Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

"जानने का अधिकार, जीने का अधिकार"
Mazdoor Kisan Shakti Sangathan
"The Right to Information, The Right to Live"

"पुराने को छोड़ नये के तरफ"
Jawaharlal Nehru
"Step Out From the Old to the New"

FOREWORD

This Indian Standard (Third Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Pulleys and Belts Sectional Committee had been approved by the Light Mechanical Engineering Division Council.

This standard was originally published in 1972 and subsequently revised in 1978 and 1988.

The present revision of the standard has been taken up to bring it in line with prevailing manufacturing practices. In this revised standard the ageing time has been reduced from 168 h to 72 h and the requirement for change in tensile strength and elongation from the original unaged values have also been modified.

This standard has been published in various parts. Other parts are:

Part 1 General purpose belting (fourth revision)
Part 3 Oil resistant belting (second revision)
Part 4 Hygienic belting (first revision)
Part 5 Fire resistant belting (under preparation)

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounding off value should be the same as that of the specified value in this standard.
AMENDMENT NO. 3 APRIL 2005
TO
IS 1891 (PART 2) : 1993  CONVEYOR AND ELEVATOR
TEXTILE BELTING — SPECIFICATION
PART 2 HEAT RESISTANT BELTING
( Third Revision )

( Page 1, clause 2 ) — Insert the following IS No. and corresponding title at
the appropriate place:

<table>
<thead>
<tr>
<th>IS No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400 (Part 3) : 1987</td>
<td>Methods of test for vulcanized rubbers : Part 3 Abrasion resistance using a rotating cylindrical drum device (first revision)</td>
</tr>
</tbody>
</table>

( Page 1, clause 4.3 ) — Insert the following new clause after 4.3:

4.4 ABRASION RESISTANCE

The abrasion loss in case of rubber cover when tested as per method given in
Annex D of IS 1891 (Part 1) : 1994 [see also IS 3400 (Part 3) : 1987] shall not
exceed 250 mm³ for both grades T₁ and T₂.

(MGP 29)

Reprography Unit, BIS, New Delhi, India
AMENDMENT NO. 2 MARCH 2002
TO
IS 1891 ( Part 2 ) : 1993 CONVEYOR AND ELEVATOR
TEXTILE BELTING — SPECIFICATION
PART 2 HEAT RESISTANT BELTING
( Third Revision )

( Page 1, clause 4.2, line 1 ) — Substitute ‘carcass’ for ‘plies’.

( Page 1, clause 4.2, line 2 ) — Substitute ‘adjacent’ for ‘individual’.

[ Page 1, Table 2, Sl No. (i), col 2 ] — Substitute ‘adjacent’ for ‘individual’.

( Page 1, Table 2, col 3 ) — Substitute ‘For cotton or cotton polyamide plies’ for ‘For cotton or cotton polyamide’.

( Pages 1 and 2, clauses 2, 4.1, 4.2, 4.3.2 and 5 ) — Substitute ‘IS 1891 ( Part 1 ) : 1994’ for ‘IS 1891 ( Part 1 ) : 1993’.

(BP 29)
AMENDMENT NO. 1 JUNE 1995
TO
IS 1891 (Part 2) : 1993 CONVEYOR AND ELEVATOR
TEXTILE BELTING — SPECIFICATION
PART 2 HEAT RESISTANT BELTING
(Third Revision)

Substitute 'IS 1891 (Part 1) : 1994' for 'IS 1891 (Part 1) : 1993' wherever it appears in the text.

(Page 1, Table 1, col 1 and 2) — Substitute 'Grade T-1' and 'Grade T-2' for 'Grade 1' and 'Grade 2' respectively.

(LM 09)

Reprography Unit, BIS, New Delhi, India
Indian Standard

CONVEYOR AND ELEVATOR TEXTILE BELTING — SPECIFICATION

PART 2 HEAT RESISTANT BELTING

(Third Revision)

1 SCOPE

This standard (Part 2) covers the requirements of conveyor and elevator textile belting for use on flat or troughed idlers for conveying hot materials which are classified as follows:

<table>
<thead>
<tr>
<th>Resistance to Temperature °C (Max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lump/Predominance of Lump</td>
</tr>
<tr>
<td>Grade T-1</td>
</tr>
<tr>
<td>Grade T-2</td>
</tr>
</tbody>
</table>

2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard:

<table>
<thead>
<tr>
<th>IS No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400 (Part 4) : 1987</td>
<td>Methods of test for vulcanized rubbers : Part 4 Accelerated ageing (second revision)</td>
</tr>
</tbody>
</table>

3 TERMINOLOGY, DIMENSIONS, TOLERANCES, FABRIC, CONSTRUCTION AND FULL THICKNESS BREAKING STRENGTH

As prescribed in IS 1891 (Part 1) : 1993.

4 TEST REQUIREMENTS OF FINISHED BELTING

4.1 Tensile Strength and Elongation

Tensile strength and elongation at break of rubber cover when tested as described in Annex B of IS 1891 (Part 1) : 1993 shall be as specified in Table 1.

<table>
<thead>
<tr>
<th>Grade 1</th>
<th>Grade 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength (MPa), Min</td>
<td>12.5</td>
</tr>
<tr>
<td>Elongation at break ( % ), Min</td>
<td>350</td>
</tr>
</tbody>
</table>

4.2 Adhesion

The adhesion between the cover and the plies and between the individual plies shall be such that when tested in the manner described in Annex G of IS 1891 (Part 1) : 1993, the force required to cause the separation shall be as given in Table 2.

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Force, Min kN/m Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Adhesion between individual plies</td>
<td>3.00</td>
</tr>
<tr>
<td>ii) Adhesion between cover and carcass</td>
<td>No Test</td>
</tr>
<tr>
<td>a) Cover up to and including 1.00 mm thick</td>
<td>2.20</td>
</tr>
<tr>
<td>b) Covers over 1.00 mm and up to and including 1.50 mm thick</td>
<td>2.50</td>
</tr>
<tr>
<td>c) Covers over 1.50 mm thick</td>
<td></td>
</tr>
</tbody>
</table>

NOTE — No individual value obtained at the time of measurement shall be below the value specified by more than 0.80 kN/m width.

4.3 Heat Resistance

4.3.1 Rubber Cover

After exposure to a temperature of 100 ± 2°C for 72 h in the case of Grade T-1 and 125 ± 2°C for 72 h in the case of Grade T-2, the test being carried out as described in IS 3400 (Part 4) : 1987, the tensile strength and elongation at break of the rubbers covers shall not vary from the original unaged values by more than the amounts specified below:

<table>
<thead>
<tr>
<th>Grade T-1</th>
<th>Grade T-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength ( % )</td>
<td>-25</td>
</tr>
<tr>
<td>Elongation at break ( % )</td>
<td>-40</td>
</tr>
</tbody>
</table>

4.3.2 Adhesion

After exposure of the belt pieces prepared
5 OTHER REQUIREMENTS

Any other requirements not specially mentioned in this standard shall be as prescribed in IS 1891 (Part 1) : 1993.

6 STANDARD MARK

Details available with the Bureau of Indian Standards.
Bureau of Indian Standards

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Doc. No.

<table>
<thead>
<tr>
<th>Amend No.</th>
<th>Date of Issue</th>
<th>Text Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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