSNs associated with this CID.

5110-00-224-9245

MILITARY INTERESTS:

NONE: DoD has no registered interest in revisions or notices to this Commercial Item Description until further notice.

PREPARING ACTIVITY:

GSA - FSS