
**Aerospace — Hydraulic system tubing —
Qualification tests for bent tubes**

*Aéronautique et espace — Tubes pour circuits hydrauliques — Essais
de qualification pour tubes coulés*

Preview

Dit document mag slechts op een stand-alone PC worden geïnstalleerd. Gebruik op een netwerk is alleen toestaan als een aanvullende licentieovereenkomst voor netwerkgebruik met NEN is afgesloten. This document may only be used on a stand-alone PC. Use in a network is only permitted when a supplementary license agreement for us in a network with NEN has been concluded.



Reference number
ISO 8574:2004(E)

© ISO 2004

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

Copyright
Preview

© ISO 2004

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 8574 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 10, *Aerospace fluid systems and components*.

This second edition cancels and replaces the first edition (ISO 8574:1990), which constitutes a minor revision by adding inch-dimensioned tubing and by deleting flexure fatigue testing.

Voorbeeld
Preview

Aerospace — Hydraulic system tubing — Qualification tests for bent tubes

1 Scope

This International Standard specifies pressure impulse and burst test procedures for determining and classifying the impulse fatigue strengths of bent tubes used in aerospace hydraulic systems. The procedures are intended for qualification purposes of high- and low-pressure system tubing or for the evaluation of new materials for hydraulic system tubing.

NOTE Requirements for tubing used in aerospace hydraulic systems are given in ISO 8575.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6772, *Aerospace — Fluid systems — Impulse testing of hydraulic hose, tubing and fitting assemblies*

3 Terms and definitions

For the purposes of this document the following terms and definitions apply.

3.1

proof pressure

static pressure for testing hydraulic system tubing, a prescribed multiple of the nominal system or sub-system pressure

3.2

tube failure

leakage or rupture of the tube itself during test

NOTE See 6.1.2.

4 Test equipment

4.1 Pressure impulse equipment

The test equipment shall be capable of producing the pressure impulse curve specified in ISO 6772 (see 6.3).

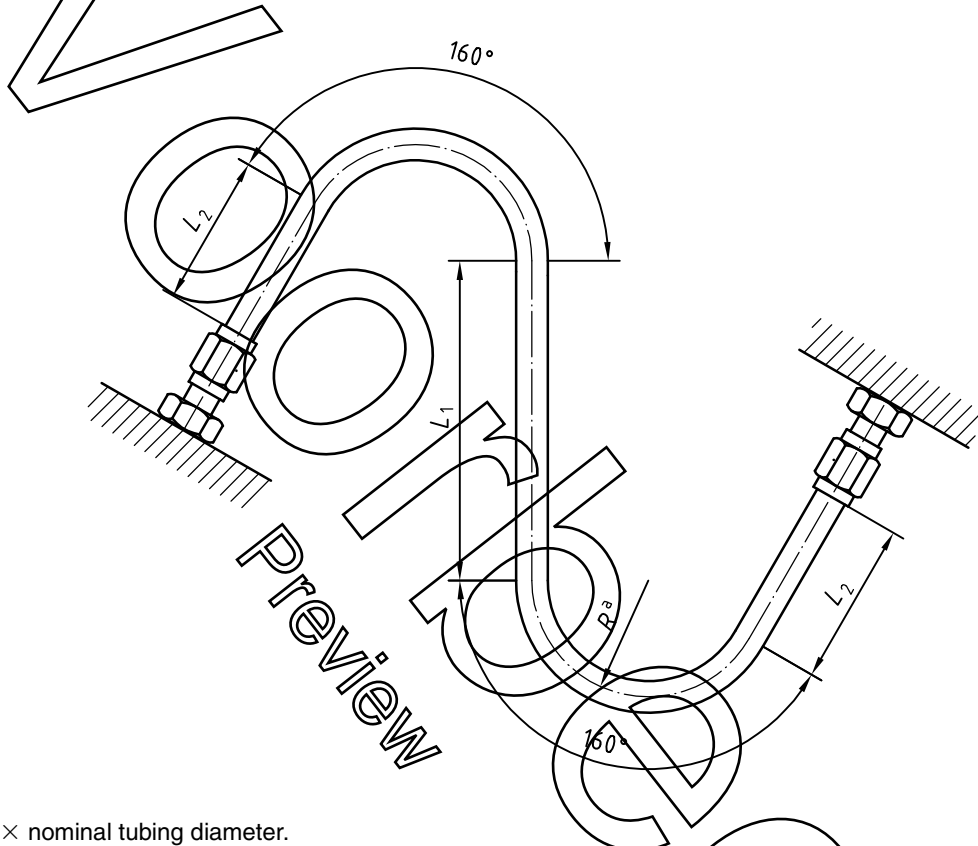
4.2 Burst pressure equipment

The test equipment shall be capable of producing the pressure requirements specified in 6.4.

5 Test specimens

5.1 Configuration

The test specimens shall consist of bent lengths of the relevant tubing of dimensions as specified in Figure 1 and Table 1 (with inch-dimensioned tubing given in Table 2), according to the case, manufactured using production techniques and requirements, in addition to test fittings and adaptors where required. Except where otherwise specified, the bend radius (R) of the specimens shall be three times the nominal tube diameter.



^a $R = 3 \times$ nominal tubing diameter.

Figure 1 — Test specimen (S-tube) for the impulse test

Table 1 — Test specimen lengths for impulse testing — metric size tubing (see Figure 1)

Dimensions in millimetres

Nominal tube size		L_1	L_2	Total tube length
DN size ^a designation	Nominal diameter			
		+13 0	+6 0	+25 0
DN6	6	65	30	300
DN10	10	65	30	300
DN12	12	90	30	400
DN16	16	140	30	510
DN20	20	140	30	570
DN25	25	140	30	670

^a DN size is the nominal diameter expressed in millimetres.

Bestelformulier

Stuur naar:

NEN Standards Products & Services
t.a.v. afdeling Klantenservice
Antwoordnummer 10214
2600 WB Delft



NEN Standards Products & Services

Postbus 5059
2600 GB Delft

Vlinderweg 6
2623 AX Delft

T (015) 2 690 390
F (015) 2 690 271

www.nen.nl/normshop

Ja, ik bestel

__ ex. ISO 8574:2004 en Aerospace - Hydraulic system tubing - Qualification tests for bent tubes € 31.57

Wilt u deze norm in PDF-formaat? Deze bestelt u eenvoudig via www.nen.nl/normshop

Gratis e-mailnieuwsbrieven

Wilt u op de hoogte blijven van de laatste ontwikkelingen op het gebied van normen, normalisatie en regelgeving? Neem dan een gratis abonnement op een van onze e-mailnieuwsbrieven. www.nen.nl/nieuwsbrieven

Gegevens

Bedrijf / Instelling _____

T.a.v. _____ O M O V

E-mail _____

Klantnummer NEN _____

Uw ordernummer _____ BTW nummer _____

Postbus / Adres _____

Postcode _____ Plaats _____

Telefoon _____ Fax _____

Factuuradres (indien dit afwijkt van bovenstaand adres)

Postbus / Adres _____

Postcode _____ Plaats _____

Datum _____ Handtekening _____

Retourneren

Fax: 015 2 690 271

E-mail: klantenservice@nen.nl

Post: NEN Standards Products & Services,

t.a.v. afdeling Klantenservice
Antwoordnummer 10214,
2600 WB Delft

(geen postzegel nodig).

Voorwaarden

- De prijzen zijn geldig tot 31 december 2018, tenzij anders aangegeven.
- Alle prijzen zijn excl. btw, verzend- en handelingskosten en onder voorbehoud bij o.m. ISO- en IEC-normen.
- Bestelt u via de normshop een pdf, dan betaalt u geen handeling en verzendkosten.
- Meer informatie: telefoon 015 2 690 391, dagelijks van 8.30 tot 17.00 uur.
- Wijzigingen en typfouten in teksten en prijsinformatie voorbehouden.
- U kunt onze algemene voorwaarden terugvinden op: www.nen.nl/leveringsvoorwaarden.