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Moulded plastics footwear — Lined or unlined polyurethane boots for general industrial use — Specification

*Articles chaussants moulés en plastique — Bottes industrielles doublées
ou non doublées en polyuréthane d'usage général — Spécifications*



Reference number
ISO 5423:1992(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 5423 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*.

Annexes A, B, C, D and E form an integral part of this International Standard. Annex F is for information only.

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Moulded plastics footwear — Lined or unlined polyurethane boots for general industrial use — Specification

1 Scope

This International Standard specifies requirements for boots, moulded from polyurethane compound, for general industrial use. The boots may be either fabric-lined or unlined and of any style from ankle boots to full thigh height inclusive.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 37:1977, *Rubber, vulcanized — Determination of tensile stress-strain properties.*

ISO 48:1979, *Vulcanized rubbers — Determination of hardness (Hardness between 30 and 85 IRHD).*

ISO 458-1:1985, *Plastics — Determination of stiffness in torsion of flexible materials — Part 1: General method.*

ISO/R 463:1965, *Dial gauges reading in 0.01 mm, 0.001 in and 0.000 1 in.*

ISO 471:1983, *Rubber — Standard temperatures, humidities and times for the conditioning and testing of test pieces.*

ISO 10335:1990, *Rubber and plastics footwear — Nomenclature.*

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 10335 apply.

4 Design requirements

NOTE 1 Suggested ranges for the heights of boots are given in annex F.

4.1 Soling pattern

The soling shall have radiused corners at the base of the sole pattern and the radius for such corners shall be not less than 1,5 mm.

NOTE 2 The pattern of the soling can have a significant effect on the formation of premature cracks.

4.2 Minimum thicknesses

The minimum thicknesses of the boot shall be in accordance with table 1 for each individual value obtained when measured as described in annex A.

4.3 Materials and components

The upper, soling and heel shall be moulded from homogeneously mixed polyurethane compound. It may be cellular or a combination of cellular and non-cellular.