## INTERNATIONAL STANDARD

ISO 1607-1

> Second edition 1993-12-01

# Positive-displacement vacuum pumps — Measurement of performance characteristics —

## Part 1:

Measurement of volume rate of flow (pumping speed)

Pompes primaires volumétriques à vide — Mesurage des caractéristiques fonctionnelles —

Partie 1: Mesurage du débit-volume



Reference number ISO 1607-1:1993(E)

#### **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.

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.

International Standard ISO 1607-1 was prepared by Technical Committee ISO/TC 112, Vacuum technology, Sub-Committee SC 3, Measurement of the performance characteristics of vacuum pumps.

This second edition cancels and replaces the first edition (ISO 1607-1:1980), which has been technically revised.

ISO 1607 consists of the following parts, under the general title *Positive-displacement vacuum pumps* — *Measurement of performance characteristics*:

- Part 1: Measurement of volume rate of flow (pumping speed)
- Part 2: Measurement of ultimate pressure

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International Organization for Standardization Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

### Introduction

The purpose of ISO 1607 is to ensure that measurements of the performance characteristics of positive-displacement vacuum pumps are, as far as possible, carried out by uniform procedures and under uniform conditions. It is hoped that, as a result, measurements conducted by different manufacturers or in different laboratories, and statements of performance quoted in manufacturers' literature will be on a properly comparable basis to the benefit of both user and manufacturer.

It is envisaged that the complete International Standard will, in due course, deal comprehensively with the measurement of a wide range of performance characteristics of the main types of positive-displacement vacuum pumps. In order, however, that useful agreements of more restricted scope may be implemented with the least possible delay, ISO 1607 is published in parts.