



NSAI
Standards

Irish Standard
I.S. EN ISO 16841:2014

Steel wire ropes - Pulling eyes for rope installation - Types and minimum requirements (ISO 16841:2014)

I.S. EN ISO 16841:2014

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

EN ISO 16841:2014

Published:

2014-03-05

*This document was published
under the authority of the NSAI
and comes into effect on:*

2014-03-15

ICS number:

77.140.65

NOTE: If blank see CEN/CENELEC cover page

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

EN ISO 16841

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2014

ICS 77.140.65

English Version

Steel wire ropes - Pulling eyes for rope installation - Types and minimum requirements (ISO 16841:2014)

Câbles en acier - Oeils de tirage pour les installations en câble - Types et exigences minimales (ISO 16841:2014)

Stahldrahtseile - Einziehösen für die Seilmontage - Formen und Mindestanforderungen (ISO 16841:2014)

This European Standard was approved by CEN on 15 February 2014.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
Foreword.....	3

Foreword

This document (EN ISO 16841:2014) has been prepared by Technical Committee ISO/TC 105 “Steel wire ropes” in collaboration with Technical Committee CEN/TC 168 “Chains, ropes, webbing, slings and accessories - Safety” the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

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

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 16841:2014 has been approved by CEN as EN ISO 16841:2014 without any modification.

This page is intentionally left blank

INTERNATIONAL STANDARD

**ISO
16841**

First edition
2014-03-01

Steel wire ropes — Pulling eyes for rope installation — Types and minimum requirements

*Câbles en acier — Oeils de tirage pour les installations en câble —
Types et exigences minimales*



Reference number
ISO 16841:2014(E)

© ISO 2014

ISO 16841:2014(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Requirements	2
4.1 General	2
4.2 Geometry	3
4.3 Type testing	6
4.4 Pulling eye working load limit (WLL)	7
4.5 Welder qualification for rigid-type pulling eyes	7
5 Verification of the requirements	7
5.1 Tensile test	7
5.2 Durability test	8
6 Information for use	8
6.1 Marking	8
6.2 Certificate of compliance	8
Annex A (informative) Determination of the line pull to which the pulling eye is subjected during installation or a re-reeving operation	9
Bibliography	10

ISO 16841:2014(E)

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. 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. 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 105, *Steel wire ropes*.

Introduction

This International Standard was developed in response to a worldwide demand for an International Standard identifying the different types of pulling eyes which are used to facilitate the installing and re-reeving of ropes on a machine.

Such pulling eyes, sometimes referred to as becketts, are often used when another rope is required to pull the new rope into place.

Steel wire ropes — Pulling eyes for rope installation — Types and minimum requirements

1 Scope

This International Standard identifies the different types of pulling eyes prepared at, or attached to, a steel wire rope end for connection to another rope when installing a new rope or re-reeving an existing rope on a machine.

This International Standard also specifies the minimum requirements for pulling eyes, including their geometry, strength, maximum line pull to which the pulling eye is intended to be subjected and information for use to be provided by the manufacturer.

The pulling eyes covered by this International Standard are not intended to be subjected to a load when the machine performs a service operation.

This International Standard applies to those pulling eyes prepared at, or attached to, ends of steel wire ropes conforming to ISO 2408 and ISO 10425.

This International Standard does not apply to steel wire ropes with fibre cores.

This International Standard does not cover those separate end connection accessories, which slide over the end of a rope and comprise an eye- and tubular-type braided rope, often referred to as a “wire rope stocking” or “cable sock”.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable to its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

ISO 17893, *Steel wire ropes — Vocabulary, designation and classification*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 17893 and the following apply.

3.1 pulling eye

end preparation or end attachment in the form of a loop or eye to facilitate installation or re-reeving of a steel wire rope on a machine

3.2 flexible-type pulling eye

end preparation or end attachment in the form of a loop or eye, made from components of rope

EXAMPLE Individual strands or core, or tapered outer strands, reduced by removing some of the constituent wires

Note 1 to entry: Pulling eyes made from the centre strand of the core have limited load capacity.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-