

BS 7928:2013

Incorporating Corrigendum No. 1



BSI Standards Publication

Specification for head protectors for cricketers

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to ii, pages 1 to 18, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, to come into effect on 1 July 2014. It was prepared by Subcommittee PH/6/6, *Protective helmets for sport and leisure*, under the authority of Technical Committee PH/6, *Head protection*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 7928:1998, which is to be withdrawn on 30 June 2014.

Information about this document

This is a full revision of the standard, and introduces the following principal changes:

- the scope has been widened to cover head protectors for use against men's and junior sized cricket balls C1 *Text deleted* C1; and
- a projectile test for facial impacts has been included.

Text introduced by or altered by Corrigendum No. 1 is indicated in the text by tags C1 C1. Minor editorial corrections are not tagged.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *The BSI guide to standardization – Section 2: Rules for the structure, drafting and presentation of British Standards*, subclause 11.3.1, which states, "Requirements should be expressed using wording such as: 'When tested as described in Annex A, the product shall ...'. This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Contractual and legal considerations

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.

Introduction

With fast bowlers capable of bowling cricket balls at speeds of over 90 mph (140 km/h), head protectors for cricketers are an essential part of a cricket player's kit.

The intention of head and face protection is to reduce the frequency and severity of localized injuries to the head and that part of the face surrounded by the head protector. The protective function is such that the force from impacts against the head protector is distributed and dampened and the penetration of objects is counteracted.

The protection given by a head protector depends on the circumstances of the accident and wearing a helmet and faceguard cannot always prevent death or long-term disability. A proportion of the impact energy is absorbed by the head protector, thereby reducing the force of the blow sustained by the head and face. The structure of the head protector might be damaged when absorbing this energy and any helmet that sustains a severe blow needs to be replaced even if damage is not apparent.

The helmet shell impact attenuation drop test records the impact of a moving helmeted headform on a hemispherical (simulated cricket ball shaped) anvil. The facial contact projectile test records whether a practice cricket ball fired from a ball launching mechanism results in either faceguard or ball contact with a specified "no contact zone" of the face. The 15 kg impact for the impact attenuation test, and the ball speeds of 23 m/s (for junior helmets tested against a $\langle C_1 \rangle$ junior sized $\langle C_1 \rangle$ ball) and 28 m/s (for adult helmets tested against $\langle C_1 \rangle$ a men's sized $\langle C_1 \rangle$ ball) for the facial contact test are used as they are theoretically equivalent to realistic cricket ball speeds faced by cricketers.

1 Scope

This British Standard specifies the requirements for the materials, construction, markings and information to be supplied for head protectors to be worn by cricketers in adult and junior cricket.

NOTE 1 It is important to stress that this Standard does not cover specific testing against a women's size ball [C1] Text deleted [C1].

NOTE 2 This British Standard does not consider head protectors for use in kwik cricket, incrediball, street cricket, etc. or any other variant of the game.

NOTE 3 Head protectors for cricketers can also be worn by close fielders and wicket-keepers. However, the testing protocol is designed for protection against batting related ball impacts, rather than those encountered in these fielding positions.

This British Standard specifies the methods to assess the impact attenuation properties during a drop test of the helmet and the protection provided against a ball or faceguard contacting a specified no contact zone of the face during a projectile test.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this British Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references, the latest edition of the publication referred to applies.

BS EN 960:2006, *Headforms for use in the testing of protective helmets*

BS EN 13087-2:2012, *Protective helmets – Test methods – Part 2: Shock absorption*

3 Terms and definitions

For the purposes of this British Standard, in addition to the definitions given by BS EN 960:2006, the following terms and definitions apply.

3.1 chin strap

strap that passes under the cricketer's chin or lower jaw

3.2 faceguard

extension of, or an attachment to, the helmet intended to give protection to the face and ears against impacts

3.3 head protector

complete assembly of helmet and faceguard

3.4 helmet

headwear primarily intended to protect against a blow to the part of the cricketer's head that lies above the ears and eyes

3.5 peak

extension from the basic form of the helmet above the eyes

3.6 positioning index

dimension that defines the position in which the helmet is intended to be placed on the appropriate headform for testing