AS/NZS 2161.3:2020
EN 388:2016+A1:2018

Australian/New Zealand Standard™

# Occupational protective gloves

## Part 3: Protection against mechanical risks

*This national standard is the identical adoption of EN 388:2016+A1:2018 with the permission of the European Committee for Standardization — CEN, Rue de la Science 23, B — 1040 Brussels, Belgium.*

AS/NZS 2161.3:2020

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The following are represented on Committee SF-053:

Australasian Fire and Emergency Service Authorities Council
Australian Chamber of Commerce and Industry
Australian Fashion Council
Australian Industry Group
AWTA Product Testing (Testing Interests Australia)
Department of Defence (Australian Government)
NCSA Foundation
New Zealand Road Safety Manufacturers Association
United Firefighters Union of Australia
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VicLab (Testing Interests Australia)

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# Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-053, Protective Clothing, to supersede AS/NZS 2161.3:2005, *Occupational protective gloves, Part 3: Protection against mechanical risks*.

The objective of this document is to specify requirements, test methods, marking and information to be supplied for protective gloves against the mechanical risks of abrasion, blade cut, tear, puncture and, if applicable, impact.

This document is intended to be used in conjunction with AS/NZS 2161.2.

The test methods developed in this standard may also be applicable to arm protectors.

This document is identical with, and has been reproduced from, EN 388:2016+A1:2018, *Protective gloves against mechanical risks*.

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## European foreword

This document (EN 388:2016+A1:2018) has been prepared by Technical Committee CEN/TC 162 “Protective clothing including hand and arm protection and lifejackets”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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 includes Amendment 1 approved by CEN on 2018-10-24.

This document supersedes [A1] EN 388:2016 [A1].

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A1] [A1].

[A1] This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of Regulation (EU) 2016/425.

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document. [A1]

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## 1 Scope

This European Standard specifies requirements, test methods, marking and information to be supplied for protective gloves against the mechanical risks of abrasion, blade cut, tear, puncture and, if applicable, impact.

This standard is intended to be used in conjunction with EN 420.

The test methods developed in this standard may also be applicable to arm protectors.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 420, *Protective gloves — General requirements and test methods*

〚A1〛 EN 1049-2, *Textiles — Woven fabrics — Construction — Methods of analysis — Part 2: Determination of number of threads per unit length (ISO 7211-2:1984 modified)* 〚A1〛

〚A1〛 EN 12127, *Textiles — Fabrics — Determination of mass per unit area using small samples* 〚A1〛

EN 13594:2015, *Protective gloves for motorcycle riders — Requirements and test methods*

〚A1〛 EN ISO 5084, *Textiles — Determination of thickness of textiles and textile products (ISO 5084:1996)* 〚A1〛

EN ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system (ISO 7500-1)*

EN ISO 11644, *Leather — Test for adhesion of finish (ISO 11644)*

〚A1〛 CEN ISO/TR 11827, Textiles — Composition testing — Identification of fibres 〚A1〛

EN ISO 12947-1, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 1: Martindale abrasion testing apparatus (ISO 12947-1)*

EN ISO 13934-1, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method (ISO 13934-1)*

EN ISO 13997:1999, *Protective clothing — Mechanical properties — Determination of resistance to cutting by sharp objects (ISO 13997:1999)*

〚A1〛 ISO 1139, *Textiles — Designation of yarns* 〚A1〛

ISO 4649:2010, *Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device*

ISO 5725-2, *Accuracy (trueness and precision) of measurement methods and results — Part 2: Basic method for the determination of repeatability and reproducibility of a standard measurement method*

〚A1〛 ISO 7211-1, *Textiles — Woven fabrics — Construction — Methods of analysis — Part 1: Methods for the presentation of a weave diagram and plans for drafting, denting and lifting*