

**Ministry of Defence
Defence Procurement Agency, ADRP2
Abbey Wood
Bristol
BS34 8JH**

OBSOLESCENCE NOTICE

All DTD specifications were declared obsolescent from 1st April 1999. All DTD 900 series approvals also lapsed at that time. The standards will no longer be updated but will be retained as obsolescent documents to provide for the servicing of existing equipment.

Further Guidance

The aim in declaring the specifications obsolescent is to recognise that the documents are not being updated and thus should be used with care by both purchaser and supplier. For example, a specification could contain valid technical information but may also contain type approval clauses that contradict procurement policy and/or use materials that do not comply with environmental legislation. The obsolescent specification can still be used as a basis for a purchase provided that the supplier and purchaser agree suitable changes to the specification within the purchase order/contract.

For the DTD 900 system, each specification has provided an MoD approved material and process. For these items, the declaration of obsolescence will constitute the termination of both the extant MoD approval and the continuing MoD assessment that had underpinned those approvals. Again, the technical content of the document remains valid and can be used by both purchaser and supplier as a basis for a contract but an acceptable (to the parties) approval/assessment procedure would be required.

Aerospace Material Specification
CHROMIUM-NICKEL NON-CORRODIBLE STEEL WIRE
(Suitable for the manufacture of wire thread inserts)

NOTE: This specification is one of a series issued by the Procurement Executive, Ministry of Defence to meet a requirement not covered by an existing British Standard for aerospace material.

1. Chemical composition

1.1 The chemical composition of the wire shall be:

Element	Per cent	
	min.	max.
Carbon		0.08
Silicon	0.20	1.00
Manganese		2.00
Nickel	8.0	11.00
Chromium	17.5	20.00
Sulphur		0.045
Phosphorus		0.045

1.2 The complete analysis of every cast shall be supplied to the inspector.

2. Condition

2.1 The wire shall be supplied in the hard drawn condition.

3. Freedom from defects

3.1 The wire shall be free from harmful defects.

3.2 Any wire may be rejected for faults revealed subsequently during manufacture, although it has been passed previously on chemical composition and mechanical tests.

4. Selection and preparation of mechanical test samples

4.1 The inspector shall select test samples from each coil of wire as follows:

(a) One test sample for the tensile test specified in Clause 5.2.

(b) One test sample of sufficient length for the wrapping test specified in Clause 5.3.

4.2 The test samples shall not be heat treated or mechanically worked before being tested.

5. Mechanical properties

5.1 The mechanical properties obtained from test samples selected and prepared as specified in Clause 4 shall be as follows:

5.2 *Tensile test* - The tensile strength shall comply with the following requirements appropriate to the size of wire.

Diameter of wire mm	Tensile strength N/mm ²
Up to 0.61	1620/1820
over 0.61 to 0.76	1510/1730
over 0.76 to 1.07	1420/1620
over 1.07 to 1.42	1310/1510
over 1.42 to 1.78	1200/1420
over 1.78 to 2.29	1110/1310
over 2.29 to 2.92	1000/1200
over 2.92	900/1110

5.3 *Wrapping test.*-The test piece shall be wrapped closely round a mandrel eight times and unwound with the exception of the last turn. The diameter of the mandrel shall be equal to the diameter of the wire, and to the minor sectional dimension if the section of the wire is other than round. When the section of the wire is other than round, the major axis of the cross section of the wire shall be parallel with the longitudinal axis of the mandrel; the corners of such wire may be chamfered if necessary.

The wire shall withstand this test without showing cracking or signs of fracture.

6. Retests

6.1 If any test piece fails to comply with the tensile or wrapping test specified in Clauses 5.2 or 5.3 the inspector shall select for test from the coil represented by the test piece which failed, two further test samples, one from each end of the coil. Both test pieces shall comply with the tensile test or the wrapping test, as appropriate, as specified in Clause 5.2 or 5.3

7. Margins of manufacture

7.1 Tolerances on the nominal diameter of the wire shall be agreed between the manufacturer and the purchaser, and shall be stated on the order.

7.2 The coils of wire shall comply with the following weight and dimensional requirements, except where they are agreed between the manufacturer and the purchaser.

Wire diameter mm	Weight of coil kg	Inside diameter of coil mm
Up to 1	18 max.	200, 250 or 300
over 1 to 6.5	45 max.	300, 350, 400, 450, or 500

8. Identification

8.1 Each coil of wire passed by the inspector shall bear a tag stamped with the identification mark of the inspector and such marking as shall ensure full identification of the material.

Approved for issue.

R. J. E. GLENNY

Head of Materials Department

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