

Please be aware that this PDF has been created from the original hardcopy document, which might not be in good condition and so the PDF might reflect this.

OFFICE COPY

No. 423—1931.

Mr. France

G. Weston

British Standards Institution.

Incorporated by Royal Charter. NO AMDS

FORMED IN 1901 AS THE ENGINEERING STANDARDS COMMITTEE.
INCORPORATED IN 1918 AS THE BRITISH ENGINEERING STANDARDS ASSOCIATION.

BRITISH

STANDARD SPECIFICATION

FOR

RIVETED STEEL AIR RECEIVERS.

LONDON:

PUBLISHED FOR THE INSTITUTION BY CROSSY LOCKWOOD & SON,
7, STATIONERS' HALL COURT, LUDGATE HILL, LONDON, E.C. 4;
AND TO BE PURCHASED FROM ANY BOOKSELLER, OR DIRECT FROM THE OFFICES OF THE
BRITISH STANDARDS INSTITUTION,
25, VICTORIA STREET, LONDON, S.W. 1.

December, 1931.

COPYRIGHT

ALL RIGHTS RESERVED, INCLUDING RIGHTS OF TRANSLATION.

Price 2/- Net. Post Free 2/2.

The following Government Departments and Scientific and Industrial Organisations were officially represented upon the Committees entrusted with the preparation of this Specification:—

Admiralty.
Air Ministry.
Board of Trade.
Crown Agents for the Colonies.
Home Office.
India Office.
Mines Department.
Ministry of Transport.
Office of Works.
War Office.
British Corporation, Register of Shipping and Aircraft.
Bureau Veritas.
Lloyd's Register of Shipping.
Department of Scientific and Industrial Research.
National Physical Laboratory.
Institution of Mechanical Engineers.
Institution of Automobile Engineers.
Institution of Engineers and Shipbuilders in Scotland.
Institution of Gas Engineers.
Institution of Heating and Ventilation Engineers.
Institute of Marine Engineers.
Institute of Naval Architects.
Railway Companies of Great Britain.
North-East Coast Institution of Engineers and Shipbuilders.
Institution of Mining Engineers.
Engineering Insurance Companies.
Agricultural Engineers' Association.
Association of British Chemical Plant Manufacturers.
British Electrical and Allied Manufacturers' Association.
British Engineers' Association.
British Marine Oil Engine Manufacturers' Association.
Machine Tool Trades Association.
National Federation of Iron and Steel Manufacturers.
Locomotive Manufacturers' Association.
Diesel Engine Users' Association.
Air Receiver Makers.

This Specification was approved by the Mechanical Industry Committee at their meeting on October 21st, 1931, and published by the authority of the Council of the Institution, as a British Standard on 14th December, 1931.

NOTE.

In order to keep abreast of progress in the Industries concerned, the British Standard Specifications are subject to periodical review. Suggestions for improvements, addressed to the British Standards Institution, 28, Victoria Street, London, S.W. 1, will be welcomed at all times. They will be recorded and in due course brought to the notice of the Committees charged with the revision of the Specification to which they refer.

No. 429—1931.

British Standards Institution.

Incorporated by Royal Charter.

FORMED IN 1901 AS THE ENGINEERING STANDARDS COMMITTEE.
INCORPORATED IN 1918 AS THE BRITISH ENGINEERING STANDARDS ASSOCIATION.

BRITISH

STANDARD SPECIFICATION

FOR

RIVETED STEEL AIR RECEIVERS.

LONDON:

PUBLISHED FOR THE INSTITUTION BY CROSBY LOCKWOOD & SON,
7, STATIONERS' HALL COURT, LUDGATE HILL, LONDON, E.C. 4;
AND TO BE PURCHASED FROM ANY BOOKSELLER, OR DIRECT FROM THE OFFICES OF THE
BRITISH STANDARDS INSTITUTION,
28, VICTORIA STREET, LONDON, S.W. 1.

December, 1931.

COPYRIGHT.

ALL RIGHTS RESERVED, INCLUDING RIGHTS OF TRANSLATION.

Price 2/- Net. Post Free 2/2.

CONTENTS.

DEFINITION.

	PAGE
1. Air Receiver	3
2. General	3
3. Quality of Material	3
4. Freedom from Defects	3
5. Tensile Breaking Strength and Elongation	3
6. Bend Test	4
7. Heat Treatment of Test Pieces	4
8. Number of Tensile and Bend Tests	5
9. Heat Treatment of Plates	5
10. Strength of Joints	5
11. Thickness of Shell Plate	6
12. Butt Straps	7
13. Riveting	8
14. Pitch of Rivets in Longitudinal Joints	9
15. Circumferential Seams	9
16. End Plates without Stays	9
17. End Plates with Stays	11
18. Dishing and Flanging of End Plates	14
19. Compensation for Manholes	14
20. Holes for Mountings	14
21. Access	14
22. Drainage	15
23. Hydraulic Test	15
24. Marking	16
25. Inspection	16
26. Testing Facilities	16

APPENDIX.

Forms of British Standard Test Pieces	17
---------------------------------------	----

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 material herein referred to, but does not purport to include all the necessary provisions of a Contract.

BRITISH

STANDARD SPECIFICATION

FOR

RIVETED STEEL AIR RECEIVERS.

Definition.

1. *Air Receiver*.—The term "*Air Receiver*" shall, for the 10 purposes of this Specification, mean any vessel intended to contain air or inert gas above atmospheric pressure.

General.

2. British Standard riveted steel air receivers shall conform in all respects to the requirements for the quality of material, construction, and tests herein laid down.

Quality of Material.

3. The material used in the construction of a receiver shall be steel made by the acid or basic open-hearth process. The cast from which the plates are rolled shall not contain more than 0.05 per cent of sulphur or of phosphorus.

Freedom from Defects.

4. The finished material shall be free from cracks, surface flaws, and laminations. It shall have a workmanlike finish and shall not have been hammer-dressed, but slight scale or shell may be removed by the use of chisel, file, buff, or sand or shot blast.

Tensile Breaking Strength and Elongation.

5. (a) *Plates*.—The tensile breaking strength and elongation shall be determined on standard test-piece A (see Appendix, p. 17), cut lengthwise or crosswise from the plates. The tensile breaking strength of cylindrical shell plates shall be not less than 28 and not