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Vacuum technology — Vocabulary —

Part 2: Vacuum pumps and related terms

Technique du vide — Vocabulaire —

Partie 2: Pompes à vide et termes associés

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 112, *Vacuum technology*.

This second edition cancels and replaces the first edition (ISO 3529-2:1981), which has been technically revised. The main changes compared to the previous edition are as follows:

— under positive displacement pumps are added diaphragm-, peristaltic-, scroll-, screw-, claw- and trochoid vacuum pumps;

— under kinetic vacuum pumps are added regenerative- and compound turbo vacuum pump;

— under gas entrapment or capture vacuum pumps different types of condensers are added;

— under parts, categories and characteristics of vacuum pumps are added some new actual used definitions.

A list of all parts in the ISO 3529 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Vacuum technology — Vocabulary —

Part 2:
Vacuum pumps and related terms

1 Scope

This document gives definitions of vacuum pumps and related terms. It is a continuation of ISO 3529-1 which defines general terms used in vacuum technology.

2 Normative references

ISO 3529-1:2019, *Vacuum technology — Vocabulary — Part 1: General terms*

ISO 21360-1:2012, *Vacuum technology — Standard methods for measuring vacuum-pump performance — Part 1: General description*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1 Vacuum pumps

3.1.1
vacuum pump
device for creating, improving and/or maintaining a vacuum

Note 1 to entry: Two basically distinct categories may be considered: *gas transfer pumps* (3.1.2) and *gas gathering vacuum pumps* (3.1.32)

Note 2 to entry: Some definitions given in ISO 3529-1 are repeated in this document in deferent terms to adapt to vacuum pumps.

Note 3 to entry: Vacuum is defined in ISO 3529-1.

Note 4 to entry: A classification table for vacuum pumps is described in Annex A.

3.1.2
gas transfer vacuum pumps
vacuum pump (3.1.1) that transports gas molecules from the inlet to the *outlet* (3.2.3) of the vacuum pump by means of positive displacement or transfer of kinetic momentum