

COMMONWEALTH AIRCRAFT CORPORATION PTY.LTD.

Date - 31/8/45

Specification No
CA.219D.*

Superseding - Change "C"

Dated - 26th April, 1945.

Specification for

ALUMINIUM ALLOY BARS, EXTRUDED SECTIONS,
AND FORGINGS.

(1) This specification shall be considered to be satisfied in all respects by the following, except that tolerances shall be in accordance with specification CA.702 unless otherwise specified on the drawing or purchase order.

(a) For Bars and Billets for Forging.

British Standard Aircraft Specification	6L.1 Section 2	} For CA.219-2
+ Australian Emergency Standard Specification	(E)D.641-1941 Section 2	

(b) For Bars for Machining and Extruded Sections.

British Standard Aircraft Specification	6L.1 Section 3	} For CA.219-3
+ Australian Emergency Standard Specification	(E)D.641-1941 Section 3.	
U.S. Federal Specification	QQ-A-351b.	

(c) For Forgings.

British Standard Aircraft Specification	6L.1 Section 4	} For CA.219-3
+ Australian Emergency Standard Specification	(E)D.641-1941 Section 4	
U.S. Federal Specification	QQ-A-367b-1 Class 1	

+ Australian Emergency Standard Specification (E)D.641-1941 is an endorsement without amendment of British Standard Aircraft Specification B.S. 6L.1

(2) MINIMUM PHYSICAL PROPERTY REQUIREMENTS.

Where material is bought to one of the specifications listed in Section (1), it shall be tested in accordance with the requirements of such specification. However, for design purposes, and acceptance of forgings and other material not heat treated by the manufacturer of the material the following minimum physical properties will be acceptable for CA.219-

PROPERTY	BARS FOR MACHINING	EXTRUDED SECTIONS	FORGINGS
Ult. Tensile Stress lb./sq.in. min.	55,000	50,000	55,000
0.2% Proof Stress lb./sq.in. min.	32,000	32,000	30,000
Elongation on 2 ins. or 4/A.	12	12	15

(3) SIMILAR SPECIFICATIONS.

The following specifications (alloy, type or schedule numbers) are listed for information only and shall not be construed as acceptable alternatives unless all the requirements of the above specifications are met and/or the numbers listed are shown on the relevant drawings.

A.A.17S; Alcoa 17S; S.A.E. 26; U.S. Navy 46A4g for Bars and Extruded Shapes; U.S. Navy 46A7d Grade 1 for Forgings; A.S.T.M. B89-42T; P.W.A.132; B.S.477 for Bars and Extruded Shapes; B.S.532 for Forgings; B.S. 2L.39 for Bars and Forgings; S.A.A. (E)D.642 for Bars and Forgings.

* NOTE: This specification is inactive for future design. Material as follows to be used in lieu.

For Bars and Extruded Shapes:

A.A.24S or Alcoa 24S aluminium alloy to specification CA.213.

For Forgings:

A.A.26S or Alcoa 14S aluminium alloy to specification CA.212.

Materials Engineer