

COMMERCIAL ITEM DESCRIPTION

CUTTING EDGES, MOLDBOARD, GRADER

The General Services Administration has authorized the use of this commercial item description in preference to Military Specification MIL-C-20704.

This description covers cutting edges intended for use on grader moldboards.

Salient characteristics:

Design: The cutting edges shall be as specified herein. The cutting edges shall be in accordance with SAE J739.

Classification: Cutting edges shall be of the following sizes as specified:

- Length - 5 foot.
- Length - 6 foot.
- Length - 7 foot.

Material: The cutting edges 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 and storage environments to which the cutting edges may be exposed. Dissimilar metals shall not be used in intimate contact with each other unless protected against galvanic corrosion. The contractor shall identify the specific material, material finish or treatment for use with component and subcomponent, and shall make information available upon request to the contracting officer or designated representative. Material shall be electric furnace, basic open hearth or basic oxygen steel (ASIM E 112). The finished cutting edge shall have a hardness in the range of 271-344 Brinell, 28-37 Rockwell C, to resist wear and abrasion. Bolts, nuts, and washers shall be furnished and shall be packed in a separate container. Bolts shall be interchangeable with ANSI B18.9, No. 3 head plow bolts. The chemical composition of the cutting edge steel shall be in accordance with SAE J403, with the steel in accordance with SAE/AISI No. 1090.

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.

Certification: The contractor shall certify that the product offered meets the salient characteristics of this description, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices and is the same product offered for sale in the commercial market-place. 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.

Regulatory requirements: The offeror/contractor is encouraged to use recovered materials in accordance with Publication 94-580 to the maximum extent practicable. For the purpose of this requirement, recovered materials are those materials which have been collected from solid waste and reprocessed to become a source of ray materials, as distinguished from virgin ray materials. The components, pieces and parts incorporated in the cutting edges may be newly fabricated from recovered materials to the maximum extent practicable, provided the cutting edges produced meet all other requirements of this description. Used, rebuilt, or remanufactured components, pieces and parts shall not be incorporated in the cutting edges.

Packaging and marking: Military packaging shall be specified when shipments are to overseas Department of Defense (DoD) consignees. Commercial packaging may be specified for shipment to DoD consignees within the Continental United States and to Non-DoD consignees worldwide. When a supplier's normal packaging will satisfy the requirements for military packaging, it may be used.

Military packaging: The cutting edges shall be preserved and packed to protect against physical damage and deterioration in a logistic environment characterized by the following:

1. Multiple handling during transportation and in-transit storage.
2. Shock, vibration, and static loading forces during worldwide shipment by all transport modes.
3. Uncontrolled warehouse storage for extended periods.
4. Weather exposure during shipment and in-transit transfers.
5. Stacking loads during shipment and storage.

Quantities of cutting edges destined to a single address may be unitized into one or more unit loads, except only cutting edges of like description shall be contained within the same container.

Commercial packaging: Each cutting edge shall be packaged in accordance with the supplier's normal method for retail distribution. Cutting edges shipped to a single destination may be unitized to permit handling as a single unit. Shipping containers shall comply with Uniform Freight Classification or National Motor Freight Classification rules.

Marking for shipping and storage: Unit, intermediate (when provided), and exterior packs shall be marked with the item nomenclature, stock or part number, quantity per pack, and contract number as a minimum; additional marking shall be as specified in the contract or order. Exterior packs shall have, in addition, the complete consignee's address. Marking shall be applied in a legible manner, in a contrasting color, of an appropriate size, and of waterproof materials.

Quality assurance. Each cutting edge shall be examined for the following defects. Presence of one or more defects shall be cause for rejection.

1. Design not as specified.
2. Size not as specified.
3. Materials not as specified.
4. Fabrication not as specified.
5. Chemical composition not as specified.
6. Hardness not as specified.
7. Packaging and marking not as specified.

Small business. A small business that cannot meet the certification-of-commercial-item requirement of this document, may make an offer under the solicitation; and, if such small business is the apparent successful offeror, the Government may require the small business to submit a sample cutting edge. Any such cutting edge may be evaluated for this solicitation if time to contract award permits. Such evaluation would be to determine conformance to all requirements of this commercial item description and to determine equivalency to cutting edges available in the commercial marketplace in the areas of performance, durability, human factors engineering, and safety. It should be noted that samples are not required unless specifically requested by the contracting officer. Note. The Government may elect not to evaluate a sample from an apparent low offeror for award in an ongoing solicitation if a determination of urgency is made by the contracting officer. The sample would then be evaluated prior to future solicitation for comparable items. If the evaluation establishes equivalency with the commercial items, a letter of equivalency will be issued by the contracting officer for use in response to future solicitations for the cutting edge.

Notes:

1. Society of Automotive Engineers  
400 Commonwealth Drive  
Warrendale, PA 15096
2. American Society for Testing and Materials  
1916 Race Street  
Philadelphia, PA 19103
3. Purchasers should select the preferred options permitted herein, and include the following information in procurement documents:
  - a. Title, number and date of this description.

- b. Size of cutting edge required.
- c. When fabrication other than specified is required.
- d. When chemical composition other than specified is required.
- e. When hardness other than specified is required.
- f. Certification that the cutting edge meets the salient characteristics of this description.
- g. Degree of preservation and packing required.

**MILITARY INTERESTS:**

Custodian  
Army - ME

Review Activities  
Army - AT  
DLA - CS

User Activity  
Navy - YD

**PREPARING ACTIVITY:**  
Army - ME

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