

CONFIRMED
DECEMBER 2007

Specification for

Studs for rugby football boots

ICS 97.220.40

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Personal Safety Equipment Standards Committee (PSM/-) to Technical Committee PSM/31 upon which the following bodies were represented:

- British Leather Manufacturers' Research Association
- British Sports and Allied Industries Federation
- Cricket Council
- Football Association
- Football League
- Rugby Football League
- Rugby Football Union
- Shoe and Allied Trades Research Association
- Sports Council
- Women's Cricket Association

This British Standard, having been prepared under the direction of the Personal Safety Equipment Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 October 1983
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Amendments issued since publication

Amd. No.	Date of issue	Comments
8443	March 1995	
12050	March 2001	Indicated by a sideline

The following BSI references relate to the work on this standard:
Committee reference PSM/31
Draft for comment 81/37103 DC

ISBN 0 580 11967 X

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Foreword

This British Standard has been prepared under the direction of the Personal Safety Equipment Standards Committee at the request of the Rugby Football Union acting on behalf of the International Rugby Football Board.

The Rugby Football Union, over the past few years, has been actively campaigning for the provision of both safer studs and safer boot soles. The Shoe and Allied Trades Research Association (SATRA) was involved in much of the early work in this area, the results of which were published in the SATRA Bulletin in 1975 and 1976. SATRA have now developed test procedures to assess the likelihood of a stud becoming damaged, either while being fitted to the boot or during normal wear, in such a way that its propensity to cause cuts or other damage to a player's skin would be increased. These test methods and others that deal with the impact resistance of the stud and its fixing means have been incorporated in this standard, which also calls for an indication to be given to warn when a stud is getting dangerously short such that there is a risk of the metal attachment spigot becoming exposed.

It is generally recognized that the dimensions of studs can significantly affect the severity of accidental injuries, and requirements for shape and size are included in the standard.

In developing the test procedures, the tests were carried out over the range of temperatures likely to be encountered in the life of the stud. No significant temperature effects were noted in this work and therefore only one conditioning and testing temperature is specified.

It was appreciated that prolonged use of studs in a variety of playing environments should provide further useful data; test methods and performance requirements will be reviewed in the light of information obtained in this way.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 12, an inside back cover and a back cover.

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Sidelining in this document indicates the most recent changes by amendment.

1 Scope

This British Standard specifies design, dimensions, construction, performance and marking requirements for replaceable (screw-in) studs for use in rugby football boots.

NOTE The titles of the publications referred to in this standard are given on the inside back cover.

2 Materials

Materials used in the studs shall be such that the studs comply with the requirements of clause 5.

3 Construction and design

3.1 Other than the shape of any integral washer at the base the stud shall be in the form of a cylinder or a truncated cylindrical cone, and the stud shall comply with the dimensional requirements given in clause 4.

3.2 Studs shall be so designed that the fixing tool supplied by the manufacturer acts only through recesses or flutes on the flanks of the studs or on flats on the integral washer at the base (see Figure 1).

3.3 When fitted to the shoe, the stud shall have no external projections on its surface except where these consist of an indication of conformity to BS 6366. In such cases, the embossment details shall be no more than 0.3 mm proud of the surrounding material of the stud.

NOTE Indications of conformity to BS 6366 may include embossments such as the "Kitemark".

3.4 If the attachment spigot is made of metal, the thread shall be either M5 or M7 in accordance with BS 3643-1 and BS 3643-2.

NOTE If the attachment spigot is not made of metal, a method of fitting other than by an M5 or M7 thread may be used.

If the method of attachment is other than by the use of an attachment spigot with an M5 or M7 thread, marking shall include the information specified in clause 6 e).

3.5 If the attachment spigot and the stud are of different materials, a clearly visible warning shall become evident when the stud has worn down to a length that gives a minimum of 2 mm cover to the end of the attachment spigot.

NOTE If the attachment spigot and the stud are of the same material and manufactured as a single item, no visible warning is needed.

3.6 Flutes or other recesses for the fixing tool shall not extend nearer to the tip of the stud than the clearly visible warning mark.

3.7 Edges of studs shall be radiused with a radius of not less than 1 mm and finished smooth.

4 Dimensions

The dimensions of the studs shall be as shown in Figure 1. The 10 mm minimum diameter shall be measured not more than 2 mm from the tip (i.e. the end of the stud remote from the attachment spigot).

5 Performance

5.1 Impact resistance

When tested up to and including an impact energy of 8 J as described in Appendix A all of the six studs tested shall:

- a) remain secured to the attachment spigot;
- b) not disintegrate or completely split;
- c) not show a fracture of the attachment spigot.

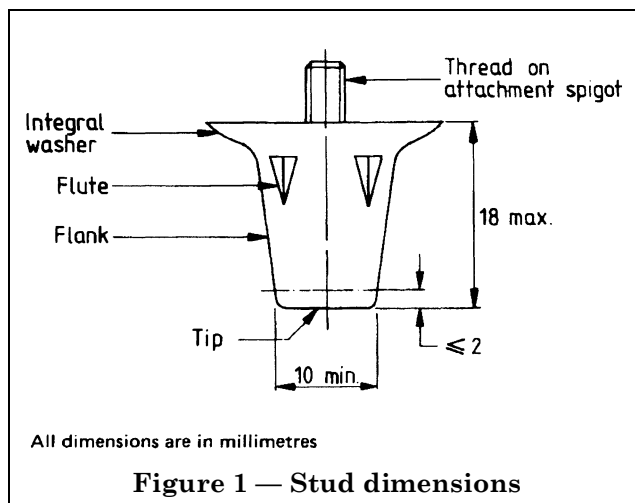
If the impact of 8 J causes fine hairline splits or cracks, the test shall be continued in steps of 0.5 J. The stud shall remain secured to the attachment spigot and not disintegrate or completely split at impacts of up to 12 J.

5.2 Damage to studs caused by tightening and loosening

After preparation as described in Appendix B, studs shall be tested as described in Appendix C to assess the risk of causing cutting injuries in wear. After this procedure none of the three studs tested shall have a damage score of greater than 3 when assessed against the scale given in Table 1.

5.3 Damage to studs caused by wear

After preparation as described in Appendix D, studs shall be tested as described in Appendix C to assess the risk of causing cutting injuries in wear. After this procedure none of the three studs tested shall have a damage score of greater than 3 when assessed against the scale given in Table 1.



6 Marking

Either the studs or their immediate packaging shall be marked with the following information:

- a) the name, trademark or other means of identification of the manufacturer;
- b) the number and date of this British Standard (i.e. BS 6366:1983¹⁾);
- c) the words “Use only the tool supplied to fit or remove studs”;
- d) an explanation of the method of operation of the warning mark;
- e) if the method of attachment is other than by the use of an attachment spigot with an M5 or M7 thread (as specified in BS 3643-1 and BS 3643-2), a description of the type and method of attachment.

A surface of the stud which is visible when the stud is fitted to the shoe shall be marked with an indication of conformity to BS 6366:1983¹⁾.

¹⁾ Marking BS 6366:1983 on or in relation to a product represents a manufacturer's declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the Standard. The accuracy of the claim is solely the claimant's responsibility. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.