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*(Cancelling BS
Specification
BS SP 7.)
Incorporating
Amendment Nos. 1, 2,
3 and 4*

Specification for Aircraft Material

**Fork Joints —
(High Tensile Type) —**

**(For Sizes No. 4 B.A. to $\frac{3}{4}$ inch
B.S.F. inclusive)**

NOTE The Institution desires to call attention to the fact that this Specification is intended to include the technical provisions necessary for the supply of the articles herein referred to, but does not purport to comprise all the necessary provisions of a contract.

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.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Amendments issued since publication

Amd. No.	Date	Comments
629	May 1947	
2714	February 1957	
4084	February 1961	
6220	July 1967	Indicated by a sideline in the margin

This Specification having been approved by the Aircraft Industry Committee was published by the authority of the Council of the Institution as a British Standard on 19 February 1943

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NOTE The order must state the material classification letter and part number of the fork joints required in accordance with Clause 5.

1 Manufacture

Fork joints may, at the option of the manufacturer, be made by machining either from bar or from blanks produced by the “cold heading” process. They shall be tapped either right hand or left hand as specified on the order.

2 Screw threads

The screw threads of coated fork joints in non-corrosion resisting steel and those of fork joints in corrosion resisting steel shall not be smaller than the minimum full, effective and core diameters specified in Table III of BS Specification No. 93 for British Association Threads, or Table 12 of BS Specification No. 84 for British Standard Fine Threads. The screw threads of all fork joints (those in non-corrosion resisting steel after being coated) shall be required to pass approved gauges.

3 Anti-corrosion treatment

All parts in non-corrosion resisting steel shall be uniformly coated with cadmium in accordance with the requirements of specification DTD 904¹⁾.

4 Selection for testing

Samples of fork joints may be selected at the discretion of the Inspector and tested as specified in Clause 5.

5 Mechanical test

The finished fork joints selected as specified in Clause 4 shall be screwed on to the wire as far as the inspection hole in the case of sizes up to and including $\frac{1}{2}$ in. and as far as the commencement of the gap in the case of sizes $\frac{9}{16}$ in. and over, and the axial load shall be applied to a pin placed through the holes in the fork joints, no part of the fork joint being gripped in the testing machine. When loaded in this manner the fork joints shall show an ultimate strength not less than that given in Table 1 (Col. 25) Table 2 (Col. 23) Table 3 (Col. 25) and Table 4 (Col. 24).

6 Marking

All fork joints shall have the appropriate part number applied on the shank near the tapped end by rolling and shall also bear the mark of the Inspector. If made of stainless steel they shall in addition be marked with the letter “Z” preceding the part number.

NOTE For ordering purposes a letter “Y” shall be inserted in the Part Reference Number for non-corrosion resisting fork joints between the Specification Number and Part Number so as to distinguish clearly between non-corrosion resisting and corrosion resisting parts.

For example, the complete Part Reference Number for $\frac{5}{16}$ in. non-corrosion resisting fork joint (left-hand thread) is BS SP 7 Y/GL and for corrosion resisting steel BS SP 7 Z/GL, while the corresponding markings on the actual fork joint will be GL and Z/GL.

FORK JOINTS MACHINED FROM BAR

7 Material

Fork joints machined from bar shall be made from steel bars which have been inspected and passed by the Inspector as complying with the latest issue of BS Specification BS S 94, BS S 96, BS S 114 or BS S 117 (B.) or BS Specification BS S 80 where corrosion resisting steel is specified.

8 Manufacture

Fork joints shall be machined bright all over.

9 Design and dimensions

All fork joints (those in non-corrosion resisting steel after coating) shall be in accordance with the dimensions and limits given in Table 1 and Table 2 or Table 3 and Table 4, with the exception that those made in stainless steel shall have the collar (D) and projection (W) omitted.

FORK JOINTS MADE BY THE “COLD HEADING” PROCESS (for SIZES 4 B.A. to $\frac{13}{32}$ in. ONLY).

10 Material

a) The fork joints shall be machined from blanks made from steel of the following chemical compositions²⁾:—

Carbon	— not less than 0.30 nor more than 0.45 per cent.
Silicon	— not less than 0.10 nor more than 0.35 per cent.
Manganese	— not more than 1.50 per cent.

¹⁾ Ministry of Technology, Process Specification DTD 904 for cadmium plating.

²⁾ Steel of this composition is covered by BS 970 En. 8.