

Fairground and amusement park machinery and structures — Safety

ICS 91.040.99

National foreword

This British Standard is the UK implementation of EN 13814:2004. The UK participation in its preparation was entrusted by Technical Committee MCE/3, Safeguarding of machinery, to Subcommittee MCE/3/4, Fairground and amusement park machinery and structures — Safety. A list of organizations represented on this committee can be obtained on request to its secretary.

WARNING

BSI as a member of CEN, is obliged to publish EN 13814:2004 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK consistently voted against its approval as a European Standard.

The reason for this disapproval is that during discussion of this standard by BSI Technical Committee MCE/3/4, which mirrors the work of CEN Committee TC 152, the UK expressed the opinion that there are several points which may necessitate additional or different safety measures to be applied to amusement devices that are to be used in the UK.

In the opinion of the committee, it is important that designers should be aware that compliance with requirements of this standard may not be sufficient to ensure compliance with UK law¹⁾.

The BSI committee had particular concerns with:

- fatigue life assessment: EN 13814:2004 does not require the designer to pass on any information regarding fatigue lives exceeding 35 000 hours, nor to cross check that inspection/maintenance instructions are consistent with any of the calculated lives. The committee believes this is inconsistent with Section 6 of the Health and Safety at Work etc. Act 1974;
- control systems: in the opinion of the UK committee a reference to IEC 62061 would be appropriate, which relates to control system design safety;
- passenger containment and clearance envelopes (6.1.6.1.2): the minimum reach distances for passengers as required in 6.1.6.1.2 do not conform to UK legal requirements¹⁾. Risk assessments referencing anthropometric data in relation to the severity of the hazards should be used to determine safe reach distances and in most cases applicable to the UK, the safe distances will be much greater than stated in 6.1.6.1.2;
- wind loading calculations: in 5.3.3.4.1 the latest relevant Eurocodes²⁾ should be taken into account as should higher probable wind loadings in the UK. The possibility of portable rides being used in northern areas with even higher probable wind velocities should also be considered.

¹⁾ It is the intention of BSI Technical Committee MCE/3/4 to draft a national annex NA, which will give additional guidance on implementation, particularly in relation to compliance with UK regulations.

²⁾ The national annex NA to BS EN 1991-1-4 will provide supplementary information and guidance on implementation for UK users. It is anticipated that this document will be available by the end of October 2008. Until the NA is published, BS 6399-2:1997 should be used.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Amendments/corrigenda issued since publication

Date	Comments
30 September 2008	National foreword revised
30 June 2011	Correction to Equation (53) in 5.5.1.2

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