

AS ISO 6484:2021
ISO 6484:1986



STANDARDS
Australia



Earth-moving machinery — Elevating scrapers — Volumetric ratings



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AS ISO 6484:2021

This Australian Standard ® was prepared by ME-063, ME-063 Earthmoving Equipment. It was approved on behalf of the Council of Standards Australia on DD Month 201X.

This Standard Not yet published

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Australian Industry Group
Better Regulation Division — SafeWork NSW
Construction and Mining Equipment Industry Group
Department of Natural Resources, Mines and Energy, Qld
Department of Regional NSW
Engineers Australia
Institute of Instrumentation, Control & Automation Australia
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This Standard was issued in draft form for comment as DR AS ISO 6484:2020.

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ISBN to be allocated on publication of the final document

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First published as AS ISO 6484:2021.

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Preface

This Standard was prepared by the Standards Australia Committee ME-063, Earthmoving Equipment.

The objective of this document is to specify a procedure for approximating the volume of typical materials contained in the bowl of open bowl scrapers. The volumes are based on the inside dimensions of the bowl and representative volumes on top of the bowl. This rating method is intended to provide a consistent means of comparing capacities; it is not intended to define actual capacities that might be observed in any specific application.

This document is identical with, and has been reproduced from, ISO 6484:1986, *Earth-moving machinery — Elevating scrapers — Volumetric ratings*.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 6484 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*.

This second edition cancels and replaces the first edition (ISO 6484-1980), of which it constitutes a minor revision.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Australian Standard®

Earth-moving machinery — Elevating scrapers — Volumetric ratings

1 Scope and field of application

This International Standard specifies a procedure for approximating the volume of a typical material carried in the bowl of an elevating scraper. The volumes are based on the in-side dimensions of the bowl and a representative volume on top of the bowl. This rating method is intended to provide a consistent means of comparing capacities; it is not intended to define actual capacities that might be observed in any specific application.

2 Reference

ISO 7133, *Earth-moving machinery — Tractor-scrappers — Terminology and commercial specifications*.

3 Definitions

3.1

elevating scraper

Scraper, as defined in ISO 7133 with a powered mechanism fixed to the scraper bowl to assist in loading material.

3.2

elevating scraper components

Components as identified in [figures 1, 2](#) and [3](#).

4 Volumetric ratings

4.1 Positioning of the bowl

4.1.1 The bowl shall be positioned so that the lowest flat surface of the floor is horizontal or as close to horizontal as possible.

4.1.2 The material discharging mechanism shall be positioned to give maximum volumetric capacity.

4.1.3 The elevating mechanism shall be positioned to give the minimum distance between the cutting edge and the path of the outer tips of the elevator. This position shall be within the manufacturer's specifications.

4.2 Boundaries of the struck volume

The boundaries of the struck volume shall be defined by :

- a) the interior surfaces of the bowl sides;
- b) the interior surface of the rear of the bowl, or ejector mechanism;
- c) the bowl floor;
- d) the plane, perpendicular to the forward surface of the cutting edge, that passes through the centreline of the elevator idler (see [figure 3](#));
- e) the plane of, or linear extension of, the inner paths of the elevator flights adjacent to the load (see [figure 3](#));