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Earth-moving machinery — Horizontal directional drills — Terminology and specifications



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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 establish terminology for horizontal directional drilling machines. It is applicable to non-riding, ride-on, pit-launched and attachment-mounted machines.

This document is identical with, and has been reproduced from, ISO 21467:2004, *Earth-moving machinery — Horizontal directional drills — Terminology and specifications.*

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Foreword

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Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 21467 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 4, *Commercial nomenclature, classification and rating*.

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Australian Standard®

Earth-moving machinery — Horizontal directional drills — Terminology and specifications

1 Scope

This International Standard establishes terminology for horizontal directional drilling machines as defined in 3.1.1. It is applicable to non-riding, ride-on, pit-launched and attachment-mounted machines.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6165, *Earth-moving machinery — Basic types — Vocabulary*

ISO 9249, *Earth-moving machinery — Engine test code — Net power*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6165 and the following apply.

3.1 General

3.1.1
horizontal directional drilling machine
machine that uses a steerable cutting head attached to the end of a drill string for creating a bore through the earth in a horizontal direction. See Figures 1 to 4.

Note 1 to entry: Drilling can include fluid injection through the drill string to the cutting head, tracking of the bore by use of sensors or a transponder near the cutting head and subsequent enlargement of the bore by backreaming.

Note 2 to entry: These machines typically apply force to the drill string using a drill frame parallel to, or inclined up to, 30° relative to the operating earth surface.

3.1.2
bore
hole produced underground used primarily for the installation of service utilities

3.1.3
drill string
one or more pieces of drill pipe joined together which transmit forces from the drill frame to the cutting head or backreamer that cuts the earth

Note 1 to entry: It is also used to rotate the cutting head to position it for steering.

3.1.4
drill frame
structure on the horizontal drilling machine that transmits rotational and push/pull forces to the drill string

3.1.5
backreaming
process of enlarging the bore by pulling back a tool of larger diameter than that previously used to form the bore

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