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Earth-moving machinery — Laboratory tests and performance requirements for protective structures of excavators —
Part 2:
Roll-over protective structures (ROPS) for excavators of over 6 t

Engins de terrassement — Essais de laboratoire et exigences de performance des structures de protection des pelles —

Partie 2: Structures de protection au retournement (ROPS) pour pelles de terrassement de plus de 6 t



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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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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 12117-2 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety, ergonomics and general requirements*.

ISO 12117 consists of the following parts, under the general title *Earth-moving machinery — Laboratory tests and performance requirements for protective structures of excavators*:

- *Part 1: Tip over protective structures (TOPS) for compact excavators*
- *Part 2: Roll-over protective structures (ROPS) for excavators of over 6 t*

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Introduction

It was long thought that hydraulic excavators did not overturn as easily as other earth-moving machines because their large attachments support the machine bodies once they start inclining. However, in some regions of the world, accident data have shown a need for roll-over protection of hydraulic excavators. Standardization was thus needed.

This part of ISO 12117 provides a test method for roll-over protective structures (ROPS) for hydraulic excavators of over 6 t used in earth-moving. Unlike the machines covered by ISO 3471, hydraulic excavators feature large attachments which affect the required performance capability of the ROPS. Therefore, the test method and criteria required for hydraulic excavators are different from those needed for the other earth-moving machines.

It is also applicable to hydraulic excavators used in forestry applications. The criteria of ROPS for hydraulic excavators, used in forestry, with cab riser, have been included for information.