
**Aerospace — Test methods for
polytetrafluoroethylene (PTFE) inner-tube
hose assemblies —**

**Part 2:
Non-metallic braid**

*Aéronautique et espace — Méthodes d'essai des tuyauteries flexibles
à tube intérieur en polytétrafluoroéthylène (PTFE) —*

Partie 2: Tuyauteries à gaine non métallique



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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 8829-2 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 10, *Aerospace fluid systems and components*.

ISO 8829-2 cancels and replaces ISO 8829:1990, which has been technically revised.

ISO 8829 consists of the following parts, under the general title *Aerospace — Test methods for polytetrafluoroethylene (PTFE) inner-tube hose assemblies*:

- *Part 1: Metallic (stainless steel) braid*
- *Part 2: Non-metallic braid*

Introduction

This part of ISO 8829 is intended to standardize the test methods for qualification of polytetrafluoroethylene (PTFE) hose and hose assemblies used in aircraft fluid systems. The tests are intended to simulate the most strenuous demands encountered in aircraft. Compliance with these test methods is necessary for hose and hose assemblies which are used in systems where a malfunction could affect the safety of flight.

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Aerospace — Test methods for polytetrafluoroethylene (PTFE) inner-tube hose assemblies —

Part 2: Non-metallic braid

1 Scope

This part of ISO 8829 specifies test methods for flexible polytetrafluoroethylene (PTFE) inner tubes with non-metallic braided hose and hose assemblies used in aircraft fluid systems, in the pressure and temperature ranges covered by pressure classes and temperature types, as specified in ISO 6771.

This part of ISO 8829 applies to the hose and the hose coupling. The tests and assembly requirements for the connecting end fittings are covered in the procurement specification.

This part of ISO 8829 is applicable when reference is made to it in a procurement specification or other definition document.

NOTE Fluids used for the tests are listed in Annex A.

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 2685:1998, *Aircraft — Environmental test procedure for airborne equipment — Resistance to fire in designated fire zones*

ISO 6771¹⁾, *Aerospace — Fluid systems and components — Pressure and temperature classifications*

ISO 6772:1988, *Aerospace — Fluid systems — Impulse testing of hydraulic hose, tubing and fitting assemblies*

ISO 6773:1994, *Aerospace — Fluid systems — Thermal shock testing of piping and fittings*

ISO 7258:1984, *Polytetrafluoroethylene (PTFE) tubing for aerospace applications — Methods for the determination of the density and relative density*

1) To be published. (Revision of ISO 6771:1987)