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MILITARY STANDARD
LOADERS, SCOOP-TYPE,
TYPES AND CAPACITIES



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1. SCOPE

1.1 Purpose. This standard established types and capacities of wheeled and tracked scoop-type for procurement by the military services of the Department of Defense.

1.2 Application. Procurement of wheeled and tracked loaders shall be confined to the types, sizes, and classes listed herein.

1.3 Classification.

Type I - Wheeled loaders.

- Size 1-1/2 - 1-1/2 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.
- Size 1-3/4 - 1-3/4 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.
- Size 2-1/4 - 2-1/4 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.
- Size 2-1/2 - 2-1/2 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.
- Size 3 - 3 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.
- Size 4-1/2 - 4-1/2 cubic yard capacity bucket.
 - Class C - Rock bucket.
- Size 5 - 5 cubic yard capacity bucket.
 - Class B - General purpose bucket.

Type II - Tracked loaders.

- Size 1 - 1 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.
- Size 1-1/2 - 1-1/2 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.
- Size 1-3/4 - 1-3/4 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.
- Size 2-1/4 - 2-1/4 cubic yard capacity bucket.
 - Class A - Multisegment bucket.
 - Class B - General purpose bucket.

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Size 2-1/2 - 2-1/2 cubic yard capacity bucket.

Class A - Multisegment bucket.

Class B - General purpose bucket.

Size 3 - 3 cubic yard capacity bucket.

Class A - Multisegment bucket.

Class B - General purpose bucket.

2. REFERENCED DOCUMENTS

NONGOVERNMENTAL

SOCIETY OF AUTOMOTIVE ENGINEERS

SAE Handbook.

(Application for copies should be addressed to the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15086.)

3. DEFINITIONS

3.1 Multisegment bucket. A scoop-type bucket which is composed of more than one section, usually two, hinged at or near the top. The shape and movement of the parts enables the mounted bucket to operate as a clamshell, a dozer, and as a scraper, in addition to the loading and excavating operations of a general purpose, scoop-type bucket.

3.2 Bucket capacity. Bucket capacities shall be the SAE rating (nominal heaped) in accordance with SAE J742a.

3.3 Articulated Frame Steer (AFS). A steering system for wheeled loader carriers where steering is accomplished by moving frame sections about a hinge type joint (or joints). Front and rear wheels and axles are non-steering.

3.4 SAE Handbook definition. Definitions for other terms shall be in accordance with the SAE Handbook, SAE J732 and SAE J818.

4. REQUIREMENTS

4.1 Characteristics. The scoop-type loaders shall be designed primarily for stockpile and bank loading and for excavating. The loaders shall be diesel-engine-driven, and the lift and bucket mechanisms shall be hydraulically operated and front-mounted. The Type I loaders shall have either an AFS or a rear-wheel steer system.

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4.2 Capacities. The operating load shall be not less than 3,000 pounds per cubic yard of rated heaped bucket capacity. For satisfactory operating load stability, the loader weight distribution used to determine the operating load may include counterweights furnished with the loader, unless specified otherwise in the procurement document. Tire ballasting is not acceptable unless specified in the procurement document.

4.3 Safety. The loader shall conform to all current Federal laws and regulations governing safety, noise level, and pollution.

4.4 Attachments. When specified, the loaders shall be equipped with the following **attachments** which shall be interchangeable with the bucket: Fork-lift, crane hook, barrel grab, and rotary and displacement type snowplows. When specified, tracked loaders shall be equipped with a rear-mounted winch.

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APPENDIX

10. REFERENCE MATERIAL

The following list of specifications does not form a part of this standard. It is provided, primarily, as referenced material for assistance in the procurement of scoop-type loaders:

- | | |
|-------------|---|
| KKK-L-1086 | - Loaders, Scoop-Type, Full Tracked. |
| KKK-L-1542 | - Loaders, Scoop-Type, Four-Wheel Drive, Pneumatic-Tired. |
| MIL-L-52385 | - Loaders, Scoop-Type; Pneumatic-Tired, Four-Wheel-Drive, Diesel-Engine-Driven. |
| MIL-L-52431 | - Loaders, Scoop-Type; Full-Tracked, Diesel-Engine-Driven. |
| MIL-L-52496 | - Loader, Scoop-Type, Rubber-Tired, Diesel-Engine-Driven, Air-Droppable and Helicopter-Transportable. |

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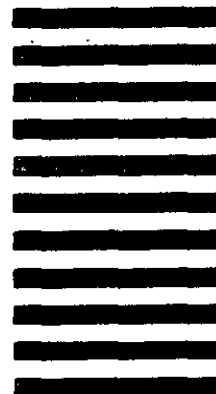
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