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[S. 110. January, 1949]

(Replacing Specification D.T.D. 176)

NOTE.—*The Institution desires to call attention to the fact that this standard is intended to include the technical provisions necessary for the supply of the material therein referred to, but does not purport to comprise all the necessary provisions of a contract.*

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 AIRCRAFT MATERIAL

CHROMIUM-NICKEL STEEL
(CORROSION-RESISTING)
(13 tons 0.1 per cent proof stress)
(Limiting ruling section 6 in.)

A. Bars and billets for forging.
B. Black and bright bars for machining.
C. Forgings.

1. **Chemical composition.**

Carbon	-	not more than 0·16 per cent.
Silicon	-	not less than 0·20 per cent.
Manganese	-	not more than 2·0 per cent.
Nickel	-	not less than 7·0 nor more than 12·0 per cent.
Chromium	-	not less than 16·0 nor more than 20·0 per cent.
Titanium or Columbium (niobium)	-	~~not less than the amount required to satisfy the requirements of Clause 7.~~ see amdt. 1.
Sulphur	-	not more than 0·045 per cent.
Phosphorus	-	not more than 0·045 per cent.

The following additional elements may be present at the option of the manufacturer :—

Tungsten, molybdenum, tantalum, copper or vanadium.
Stabilizing elements :- see amdt. 3.

2. **Process of manufacture.**

Electric.

3. **Rough machining.**

Section One, Clause 5.2, of British Standard 2 S. 100.

4. **Condition.**

4.1. Bars and billets for forging shall be supplied as rolled or forged.

4.2. Black bars for machining up to and including 2½ inch diameter shall be supplied in the softened condition.

4.3. Black bars for machining over 2½ inch diameter shall be supplied as rolled or forged, and the parts made therefrom shall be softened after machining.