

This is a preview of "ISO 13031:2016". [Click here to purchase the full version from the ANSI store.](#)

First edition
2016-05-01

Earth-moving machinery — Quick couplers — Safety

Engins de terrassement — Attaches rapides — Sécurité



Reference number
ISO 13031:2016(E)

© ISO 2016



COPYRIGHT PROTECTED DOCUMENT

© ISO 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

This is a preview of "ISO 13031:2016". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Safety requirements and protective measures	5
4.1 Quick coupler	5
4.1.1 General	5
4.1.2 Engagement system	6
4.1.3 Locking system	6
4.2 Object handling	7
4.3 Controls	7
4.3.1 General requirements	7
4.3.2 Separate control	7
4.3.3 Integrated controls	8
4.4 Electrical circuits	10
4.4.1 Over-current protective devices	10
4.5 Pressurized systems	10
5 Information for use	10
5.1 Safety labels	10
5.2 Instructions and information for use	10
5.2.1 Operator's manual	10
5.2.2 Installation manual	11
5.3 Quick coupler marking	11
Bibliography	12

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety, ergonomics and general requirements*.

This is a preview of "ISO 13031:2016". [Click here to purchase the full version from the ANSI store.](#)

Introduction

This International Standard specifies design criteria for quick couplers related to assisting the operator in ensuring that an attachment is located in the right position on the quick coupler and that the engagement system is fully activated. While preparing this International Standard, it was considered to what extent the state of the art allowed the further reduction of risks related to incomplete engagement procedures. In particular, it was considered carefully whether the use of sensors and associated control systems could be normatively required in order to ensure that those procedures were correctly completed. It was determined that the current state of the art did not allow such a requirement to be made. However, due to the continuing development of technology, this possibility will be reviewed by ISO/TC 127 periodically so that a revision to this International Standard can be initiated at the appropriate time. Nothing in this International Standard is to be taken as discouraging the development of new technologies and new technical measures to reduce or remove risk.

This International Standard is a type C standard as defined in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the scope of this International Standard.

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the provisions of this type-C standard.