INTERNATIONAL STANDARD

ISO 4195

Second edition
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Conveyor belts with heat-resistant rubber covers — Heat resistance of covers — Requirements and test methods

Courroies transporteuses avec revêtements caoutchouc résistant à la chaleur — Résistance à la chaleur des revêtements — Exigences et méthodes d'essai

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 4195 was prepared by Technical Committee ISO/TC 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 3, *Conveyor belts*.

This second edition cancels and replaces the first edition (ISO 4195:2007), of which it constitutes a minor revision. It also incorporates ISO 4195:2007/Cor 1:2008.

Conveyor belts with heat-resistant rubber covers — Heat resistance of covers — Requirements and test methods

1 Scope

This International Standard specifies requirements and test methods for the relative level of heat resistance of conveyor belt covers made of rubber. It gives the permissible variations of hardness, elongation at break and tensile strength after exposure to heat. It is applicable only to those conveyor belts having a cover thickness greater than or equal to 4 mm. It is not suitable or valid for light conveyor belts as described in ISO 21183-1[1].

2 Normative references

The following referenced documents are indispensable for the application 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 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 48, *Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 18573, *Conveyor belts — Test atmospheres and conditioning periods*

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

3 Performance requirements

When tested in accordance with the method specified in Clause 4, the permissible variations in hardness, elongation at break and tensile strength shall be in accordance with Table 1.

Table 1 — Permissible variations

Cover characteristic	Variation for belt class		
	1	2	3
Hardness (IRHD)			
— variation of initial value — maximum value	+ 20 85	+ 20 85	+ 20 85
Elongation at break (%)			
— variation in percentage of initial value — minimum value	− 50 200	− 50 200	− 55 180
Tensile strength (N/mm^2)			
— variation in percentage of initial value — minimum value	− 25 12	− 30 10	− 40 5