STANDARDS ASSOCIATION OF AUSTRALIA

BRITISH STANDARD SPECIFICATIONS FOR AIRCRAFT MATERIALS AND COMPONENTS.

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A. Bolts, etc.

6 A 1. Hexagonal Headed Bolts (Low Tensile Steel).
2 A 4. Test Pieces (Tensile, Bend and Notched Bar).
A 9. Magneto Couplings and Engine Mountings.
** A 14. Hexagonal Brass Nuts ... ... *Add**
2 A 15. Hexagonal Headed Bolts (High Tensile Steel).
** A 16. Hexagonal Steel Nuts (Ordinary, Thin, Slotted and Castle).
A 17. Machined Hexagonal Headed Bolts (Aluminium Alloy).
A 18. Machined Hexagonal Nuts (Aluminium Alloy).
A 19. Serrations and Gauges for Serrations.
A 19, Part 2. "Not Go" Gauges and "Go" Calliper Gauges for Serrations.
A 20. Spline Shafts and Holes.

B. Brass, Copper, etc

†2 B 8. Phosphor Bronze Castings for Bearings. (Includes Solid and Cored Sticks) ... *Add** (A.S. No. (E)D.701—1940).
†3 B 11. Brass Bars suitable to be Brazed or Silver Soldered. ... ... *Add** (A.S. No. (E)D.703—1940).
2 B 21. White Metal (88/8/4) Ingots. (Suitable for Bearings).
2 B 22. White Metal (92/4/4) Ingots. (Suitable for Bearings).

D. Dope and Ingredients.

3 D 1. Methyl Ethyl Ketone.
3 D 3. Amyl Acetate.
3 D 4. Butyl Acetate.
3 D 5. Castor Oil (for Nitro Dope Coverings).
3 D 7. Benzyl Alcohol.
2 D 8. Nitro-cellulose Syrup.
3 D 9. Alcohol.
3 D 10. Benzol.
2 D 11. Triacetin.
3 D 12. Triphenyl Phosphate.
3 D 15. Distillation Apparatus.
2 D 17. Butyl Alcohol.
3 D 22. Acetone.
D 26. Yellow Ochre.
2 D 27. Zinc Oxide ... ... *Add.**
2 D 28. Red Oxide of Iron ... ... *Add.**
2 D 29. Identification Red ... ... *Add.**
2 D 30. Carbon Black ... ... *Add.**
2 D 31. Ultramarine Blue ... ... *Add.**
2 D 32. Aluminium Powder.
D 34. Ethylene Glycol.
2 D 50. Cellulose Acetate.
2 D 101. Properties of Aeroplane Doping Scheme.

E. Electrical.

4 E 3. Low Tension Flexible Electric Cords and Cables ... ... *Add.**
2 E 9. Sparking Plugs and Sparking Plug Holes, Taps and Washers.
3 E 12. Electric Incandescent Lamps for Aircraft, other than Landing Lamps ... ... *Add.**
E 18. Electric Incandescent Lamps for Aircraft, Landing Lamps.

F. Fabric, etc.

6 F 1. 4 oz. Linen Fabric and Tape ... ... *Add.**
5 F 7. Rubber Hose for use with Aviation Fuel *Add**
4 F 8. Mercerised Cotton Aeroplane Fabric (Grade I).
3 F 15. Hemp Lines and Ropes for Kite Balloons *Add.**
5 F 16. Rubber Shock Absorber Cord.
2 F 30. Cotton Breaking Cord for Supplies Droppers.
3 F 31. Hemp Cordage for Supplies Droppers ... *Add.**
3 F 32. Hemp Cordage ... ... *Add.**
3 F 33. Flexible Cotton Ropes.
3 F 34. Linen Sewing Thread.
4 F 35. Flax Cordage.
2 F 37. 18 oz. Cotton Canvas.

F. Fabric, etc.—*Continued.*

2 F 38. 18 oz. Flax Canvas.
2 F 41. Rubber-Proofed Fabric.
3 F 45. Rubber Hose for use with Hot Water.
3 F 47. Cotton Tapes.
F 49. Cotton Webbing.
3 F 50. Eyeleted Fuselage Webbing.
3 F 51. Light Elastic Cord for Parachutes, W/T Instruments and Aerial Suspensions.
F 52. Linen Reinforcement Webbing.
F 53. Parachute Main Harness Webbing.
F 54. Flax Sewing Cord for Parachute Harness.
2 F 55. Cotton Duck (Dyed) for Cases and Travelling Bags for Parachutes.
F 56. Transparent Sheets for Observation Panels.
F 57 Scoured Cotton Fabrics.

K. Cast Iron.

4 K 6. Cast Iron Piston Ring Pots.
2 K 11. Iron Castings for Cylinders (Water-Cooled and Air-Cooled), Pistons and Valve Guides.

L. Aluminium and Light Alloys.

†6 L 1. Aluminium Alloy Bars, Extruded Sections and Forgings (not greater than 3 inches diameter or minor sectional dimension.) (A.S. No. (E)D.641—1941).
†5 L 3. Aluminium Alloy Sheets and Coils. (A.S. No. (E)D.628—1940).
†2 L 4. Aluminium Sheets (Hard). (A.S. No. (E)D.625—1940).
3 L 5. Aluminium-Zinc-Copper Alloy Castings.
3 L 8. 12% Copper-Aluminium Alloy Castings.
†4 L 11. 7/1 Aluminium Alloy Castings. (A.S. No. (E)D.608—1940).
†2 L 16. Aluminium Sheets (Half hard). (A.S. No. (E)D.626—1940).
†2 L 17. Aluminium Sheets (Soft). (A.S. No. (E)D.627—1940).
†2 L 24. "Y" Aluminium Alloy Castings. (A.S. No. (E)D.609—1940).
4 L 25. Aluminium Alloy Forgings (including Pistons and Cylinder Heads).
2 L 30. 98% Aluminium Notched Bars and Ingots.
3 L 31. 99% Aluminium Notched Bars and Ingots for Remelting.
† L 33. Silicon Aluminium Alloy Castings. (A.S. No. (E)D.610—1940).
† L 34. 99% Aluminium Bars and Sections. (A.S. No. (E)D.620—1940).
† L 35. "Y" Aluminium Alloy Castings (Heat Treated). (A.S. No. (E)D.611—1940).
† L 36. Aluminium Rivets. (A.S. No. (E)D.632—1940).
†2 L 37. Aluminium Alloy Rivets. (A.S. No. (E)D.633—1940).
2 L 38. Aluminium Coated Aluminium Alloy Sheets and Coils.
†2 L 39. Aluminium Alloy Bars and Forgings (greater than 3 inches diameter or width across flats or minor sectional dimension). (A.S. No. (E)D.642—1941).
†2 L 40. Aluminium Alloy Bars, Extruded Sections and Forgings (not greater than 3 inches diameter or minor sectional dimension). (A.S. No. (E)D.621—1940).
2 L 42. Aluminium Alloy Forgings (including Pistons and Cylinder Heads).
† L 44. Soft Aluminium Alloy Extruded Bars and Sections (not greater than 3 inches diameter or minor sectional dimension). (A.S. No. (E)D.622—1940).
† L 45. Aluminium Alloy Bars and Forgings (greater than 3 inches diameter across flats or minor sectional dimension). (A.S. No. (E)D.623—1940).
L 46. Soft Aluminium Alloy Sheets and Coils.
L 47. Aluminium Coated Aluminium Alloy Sheets and Coils.

*NOTE.—"*Add.*" signifies that an Addendum, Corrigendum or Revision slip is issued with this Standard.

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[P.T.O.

S. Steels.

3	S	1.	Bright Steel Bars.
2	S	2.	55-ton Alloy Steel Bars. ... ... *Add.**
†3	S	3.	Mild Steel Sheets and Strips (suitable for Welding). §(A.S. No. (E)D.501—1940).
3	S	4.	5% Nickel Steel Sheets (not suitable for Welding).
3	S	6.	"40" Carbon Steel (Normalised).
†4	S	11.	55-65 ton Nickel Chromium Steel. (A.S. No. (E)D.502—1940).
†2	S	14.	Carbon Case-hardening Steel. (A.S. No. (E)D.503—1940).
†3	S	15.	3% Nickel Case-hardening Steel. (A.S. No. (E)D.504—1940).
†3	S	20.	Tinned Steel Sheets. (A.S. No. (E)D.505—1940).
†3	S	21.	"20" Carbon Steel. (A.S. No. (E)2D.506—1942).
†3	S	24.	Bright Steel Bars for Keys. (A.S. No. (E)D.507—1940).
†2	S	28.	Air-hardening Nickel-Chrome Steel. (A.S. No. (E)D.508—1940).
†	S	61.	High Chromium Steel (Non-corroding)—35 Tons. (A.S. No. (E)D.521—1941).
†	S	62.	High Chromium Steel (Non-corroding)—46 Tons. (A.S. No. (E)D.522—1941).
†	S	65.	65-ton Nickel Chrome Steel. §(A.S. No. (E)D.509—1940).
	S	67.	5% Nickel Case-hardening Steel.
	S	68.	16% Tungsten Steel.
†	S	69.	3½% Nickel Steel. §(A.S. No. (E)D.510—1940).
†	S	70.	"55" Carbon Steel (Normalised). (A.S. No. (E)D.511—1940).
	S	71.	"30" Carbon Steel (Normalised).
2	S	76.	"40" Carbon Steel (Hardened and Tempered).
	S	77.	"30" Carbon Steel (Hardened and Tempered).
	S	79.	"55" Carbon Steel (Hardened and Tempered).
†	S	80.	High Chromium Steel (Non-corroding)—55 Tons. (A.S. No. (E)D.523—1941).
†2	S	81.	65 to 75 Ton Nickel Chromium Steel. (A.S. No. (E)D.512—1940).
†	S	82.	Nickel Chromium Case-Hardening Steel. (A.S. No. (E)D.542—1942).
†	S	84.	Low Carbon Steel Sheets and Strips (suitable for Welding). (A.S. No. (E)D.513—1940).
†	S	85.	Non-Corrodible Steel Sheets. (A.S. No. (E)D.524—1941).
	S	86.	Nickel Chromium Steel Sheets and Strips (40-50 Tons—0·1 per cent. Proof Stress).
	S	87.	Nickel Chromium Steel Strips (55-65 Tons—0·1 per cent. Proof Stress).
	S	88.	High Tensile Nickel Chromium Steel Strips (65-75 Tons—0·1 per cent. Proof Stress).
†	S	90.	High Tensile 5 per cent. Nickel Case-Hardening Steel. (A.S. No. (E)D.514—1940).

S.P. Standard Details.

**2	S	P	1.	Shackles ... ... *Add**
2	S	P	3.	Fork Joints (Low Tensile Type) ... *Add*(3)*
**4	S	P	4.	Steel Pins.
	S	P	6.	Turnbuckles.
	S	P	7.	Fork Joints (High Tensile Type) ... *Add**
	S	P	8.	Turnbuckles (Tension Rod Type) ... *Add**

T. Tubes.

2	T	1.	35-ton Steel Tubes.
2	T	2.	85-ton Nickel Chromium Steel Tubes (primarily for use as Axle Tubes).
†5	T	4.	Aluminium Alloy Tubes (Duralumin) ... *Add** (A.S. No. (E)2D.617—1941).
†5	T	7.	Seamless Copper Tubes for Oil, Petrol, Gas Starters and General Purposes. (A.S. No. (E)D.707—1940).
†4	T	9.	Aluminium Tubes. (A.S. No. (E)D.618—1940).
‡3	T	26.	20-ton Steel Tubes (Suitable for Welding). (A.S. No. (E)2D.537—1942).
	T	35.	35-ton Steel Tubes (Suitable for Welding).
	T	45.	45-ton Steel Tubes (Suitable for Welding).
†4	T	47.	Brass Tubes for Honeycomb Type Radiators. (A.S. No. (E)D.708—1940).
	T	50.	50-ton Steel Tubes.
†2	T	51.	High Pressure Seamless Copper Tubes. (A.S. No. (E)D.709—1940).
2	T	52.	Hard Drawn Phosphor-Bronze and Phosphorus Deoxidised Bronze Tubes.

V. Timber, Glues, etc.

**3	V	2.	Casein Cement.
5	V	3.	Plywood for structurally important Parts of Aircraft ... ... *Add.**
3	V	4.	Ash.
3	V	5.	Walnut (for use in Airscrews).
4	V	7.	Mahogany (for use in Airscrews) ... *Add.**
	V	8.	Rock Elm ... ... *Add.**
5	V	10.	Liquid and Jelly Gelatine Glues.
4	V	11.	Dry Gelatine Glue.
	V	34.	Plywood for unstressed or lightly stressed Parts of Aircraft.

W. Wires, Wire Ropes, etc.

3	W	1.	High Tensile Steel Wire.
5	W	2.	Flexible Steel Wire Rope ... ... *Add.**
**6	W	3.	Streamline Wires.
3	W	6.	Flexible Steel Wire Rope for Kite Balloon Cables ... ... *Add.**
6	W	8.	Tie Rods (Swaged).

X. Paints and Varnishes.

4	X	2.	Oil and Petrol resisting Battleship Grey Paint.
3	X	4.	White Dope Resisting Paint.
3	X	6.	Varnish for External Woodwork.
3	X	7.	Varnish for Internal Woodwork.
2	X	8.	Undercoating Propeller Varnish.
3	X	9.	Bituminous Paint.
2	X	11.	Transparent Woodfiller for Propellers.
2	X	12.	Finishing Propeller Varnish.
2	X	14.	Priming Varnish.
2	X	17.	Seaplane Varnish... ... ... *Add.**
	X	18.	Shellac Varnish.
	X	19.	Acid Resisting Paint.

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§Australian Standard cancelled, but still available as reprinted British Standard.

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Price 1/3 per copy, post free 1/5. (Australian Currency).

The following British Standards relating to Aircraft Materials and Components may also be obtained from the Association :—

B.S. No.		Price.	Post free.
83—1922.	Standard of Reference for Dope and Protective Covering ...	2/6	2/8
86—1919.	Magnetos for Aircraft Purposes, Dimensions of	2/6	2/8
87—1931.	Airscrew Hubs and their Fixings—		
	87 (Part 1) 1931. Airscrew Hubs	2/6	2/8
	87 (Part 2) 1931. Engine Flange Fixings	2/6	2/8
135—1939.	Benzoles (Pure Benzole, Pure Benzole for Nitration, Motor Benzole, 90's Benzole, Industrial Benzole)	4/3	4/5
185—1940.	Glossary of Aeronautical Terms [*Add*, November, 1940.] ...	9/3	9/6
491—1933.	Nomenclature of Timber for Aircraft Purposes. (Including Sources of Supply and Application to Aircraft)	2/6	2/8
563—1937.	Land Aerodrome and Airway Lighting	2/6	2/8
720—1937.	Calibration of Carburettor Jets for Petrol Engines (all Types) (for flows not exceeding 2,000 ml. per minute)	2/6	2/8

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NOTE.

D.T.D. (Directorate of Technical Development) Specifications are not issued by the British Standards Institution ; application for these should be addressed to the Director of Publications, H. M. Stationery Office, York House, Kingsway, W.C.2.

A.G.S. (Aircraft General) Standards can be obtained, by application in writing, from the Secretary, Air Ministry (R.T.P.) Kingsway, W.C.2.