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Industrijske zaščitne čelade

Industrial protective helmets

Industrieschutzhelme

Casques de protection pour l'industrie

Ta slovenski standard je istoveten z: EN 397:2025

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Industrial protective helmets

Casques de protection pour l'industrie

Industrieschutzhelme

This European Standard was approved by CEN on 14 March 2025.

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Contents

Page

European foreword	4
Introduction	5
1 Scope.....	6
2 Normative references.....	6
3 Terms and definitions	7
4 Requirements.....	9
4.1 Physical requirements.....	9
4.1.1 Requirements overview	9
4.1.2 General.....	10
4.1.3 Material and design.....	10
4.1.4 Penetration of the shell via ventilation holes.....	10
4.1.5 Sizing	10
4.1.6 Ergonomics.....	11
4.2 Performance requirements.....	11
4.2.1 Shock absorption on-crown impacts for type 1 and 2.....	11
4.2.2 Shock absorption for high energy on-crown impact for type 2.....	11
4.2.3 Shock absorption for off-crown impacts for type 2.....	11
4.2.4 Resistance to penetration.....	11
4.2.5 Retention system	11
4.2.6 Resistance to ignition.....	12
4.2.7 Special application requirements.....	12
4.2.8 Marking	18
5 Test methods	18
5.1 Samples.....	18
5.2 Conditioning for testing.....	24
5.2.1 General.....	24
5.2.2 Ambient temperature.....	24
5.2.3 Low temperature	24
5.2.4 High temperature	24
5.2.5 Water immersion	24
5.2.6 Artificial ageing	24
5.2.7 Higher temperature	24
5.2.8 Artificial ageing for enhanced visibility	26
5.3 Headforms	26
5.3.1 Construction	26
5.3.2 Selection of size	26
5.4 Pin insertion of the shell via ventilation holes.....	26
5.5 Sizing	27
5.6 Ergonomics.....	27
5.6.1 General.....	27
5.6.2 Test subjects	27
5.6.3 Procedure	27
5.7 Shock absorption	28
5.7.1 Shock absorption for crown impact for type 1 and type 2.....	28

5.7.2	Shock absorption for high energy on-crown impact for type 2	29
5.7.3	Shock absorption for off-crown for type 2	29
5.8	Resistance to penetration.....	31
5.9	Retention system strength release.....	31
5.10	Retention system effectiveness	31
5.10.1	General	31
5.10.2	Principle.....	32
5.10.3	Apparatus	32
5.11	Resistance to ignition of the shell	34
5.11.1	Principle.....	34
5.11.2	Apparatus	34
5.11.3	Procedure	34
5.11.4	Report	34
5.12	Molten metal splash.....	34
5.12.1	Principle.....	34
5.12.2	Apparatus	35
5.12.3	Procedure	35
5.13	Electrostatic properties.....	35
5.13.1	Atmosphere for conditioning and testing.....	35
5.13.2	Surface resistance test for helmets comprising dissipative or conductive components	35
5.13.3	Leakage resistance test for helmets comprising dissipative or conductive components	35
5.13.4	Capacitance test for isolated conductive helmet components.....	36
5.13.5	Transferred charge test for insulating and isolated dissipative helmet components	37
5.14	Enhanced visibility.....	39
5.14.1	Background material.....	39
5.14.2	Surface of retroreflective material.....	39
5.14.3	Coefficient of retroreflection	39
5.15	Determination of resistance to off-crown penetration.....	39
5.15.1	Apparatus	39
5.15.2	Procedure	40
6	Marking	40
6.1	General	40
6.2	General markings	40
7	Manufacturer's instructions and information	41
7.1	General	41
7.2	For electrostatic properties.....	42
7.3	For enhanced visibility properties.....	43
Annex A	(normative) Flowchart for testing electrostatic properties	44
Annex ZA	(informative) Relationship between this European Standard and the essential Requirements of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment aimed to be covered....	53
Bibliography	55

EN 397:2025 (E)**European foreword**

This document (EN 397:2025) has been prepared by Technical Committee CEN/TC 158 “Head protection”, the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2025, and conflicting national standards shall be withdrawn at the latest by October 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 397:2012+A1:2012.

In comparison with the previous version EN 397:2012+A1:2012 of edition EN 397:2012, the following technical modifications have been made:

- the Introduction has been revised and modernized;
- two types of helmets have been introduced; with protection against impacts on-crown (type 1) or on-crown and off-crown (type 2);
- measuring of drop speed has been defined for improved reproducibility;
- electrostatic and enhanced visibility requirements have been added;
- reference to EN 50365:2023, 4.3 for requirements on electrical insulation has been made.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

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For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

An industrial protective helmet is intended to be used in different work settings such as construction, mining, shipping, manufacturing, etc. With this in mind the accidents that occur can therefore be different depending on the workplace. Typical hazards include falling objects, slips, trips or falls of a person from the same level or one above and loss of control of machinery. The intention with this document is to reduce the potential injury to the head and risks associated with the hazards but will not eliminate them completely.

Manufacturers complying with European Standards offer a suite of head protection devices for general industrial use:

- the industrial bump cap meeting the requirements of EN 812;
- the industrial protective helmet meeting the requirements of type 1 and type 2 in this document;
- the high performance industrial helmet meeting the requirements of EN 14052.

EN 812, *Industrial bump caps* is intended to provide protection to the wearer against the effects of striking their head against hard or stationary objects with sufficient severity to cause lacerations or other superficial injuries. They are not intended to provide protection against the effects of impacts on the crown area. In addition to the mandatory requirements the bump cap can have shock absorption properties at low temperatures, be ignition resistant and have electrical insulation properties.

In this document type 1 industrial protective helmets are intended to reduce the possible consequential effects of head injuries caused by impacts on the crown area. In this document type 2 industrial protective helmets are tested using higher impact energy to the crown and require some additional testing for impacts off-crown, front, rear, sides of the helmet. It also includes a retention system that meets requirements for chin strap strength and effectiveness. In addition to the requirements for the type 1 and type 2 helmets, this document includes requirements for special applications, for example low temperature, high temperature, electrical insulation, electrostatic and enhanced visibility properties.

EN 14052, *High performance industrial helmets* offers even greater protection from falling objects, protection from off-crown impacts and protection from penetration by a flat blade striker. It also includes a retention system that meets requirements for chin strap strength and effectiveness.

Angled and tangential (rotational) impacts are one of the causes of head injuries. At the time of developing this document, no rotational test method was available. Therefore, only linear impacts to a helmeted head in the shock absorption test have been addressed. CEN/TC 158 will in the near future present a new test method, which can be used in future revisions of this document.

The wearing of a helmet meeting the requirements in this document reduces, but not eliminates, the consequences of head injury. A proportion of the energy of an impact is absorbed by the helmet, thereby reducing the force of the blow sustained by the head.

There are limits to the amount of protection that can be provided and wearing a helmet cannot always prevent death or long term disability.