
 NOT MEASUREMENT
 * SENSITIVE *

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 SUPERSEDING
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COMMERCIAL ITEM DESCRIPTION

TAMPER, VIBRATING PLATE TYPE, GASOLINE AND DIESEL ENGINE DRIVEN

The General Services Administration has authorized the use of this commercial item description (CID) as a replacement for MIL-T-28623B(YD) which is canceled.

Abstract. This document covers commercial, manually controlled, vibrating plate type tampers, powered by a gasoline or diesel engine. The tamper is intended for use in compacting fine and coarse grained soil and finishing hot and cold mixed asphalt in areas inaccessible by large self-propelled compacting equipment. This CID covers two classes of tampers as follows:

- Class 1 - Gasoline Engine Powered
- Class 2 - Diesel Engine Powered

Salient Characteristics. The tamper shall consist essentially of a powerplant, power train, vibrating mechanism, base plate, handle, wheels or a transportation cart, and a sprinkler system. The tamper shall conform to the dimensions and weight specified in table I.

TABLE I. Dimensions

* Base plate:	* Minimum	* Maximum		*
* Overall width	* 19 in (482 mm)	* 21 in (533 mm)		*
* Overall length	* 20 in (508 mm)	* 25 in (635 mm)		*
* Effective area	* 198 in2 (127,750 mm2)	* 280 in2 (180,656 mm2)		*
* Operating weight	* 150 lb (68 kg)	* 230 lb (104 kg)		*
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 Beneficial comments (recommendations, additions, deletions) and any pertinent
 *data which may be of use in improving this document should be addressed to: *
 *Commanding Officer (Code 156), Naval Construction Battalion Center, Port *
 *Hueneme, CA 93043-5000. *

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1. Safety. All rotating or reciprocating parts and all parts subject to high operational temperatures, that are of such a nature or are so located as to be or become a hazard to the safety of the operating personnel, shall be insulated, enclosed, or guarded to the extent necessary to eliminate the hazard. The tamper shall comply with applicable Department of Labor (DoL), Occupational Safety and Health Administration (OSHA) regulations in effect at time of manufacture. For noise limitation, the tamper shall comply with OSHA documents.

2. Ease of maintenance. Design of the tamper shall permit ready accessibility to all parts for maintenance and repair in the field by use of conventional general-purpose tools associated with tampers. Replacement and adjustment of component parts and accessories shall be accomplished with minimum disturbance to other elements of the tamper. Intricate locking devices, controls, and threaded fastenings that can be easily over-torqued shall be avoided. Covers or plates that must be removed for component adjustment or for parts removal shall be equipped with substantial, quick disconnect fastenings. Accessibility to lubricating oil fill openings, fluid checking devices, and drain plugs shall be provided without the need of removing or adjusting accessories and parts.

3. Operational requirements. The tamper shall be capable of operating satisfactorily in ambient temperatures from 0 degrees Fahrenheit (oF) up to 125oF.

4. Performance. When operating at maximum frequency and as specified herein, the tamper shall withstand the strains imposed upon it without receiving any damage or deformation. The tamper shall be capable of compacting asphalt concrete between the temperatures of 60oF and 210oF to 92 to 94 percent compaction (6 to 8 percent air voids). When the asphalt concrete temperature is between 190oF and 210oF, not more than six passes with the tamper will be required to achieve the required compaction. When the asphalt concrete temperature is between 90oF and 190oF, not more than ten passes with the tamper will be required to achieve the required compaction. The water sprinkler will be used for only the first two passes when material temperature is between 60oF and 140oF and for all but the final two passes when material temperature is between 140oF and 210oF. Surface of the compacted asphalt will be smooth, without any evidence of washboard, rills, dips, depressions, and projections. The asphalt material, hot and cold mix, and compaction test method shall be in accordance with the requirements for the location where the performance test is conducted (if no local standard is enforceable, use California State Highway Department SS-1 standards). The tamper shall compact both fine and coarse grained soils as classified in accordance with ASTM D 2487. Maximum density, as determined by ASTM D 1557, shall be not less than 90 percent for both soils. Not more than six passes with the tamper shall be required to compact the fine grain soil. Not more than ten passes with the tamper shall be required to compact the coarse grain soil. The tamper shall travel at a maximum forward speed of not less than 50 feet per minute without any assistance from the operator except directional control. The tamper in general, and the engine and vibrating mechanism in particular, shall be designed to protect against the harmful effects of dust, water, and temperature.

5. Powerplant. The class 1 tamper shall be powered by a four-stroke, air cooled, gasoline engine, which operates on unleaded fuel. The class 2 tamper shall be powered by a four-stroke, air cooled, diesel engine. The tamper shall be powered by the manufacturer's standard commercial engine normally furnished to the commercial market for that tamper. The power and speed necessary to meet

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the performance requirements of the tamper shall not exceed the continuous rated horsepower and maximum rated engine speed. The engine shall be furnished with accessories normally equipped on the manufacturer's standard commercial tamper and have, as a minimum, the following:

- a. A governor set to keep the engine from exceeding the maximum rated engine speed.
- b. A fuel tank with a capacity of not less than 1/2-gallon (gal) (2 liters (L)).
- c. A suitable serviceable dry type or oil bath type intake air cleaner.
- d. Manual speed control and choke.
- e. A recoil starter.
- f. Stop control.
- g. An exhaust muffler.

6. Sprinkler system. The tamper shall be equipped with a gravity feed type sprinkler system. The sprinkler system shall wet the full width of the base plate and shall prevent asphalt sticking to the underside of the base plate. The sprinkler system shall include a storage tank, plug valve, feeder hose, and distributor hose or pipe.

7. Transportability. The tamper shall be furnished with a maneuvering handle, lifting handles, and two transportation wheels or a two-wheeled transportation cart. The maneuvering handle shall serve as a control handle and as a transportation handle. As a control handle, it shall allow the operator to control travel speed and direction of travel. As a transportation handle, it shall allow the operator to push or pull the tamper, balance it, and control its direction of travel. Not less than two lifting handles shall be provided. When two lifting handles are furnished, they shall be located on the tamper in positions that shall assure the tamper will remain in a relatively horizontal plane while being lifted. Transportation wheels shall be pneumatic or semi-pneumatic.

8. Lubrication. Means for lubrication shall be in accordance with the manufacturer's standard practice. The lubricating points shall be easily visible and accessible. Hydraulic lubrication fittings shall be in accordance with SAE J534. Where use of high pressure lubricating equipment, 1,000 pound-force per square inch (70.3 kilogram-force per square centimeter) or higher, will damage grease seals or other parts, a suitable warning shall be affixed to the equipment in a conspicuous location. The unit shall be lubricated prior to delivery with the type of lubricant specified in the owner's manual and grade of lubricant recommended for ambient temperature at the delivery point. The unit shall be conspicuously tagged to identify the lubricants and their temperature range.

9. Identification marking. Identification shall be permanently and legibly marked directly on the tamper or on a corrosion resisting metal plate securely attached to the tamper by the manufacturer. Identification shall include the manufacturer's model and serial number, name, and trademark to be readily identifiable to the manufacturer.

10. Instruction plates. The tamper shall be equipped with instruction plates suitably located, firmly attached instruction plates describing any special or

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important procedures to be followed in operating and servicing the equipment. Plates shall be of a material which will last and remain legible for the life of the equipment.

Contractor certification. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this CID, 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.

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 Federal Standard 376, and all other requirements of this CID 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. The contracting officer has the option of accepting or rejecting the product.

Preservation, packaging, packing, labeling, and marking. Preservation, packaging, packing, labeling, and marking shall be in accordance with the requirements of ASTM D 3951, unless otherwise specified in the contract or order.

CID based part identification numbers (PIN). The following PIN numbering procedure is for Government purposes and does not constitute a requirement for the contractor.

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*      *      *
*      *      *-----Class
*      *
*      *-----CID Number
*
*-----Designates a Commercial Item Description

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Notes.

Ordering data. Acquisition documents should specify the following:

- a. Title, number, and date of this document.
- b. Class required
- c. Size required.
- d. When regular grade gasoline shall not be used.
- e. When radio noise suppressors are required.
- f. Color of finish coat.

ASTM D 2487, ASTM D 1557, and ASTM D 3951, are available from the ASTM, 1916 Race Street, Philadelphia, PA 19103.

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OSHA and DoL documents should be obtained from the Superintendent of Documents,
Government Printing Office, Washington, DC 20402.

MILITARY INTERESTS:

Custodian

Navy - YD

CIVIL AGENCY COORDINATING ACTIVITIES:

GSA - FSS

PREPARING ACTIVITY:

Navy - YD

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