

AS 17757:2020



Earth-moving machinery and mining — Autonomous and semi-autonomous machine system safety (ISO 17757:2019, MOD)



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Department of Regional NSW
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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 safety requirements for autonomous machines and semi-autonomous machines (ASAM) used in earth-moving and mining operations, and their autonomous or semi-autonomous machine systems (ASAMS). It specifies safety criteria both for the machines and their associated systems and infrastructure, including hardware and software, and provides guidance on safe use in their defined functional environments during the machine and system life cycle. It also defines terms and definitions related to ASAMS.

This document applies to autonomous and semi-autonomous versions of the earth-moving machinery (EMM) defined in ISO 6165 and of mobile mining machines used in either surface or underground applications. The principles of this document and many of its provisions can be applied to other types of ASAM used on the worksites.

This document addresses additional hazards specific and relevant to ASAMS when used as intended.

This document is not applicable to remote control capability (covered by ISO 15817) or function-specific automated features, except when those features are used as part of ASAMS.

This document is an adoption with national modifications, and has been reproduced from, ISO 17757:2019, *Earth-moving machinery and mining — Autonomous and semi-autonomous machine system safety*. The modifications are additional requirements and are set out in [Appendix ZZ](#), which has been added at the end of the source text.

[Appendix ZZ](#) lists the variations to ISO 17757:2019 for the application of this document in Australia.

As this document has been reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

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