

**BS 3SP 1:2013**

*Incorporating Corrigendum No. 1*



**BSI Standards Publication**

**Specification – Shackles,  
carbon steel, cadmium  
plated for aircraft**

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### Summary of pages

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## Foreword

### Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 August 2013. It was prepared by Technical Committee ACE/12, *Aerospace fasteners and fastening systems*. A list of organizations represented on this committee can be obtained on request to its secretary.

### Supersession

This British Standard supersedes BS 2SP 1:1927, which is withdrawn.

### Information about this document

This new edition of British Standard incorporates technical changes and does not represent a full review or revision of the standard, which will be undertaken in due course.

Text introduced 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.*

### 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.**

## 1 Scope

This British Standard specifies requirements for carbon steel shackles, cadmium plated for aircraft use.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN 2133, *Aerospace series – Cadmium plating of steels with specified tensile strength  $\leq 1450$  MPa, copper, copper alloys and nickel alloys*

BS EN ISO 6506-1, *Metallic materials – Brinell hardness test – Part 1: Test method*

BS S 93, *Specification for aircraft material – ‘40’ carbon steel (normalized) (35/45 tonf/sq in: limiting ruling section 6 in)*

Def Stan 03-19, *Electro-deposition of cadmium*

## 3 Material

All shackles shall be stamped from steel conforming to BS S 93. Shackles shall be machined where marked.

## 4 Dimensions

The shackles shall be manufactured to the dimensions and limits shown in Figure 1 and Table 1.