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I.S. EN 13411-4:2011

Terminations for steel wire ropes - Safety - Part 4: Metal and resin socketing

I.S. EN 13411-4:2011

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Endverbindungen für Drahtseile aus Stahldraht - Sicherheit
- Teil 4: Vergießen mit Metall und Kunstharz

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Foreword

This document (EN 13411-4:2011) has been prepared by 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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

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.

This document supersedes EN 13411-4:2002+A1:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This second edition incorporates both technical and editorial amendments, with the following main changes made with respect to the previous edition:

- enhance approved socket dimension criteria negating need for type testing and move data into informative Annex F;
- add definition for ‘socketing manufacturer’;
- re-draft hazards clause;
- re-draft standard in accordance with rules of ISO/IEC Directives, Part 2 and CEN Guide 414.

EN 13411, under the general title “Terminations for steel wire ropes — Safety”, consists of the following parts:

- Part 1: Thimbles for steel wire rope slings;
- Part 2: Splicing of eyes for wire rope slings;
- Part 3: Ferrules and ferrule-securing;
- Part 4: Metal and resin socketing;
- Part 5: U-bolt wire rope grips;
- Part 6: Asymmetric wedge socket;
- Part 7: Symmetric wedge socket;
- Part 8: Swage terminals and swaging.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European Standard is a type C standard as stated in EN ISO 12100.

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

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

The methods of socketing described in this standard are based on established procedures and following them is considered to result in a rope termination having an efficiency of 100 % based on the minimum breaking force of the rope.

It is assumed that the socket is:

- suitable for heating without changing the characteristics of the socket material when the socketing medium is molten metal;
- strong enough for the rope; and
- suitable for the purpose for which it is intended.

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