

International Standard

ISO 10256-4

Protective equipment for use in ice hockey —

Part 4:

Head and face protectors for Standards goalkeepers (https://standards.iteh.ai)

Équipements de protection destinés à être utilisés en hockey sur glace —

Partie 4: Protections de tête et de visage pour les gardiens de but

SO 10256-4:2024

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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.

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 document 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 83, *Sports and other recreational facilities and equipment*, Subcommittee SC 5, *Ice hockey equipment and facilities*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 158, *Head protection*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 10256-4:2016), which has been technically revised.

The main changes are as follows:

- <u>Clause 1</u> has been modified to clarify that the standard only refers to head and face protectors for goalkeepers;
- Clause 3 has been expanded to include additional definitions;
- <u>Clause 4</u> and <u>Clause 5</u> have been revised to include types of goalkeeper head and face protectors;
- information on ergonomics ($\underline{4.2}$ and $\underline{5.2}$), innocuousness ($\underline{4.3}$ and $\underline{5.3}$), and markings ($\underline{4.4}$ and $\underline{5.4}$) has been added;
- 4.7 and 5.7 have been revised to clarify puck impact resistance requirements and tests;
- <u>5.1.2</u> has been revised;
- in 5.1.4, a difference between head protector tests (5.1.4.2) and face protector tests (5.1.4.3) has been added;
- in $\underline{5.5}$, $\underline{5.6}$ and $\underline{5.7}$, test procedures have been revised;
- in <u>5.8</u> and <u>5.10</u> test procedures have been added;
- in <u>Clause 6</u> requirements have been clarified;
- in <u>Clause 7</u> requirements have been updated for head protector (7.1) and for the face protector (7.2) portions of the goalkeeper head and face protector;

- <u>Clause 8</u> has been expanded to provide more information regarding assembly and care of the product;
- Table 1 has been expanded to include the protocol and sequencing of all tests for the goalkeeper head and face protector;
- Figure 1 has been modified to illustrate the overlap of the face protector portion of goalkeeper head and face protector.

A list of all parts in the ISO 10256 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.

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Introduction

Ice hockey is a high-speed, collision sport in which there is a risk of injury. By playing this sport, participants accept the risk of serious injury, paralysis, or death.

This document addresses the unique demands and hazards associated with the position of ice hockey goalkeeper.

Two types of goalkeeper head and face protectors are designated. Performance requirements were determined after consideration of the state of the art of head and face protective design and manufacture.

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Protective equipment for use in ice hockey —

Part 4:

Head and face protectors for goalkeepers

1 Scope

This document specifies performance requirements and test methods for head and face protectors for use by ice hockey goalkeepers only.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 10256-1:2024, Protective equipment for use in ice hockey — Part 1: General requirements

ISO 10256-2:2024, Protective equipment for use in ice hockey — Part 2: Head protectors for skaters

ISO 10256-3:2024, Protective equipment for use in ice hockey — Part 3: Face and eye protectors for skaters

CSA Z262.6-14, Specifications for Facially Featured Headforms

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10256-1:2024 and the following apply.

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

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

3.1

head protector

device intended to reduce the risk of head injury to ice hockey participants

3.2

face protector

device intended to reduce the risk of injury to the eyes and face of ice hockey participants

3.3

attachment

protector that can be attached or removed by the user described in the manufacturer's documentation

3.4

fastening system

devices used to connect one or more attachments to the *head protector* (3.1)

3.5

chip

readily visible particle missing from the eye or face protector (3.2) with an area $> 9 \text{ mm}^2$

3.6

crack

condition in which there is a break in the protector through the full thickness of the material without complete separation of parts

3.7

fracturing

condition in which there is a complete separation of any part of the protector into pieces

3 8

field of vision

extent of vision through the protector in the 'as worn' position

39

retention system

system that secures the *head protector* (3.1) to the head by passing under the mandible in whole or in part when adjusted in accordance with manufacturer's instructions

3.10

helmet positioning index

HPI

vertical distance measured at the median plane, from the front edge of the *head protector* (3.1) to the reference plane, when the head protector is placed on the reference headform

3.11

model

category of protector with the same essential characteristics that can come in several sizes

Note 1 to entry: Essential characteristics include:

- a) materials;
- b) construction;
- c) retention system;
- d) protective padding.

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3.12

combination

unit of a face protector placed on a hockey *head protector* (3.1) with which it is intended to be used

Note 1 to entry: The head protector shall be compliant with ISO 10256-2:2024.

4 Requirements

4.1 Types of goalkeeper head and face protectors

The types of goalkeeper head and face protectors shall be as follows.

- a) Type D1 intended for use by all goalkeepers and meeting the test blade penetration resistance for the head and face.
- b) Type D2 intended for use by goalkeepers ≥ 18 years of age and meeting the test blade penetration resistance for the head and the test disk penetration resistance for the face.

4.2 Ergonomics

ISO 10256-1:2024, 4.1 shall apply.