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Machines for underground mines - Safety requirements for hydraulic powered roof supports - Part 3: Hydraulic control systems

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Maschinen für den Bergbau unter Tage - Sicherheitsanforderungen an hydraulischen Schreitausbau - Teil 3: Hydraulische Steuerungen

This European Standard was approved by CEN on 21 September 2004 and includes Amendment 1 approved by CEN on 21 December 2009.

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Foreword

This document (EN 1804-3:2006+A1:2010) has been prepared by Technical Committee CEN/TC 196 "Machines for underground mines - Safety", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by July 2010, and conflicting national standards shall be withdrawn at the latest by July 2010.

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 includes Amendment 1, approved by CEN on 2009-12-21.

This document supersedes EN 1804-3:2006.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **[A1]** **[A1]**.

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 document is Part 3 of a European Standard specifying the safety requirements for hydraulic control systems.

The other parts are:

Part 1: Support units and general requirements

Part 2: Power set legs and rams

Part 4¹: Electro-hydraulic control systems

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 United Kingdom.

¹ In preparation

Introduction

This document is a type C standard as stated in EN ISO 12100-1.

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

When provisions of this type C standard are different from those which are stated in type A or 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 extent to which hazards are covered is indicated in the scope of this document.
While preparing this document, it was assumed that:

- only trained and competent persons operate the machine;
- components without specific requirements are:
 - a) designed in accordance with the usual engineering practice and calculation code;
 - b) of sound mechanical construction;
 - c) free of defects;
- components are kept in good working order;
- a negotiation took place between the user and the manufacturer concerning the use of the machinery.