

AMERICAN NATIONAL STANDARD



*for Ophthalmic Optics –
Information Interchange for
Ophthalmic Optical Equipment*

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American National Standard
for Ophthalmic Optics –
Information Interchange for
Ophthalmic Optical Equipment

Secretariat

Optical Laboratories Association

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American National Standards Institute, Inc.

American National Standard

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Optical Laboratories Association
Z80 Secretariat
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Foreword (This foreword is not part of American National Standard ANSI Z80.24-2002.)

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 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ANSI Z80.24-2002 adopts the text of ISO 16284:2001 as an American National Standard.

International Standard ISO 16284 was prepared by Technical Committee ISO/TC 172, Optics and optical instruments, Subcommittee SC 7, Ophthalmic optics and instruments.

Annex A forms a normative part of this International Standard. Annexes B and C are for information only.

Suggestions for improvement of this standard will be welcome. They should be sent to Optical Laboratories Association, P.O. Box 2000, Merrifield, VA 22116-2000.

This standard was processed and approved for submittal to ANSI by Accredited Standards Committee on Ophthalmic Standards, Z80. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the Z80 Committee had the following members:

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F. Dow Smith, Vice-Chairman
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Introduction

This International Standard is the result of a desire shared by manufacturers of optical laboratory equipment and producers of software used in optical laboratories to simplify the interconnection of their products.

The International Standard defined herein provides:

- a method by which machines and computer systems conduct their exchanges of data;
- a method by which computer systems can initialize such parameters on machines as the manufacturers thereof allow;
- a method by which machines can initialize computer systems with information that the systems can use for various purposes;
- a method by which a machine can inform a computer system as to what information it wants to receive, thus allowing machines to define new interfaces dynamically.
- a standard set of records and device types that are used to communicate agreed-upon sets of information.

The last feature listed above requires that this International Standard be amended on a regular basis, as the need for new data elements is inevitable.

Ophthalmic optics — Information interchange for ophthalmic optical equipment

1 Scope

This International Standard establishes a method by which machines and computer software systems used in the fabrication of ophthalmic lenses can exchange information.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 13666:1998, *Ophthalmic optics — Spectacle lenses — Vocabulary*.

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO 13666 and the following apply.

3.1 General

3.1.1 device

machine or instrument used in the fabrication of ophthalmic lenses that communicates with a computer system to send or receive job information

3.1.2 host

computer system providing information to or receiving information from a device

3.1.3 job

order for prescription ophthalmic lenses or spectacles

3.1.4 download

communication session in which the host system transmits data to the device

3.1.5 upload

communication session in which the device transmits data to the host