INTERNATIONAL STANDARD

ISO 8573-9

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Compressed air —

Part 9: Test methods for liquid water content

Air comprimé —

Partie 9: Méthodes d'essai pour la détermination de la teneur en eau liquide

Reference number
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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 8573-9 was prepared by Technical Committee ISO/TC 118, *Compressors, pneumatic tools and pneumatic machines*, Subcommittee SC 4, *Quality of compressed air*.

ISO 8573 consists of the following parts, under the general title *Compressed air*:

— *Part 1: Contaminants and purity classes*

— *Part 2: Test methods for aerosol oil content*

— *Part 3: Test methods for measurement of humidity*

— *Part 4: Test methods for solid particle content*

— *Part 5: Test methods for oil vapour and organic solvent content*

— *Part 6: Test methods for gaseous contaminant content*

— *Part 7: Test methods for viable microbiological contaminant content*

— *Part 8: Test methods for solid particle content by mass concentration*

— *Part 9: Test methods for liquid water content*

Part 2 is under revision.

Introduction

Water can be present in compressed air systems in two states: liquid and vapour. Liquid water usually consists of liquid aerosol and wall flow.

This part of ISO 8573 deals with liquid water content. Water vapour content is dealt with in ISO 8573-3.

Compressed air —

Part 9:
Test methods for liquid water content

1 Scope

This part of ISO 8573 specifies test methods for determining the liquid water content in compressed air, expressed as the liquid water mass concentration. The limitations of the methods are also given. One of a series of standards aimed at harmonizing air contamination measurements, it identifies sampling techniques and also gives requirements for evaluation, uncertainty considerations and reporting for the air purity parameter liquid water. The test methods are suitable for determining the purity classes in accordance with ISO 8573-1.

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 1219-1, *Fluid power systems and components — Graphic symbols and circuit diagrams — Part 1: Graphic symbols*

ISO 3857-1, *Compressors, pneumatic tools and machines — Vocabulary — Part 1: General*

ISO 5598, *Fluid power systems and components — Vocabulary*

ISO 8573-1, *Compressed air — Part 1: Contaminants and purity classes*

ISO 8573-2, *Compressed air — Part 2: Test methods for aerosol oil content*

ISO 8573-3, *Compressed air — Part 3: Test methods for measurement of humidity*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 3857-1, ISO 5598, ISO 8573-1, ISO 8573-2 and the following apply.

3.1
water aerosol
liquid water particles in compressed air that have negligible fall velocity/settling velocity

3.2
liquid water
water aerosol and wall flow in compressed air