

AS ISO 13766.1:2020
ISO 13766-1:2018



STANDARDS
Australia



Earth-moving and building construction machinery — Electromagnetic compatibility (EMC) of machines with internal electrical power supply

Part 1: General EMC requirements under typical electromagnetic environmental conditions



AS ISO 13766.1:2020

This Australian Standard® was prepared by ME-063, Earthmoving Equipment. It was approved on behalf of the Council of Standards Australia on 28 October 2020.

This Standard was published on 13 November 2020.

The following are represented on Committee ME-063:

- Australian Industry Group
- Better Regulation Division — SafeWork NSW
- Construction and Mining Equipment Industry Group
- Department of Natural Resources, Mines and Energy, Qld
- Engineers Australia / Mining Electrical and Mining Mechanical Engineering Society
- Institute of Instrumentation, Control & Automation Australia
- Minerals Council of Australia
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This Standard was issued in draft form for comment as DR AS ISO 13766.1:2020.

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Part 1: General EMC requirements under typical electromagnetic environmental conditions

First published as AS ISO 13766.1:2020.

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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 provide test methods and acceptance criteria for the evaluation of the electromagnetic compatibility (EMC) of earth-moving machinery, as defined in ISO 6165:2012, and of the following building construction machinery, as defined in ISO/TR 12603:2010:

- (a) Drilling and foundation equipment.
- (b) Equipment used for the preparation, conveyance and compaction of concrete, mortar and processing reinforcement.
- (c) Road construction and maintenance machinery and equipment.

This document deals with general EMC requirements under typical electromagnetic environmental conditions.

It also deals with electrical/electronic subassemblies (ESA) and separate ESA intended to be fitted to the machinery. The following electromagnetic disturbance phenomena are evaluated:

- (i) Broadband and narrowband electromagnetic interference.
- (ii) Electromagnetic field immunity.
- (iii) Electrostatic discharge.
- (iv) Vonducted transients.

This document does not apply to machines that are designed to be supplied by an external mains network or to phenomena caused by military applications.

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