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Edition 3

SOUTH AFRICAN NATIONAL STANDARD

Conveyor belting — General purpose textile-reinforced construction

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Table of changes

Change No.	Date	Scope

Foreword

This South African standard was approved by National Committee SABS/TC 45/SC 01, *Rubber and rubber products – Conveyor belts*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This document was published in January 2014.

This document supersedes SANS 1173:2006 (edition 2.1).

Annex A forms an integral part of this document. Annex B is for information only.

Contents

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Conveyor belting — General purpose textile-reinforced construction

1 Scope

1.1 This standard covers general requirements for textile-reinforced construction conveyor belting designed for use on flat or troughed idlers. The belting is classified according to the minimum full thickness breaking strength of the finished belting in kilonewtons per metre (kN/m).

1.2 Speciality belting, such as heat-resistant belting, oil-resistant belting, and belting suitable for use on elevators and food conveyors, is not covered in this standard.

1.3 This standard does not specify data for the design of belting installations.

NOTE For information refer to the manufacturer's catalogue.

1.4 Fire resistance test methods and properties are covered in SANS 971.

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. Information on currently valid national and international standards can be obtained from the SABS Standards Division.

ISO 505, *Conveyor belts – Method for determination of the tear propagation resistance of textile conveyor belts*.

SANS 54/ISO 188, *Rubber, vulcanized or thermoplastic – Accelerated ageing and heat resistance tests*.

SANS 971, *Conveyor belting – Methods of testing fire retardant properties of all conveyor belt constructions.*

SANS 4649/ISO 4696, *Rubber, vulcanized or thermoplastic – Determination of abrasion resistance using a rotating cylindrical drum device.*

SANS 10037/ISO 37, *Rubber, vulcanized or thermoplastic – Determination of tensile stress-strain properties*.

SANS 16133/ISO 6133, *Rubber and plastics – Analysis of multi-peak traces obtained in determinations of tear strength and adhesion strength*.

SANS 23529/ISO 23529, *Rubber – General procedures for preparing and conditioning test pieces for physical test methods.*

3 Definitions

For the purposes of this document, the following definitions apply.

3.1
fire retardant
characteristic whereby a substance is added, or a treatment is applied to a material in order to suppress, or significantly reduce the combustion of the material and self-extinguishes upon removal of the source of combustion

3.2
full thickness breaking strength
load, in kilonewtons per metre, required to break a full thickness sample of belting

3.3
lot
continuous length of belting of length greater than 30 m submitted at any one time for inspection and testing

3.4
reference load
reference force
load, in kilonewtons per metre, equal to 10 % of the specified minimum longitudinal full thickness breaking strength of the belting

NOTE This definition does not imply that a 10:1 factor should be used in design calculations, but it is important to bear in mind that any belt with any form of joint or splice should be capable of transmitting the desired working strength.

3.5
standard test conditions
temperature of 23 °C ± 2 °C and a relative humidity of 50 % ± 4 %

4 Requirements

4.1 General

Methods for testing fire-resistant properties are specified in SANS 971.

4.2 Class

Belting shall be one of the following class numbers, as specified by the purchaser (see annex A):

200; 250; 315; 400; 500; 630; 800; 1 000; 1 250; 1 400; 1 600; 2 000; or 2 500.

NOTE See also 4.7.1 and annex A.

4.3 Type of covers

Belting shall be one of the following types, as specified by the purchaser (see annex A):

a) **Type A**: A belt with a rubber cover that provides the highest resistance to abrasives and is recommended for transporting abrasive materials.

b) **Type C**: A belt with a rubber cover that is suitable for the conveyance of abrasive materials under average working conditions.

c) **Type F**: A belt with a fire-retardant carcass and fire-retardant rubber cover(s).

d) **Type M**: A belt with a rubber cover that is suitable for the conveyance of extremely sharp and abrasive materials under severe working conditions.

e) **Type N**: A belt with a rubber cover that is suitable for the conveyance of abrasive materials under average working conditions.

4.4 Materials

4.4.1 Textile reinforcement

The textile reinforcement of the ply materials shall be free from foreign matter, knots or irregularities, that will impair the serviceability of the belting, as required (see annex A).

NOTE Code letters for ply materials are given in table 1.

Table 1 — Code letters for ply materials

1	2	3	4
Code letter, for this standard	**Corresponding DIN**	**Corresponding AS**	**Ply material**
P	P	N	Polyamide (nylon)
E	E	P	Polyester
NOTE DIN refers to a German standard and AS refers to an Australian standard.			

4.4.2 Covers

4.4.2.1 Covers shall be based on a suitable polymer and shall comply with the appropriate requirements given in table 2 (see also 5.2(b)).

4.4.2.2 When covers are tested for tensile strength and elongation at break in accordance with 6.2, they shall comply with the requirements for tensile strength and elongation at break given in table 2, as appropriate to the different types of covers.

4.4.2.3 When covers are tested for resistance to abrasion in accordance with 6.8, they shall comply with the values for maximum abrasion loss given in table 2, as appropriate to the types of cover.

Table 2 — Requirements for covers

1	2	3	4	5	6	7	8
Requirement		**Type**					**Test method subclause**
Description	**Measuring units**	**A**	**C**	**M**	**N**	**F**	
Tensile strength, original	MPa, min.	18	20	25	17	14	6.2
After ageing, % of original	%	80 to 120	80 to 120	80 to 120	80 to 120	80 to 120	6.3
Elongation at break, original	%, min.	400	400	450	400	400	6.4
Maximum abrasion loss	mm^3	70	150	120	150	180	6.8

4.4.2.4 When covers are tested for resistance to ageing in accordance with 6.3, the tensile strength and elongation of covers shall not change by more than 20 % from the original values obtained.

4.5 Construction

4.5.1 General

The belting shall consist of a carcass of multiple textile plies and an elastomeric cover on one or both faces, with the following:

a) **Breaker ply**: When so required for the protection of carcasses (see annex A), a layer of an open mesh or a cord fabric may be interposed between the cover and the adjacent ply, or be embedded in the cover.

b) **Edge protection of width**: When so required by the purchaser (see annex A), the material shall be the same as the cover and of width between 6 mm and 15 mm.

4.5.2 Carcass

4.5.2.1 Transverse joints

Transverse joints in a fabric ply shall be at an angle of 45° to 70° to the longitudinal centre line of the belting. The distances between the joints, as required (see annex A) shall be as follows:

a) **Outer plies:** not more than one joint in any 100 m length of belting.

b) **Inner plies:** not more than two joints in any 100 m length of belting, and the distance between adjacent joints shall be at least 20 m.

c) **Consecutive plies:** the distance between joints shall be at least 5 m.

d) **Non-consecutive plies:** the distance between joints shall be at least the width of the belting.

The aim is to have no joints, but in the event that manufacturers have to include a joint, then it shall be recorded.

4.5.2.2 Longitudinal joints

There shall be no longitudinal joints.

4.6 Workmanship

Belting shall be substantially rectangular in cross-section and free from defects (such as voids, blisters, ply separation, and folds and tucks in the carcass) that would impair the long-term serviceability of the belting.

4.7 Dimensions

4.7.1 Overall thickness of belts

The thickness of the belt depends on its construction, and shall be agreed between the manufacturer and the user (see annex A). The actual dimensions shall not differ from the agreed nominal thickness (see annex A) by more than ± 1 mm in belts up to 10 mm thick, or by more than 10 % of the thickness in belts more than 10 mm thick.

4.7.2 Thickness of covers

When the belting is tested in accordance with 6.7, the thickness of a cover shall be one of the thicknesses given in table 3 and as specified by the purchaser (see annex A).

NOTE The ratio of the top cover (carry cover) to the bottom cover (pulley cover) should not be greater than 3:1 so as to prevent excessive belt curl.

Table 3 — Thickness of covers

1	2
Thickness mm	**Tolerance**
– – 1,0	−0,2 mm −0,2 mm −0,2 mm
1,5 2,0 2,5	−0,2 mm −0,2 mm −0,2 mm
3,0 4,0 5,0	−0,2 mm −0,2 mm −5 %
6,0 8,0 10,0 12,0	−5 % −5 % −5 % −5 %

4.7.3 Width

4.7.3.1 The nominal width of the belting shall be as specified by the purchaser (see annex A) and shall preferably be one of the following widths:

450 mm; 500 mm; 600 mm; 750 mm; 900 mm; 1 050 mm; 1 200 mm; 1 350 mm; 1 500 mm; 1 650 mm; 1 800 mm; or 2 100 mm.

NOTE Bold widths are ISO preferred widths.

4.7.3.2 The actual width shall not differ from the nominal value by more than the appropriate of the following:

a) Nominal widths less than 600 mm: ± 5,0 mm.

b) Nominal widths of 600 mm and above: ± 1,0 % of the nominal value.

NOTE The tolerances for widths are in accordance with the requirements of ISO 251.

4.7.4 Length

The length of the belting shall, subject to a tolerance of +2 % or –0,5 %, be as specified by the purchaser (see annex A).

4.8 Breaking strength and elongation of belting

The breaking strength and elongation, determined in accordance with 6.4, shall be such that

a) the longitudinal full-thickness breaking strength, in kilonewtons per metre (kN/m), is at least equal to the appropriate value given in column 2 of table 4 (i.e. equal to the class number marked on the belting (see 7.2(d)),

b) the elongation in the longitudinal direction, produced by the reference load, shall not exceed the values given in table 5,

c) the elongation at break of the belting in the longitudinal direction is at least 10 %,

d) the elongation in the transverse direction shall not be less than 10 % at break point, and

e) the transverse breaking strength, in kilonewtons per metre, is at least equal to the appropriate value given in column 3 of table 4.

Table 4 — Full-thickness breaking strength and tear strength

1	2	3	4
Class number	**Breaking strength**		**Tear strength, min.**
	Longitudinal direction, min kN/m	**Transverse direction, min.** kN/m	kN
200 250 315	200 250 315	80 100 125	0,6 0,6 0,7
400 500 630	400 500 630	160 180 180	0,9 0,9 1,0
800 1 000 1 250	800 1 000 1 250	200 220 250	1,2 1,6 1,6
1 400 1 600 2 000 2 500	1 400 1 600 2 000 2 500	300 350 350 350	1,6 1,6 1,6 1,6

Table 5 — Maximum elongation at reference load

1	2
Min. breaking load kN/m	**Elongation** %, max.
160 to 500	2,0
630 to 1 250	2,5
1 600 to 2 500	3

4.9 Troughability

The troughability of the belting, determined in accordance with 6.5, shall be at least the value given in column 3 of table 6 appropriate to the troughing angle (i.e. the angle of inclination of conveyor side-idlers), as specified by the purchaser (see annex A).

Table 6 — Troughability

1	2	3
Troughing angle degrees		**Troughability** min. (see 6.5.4)
Over	**Up to and including**	
0	20	0,08
20	35	0,14
35	45	0,18
45	60	0,26

4.10 Adhesion between components

The adhesion (in each direction) between each pair of consecutive components of the belting, determined in accordance with 6.6, shall be as follows:

a) between carcass and cover: 5,0 N/mm, min; and

b) between consecutive plies: 7,0 N/mm, min.

4.11 Tear strength

When belting is tested in accordance with 6.9, the examination and analysis of the multi-peak tear strength test traces shall be in accordance with SANS 16133. See column 4 of table 4 for the minimum tear strength.

NOTE The median peak force described in SANS 16133 is defined as the mean tear resistance.

4.12 Flame retardancy (Type F belting)

4.12.1 Flame resistance

When the belting is tested in accordance with SANS 971, it shall be self-extinguishing to an extent such that

a) the total duration of flame and glow for a set of six test pieces is less than 45 s,

b) the duration of flame and glow for an individual test piece does not exceed 15 s, and

c) there is no appearance or reappearance (as relevant) of flame or glow when a test piece is subjected to the air draught 60 s after it has been removed from the flame.

4.12.2 Electrical conductivity

The electrical resistance of each surface of the belting, determined in accordance with SANS 971, shall not exceed 3×10^8 Ω.

NOTE Resistance is measured to determine conductivity of the belting.

4.12.3 Drum friction test

When the belting is tested in accordance with SANS 971, it shall not show any sign of flame or glow. The temperature of the drum shall not exceed 325 °C.

4.12.4 Flame propagation test

When performing the fire propagation test in accordance with SANS 971 the belt shall meet one of the following requirements:

a) the length of the test piece that remains undamaged across the whole width of the test piece shall be not less than 600 mm; or

b) the maximum average temperature rise shall not exceed 140 °C, the length of belting consumed by mass shall not exceed 1 250 mm and the length of the test piece that remains undamaged shall be not less than 50 mm across the whole width of the conveyor belt.

5 Sampling and compliance with this standard

5.1 General

This clause applies to the sampling for inspection and testing before acceptance or rejection of single lot (consignments) in cases where no information about the implementation of quality control or testing during manufacture is available to help in assessing the quality of the lot. It is also used as the procedure for adjudicating in cases of dispute.

5.2 Sampling

The following sampling procedure shall be applied in determining whether a lot complies with the relevant requirements of this standard. The sample(s) so taken shall be deemed to represent the lot for all properties other than workmanship and length.

a) **Belting**. After checking for compliance with 4.6, 4.7.3, and clause 7, from across the full width of the belting that constitutes the lot, cut one sample of length approximately 2 m.

b) **Cover material**. In the case of belting with a cover or covers of thickness less than 3,0 mm, use the tests given in 6.2, from a sample sheet (of thickness 2,0 mm) of the same formulation used in the manufacture of the belting.

5.3 Compliance with this standard

The lot shall be deemed to comply with the relevant requirements of this standard if

a) it complies with the requirements for workmanship (see 4.6), length (see 4.7.4), packing and marking (clause 7), and

b) on inspection and testing of the sample or samples taken in accordance with 5.2, are found to comply with all the other relevant requirements of this standard.

6 Methods of test

6.1 Conditioning

Unless otherwise specified by the purchaser (see annex A), condition all test specimens for at least 24 h under standard test conditions (see 3.5) before testing them, and conduct the tests under these conditions.

6.2 Tensile strength and elongation at break of covers

Use SANS 10037, after preparing the specimen in accordance with SANS 23529.

6.3 Ageing

Use SANS 54, ageing of test specimens for 168 h ± 2 h at 70 °C ± 1 °C.

6.4 Breaking strength, elongation at break and elongation at reference load of full thickness belting

6.4.1 Apparatus

6.4.1.1 Tensile testing machine. As in SANS 10037, except that the rate of travel of the moving jaw shall be 100 mm/min ± 10 mm/min.

6.4.1.2 Steel rule. Graduated in millimetre divisions.

6.4.1.3 Die. The dimensions of the die shall be in accordance with figure 1.

6.4.2 Test specimens

Using the die, cut from the belting three specimens each in the longitudinal and transverse direction. On each specimen draw two reference lines that are 100 mm ± 1 mm apart.

NOTE If, in the case of belting that has very thick covers or covers of very different thicknesses, slippage of the specimens in the grips of the tensile testing machine occurs, specimens cut from parts of the sample from which the covers have been removed, may be used.

This alternative should not be resorted to unless satisfactory testing of full thickness specimens is not possible.

6.4.3 Procedure

6.4.3.1 Measure the width of a specimen at the mid-point of the narrow section. Calculate the reference load for this specimen as follows:

$$RL = c \times w \times 10^{-4}$$

where

RL is the reference load, in kilonewtons;

c is the minimum full thickness breaking strength of finished belting, relevant to the class of belting under test, in kilonewtons per metre of width; and

w is the width of the test specimen, in millimetres.

6.4.3.2 Clamp the ends of the specimen in the jaws of the testing machine that the jaws are 200 mm ± 10 mm apart. Operate the machine, measuring the distance between the reference lines during elongation of the specimen and noting this distance when

a) the load reaches the reference load, and

b) the specimen ruptures.

Note and record also the maximum force applied before rupture.

Repeat the test on the remaining specimens.

6.4.4 Calculations

6.4.4.1 Breaking strength

Calculate the breaking strength of each specimen as follows:

$$B_s = \frac{ML_a}{W_{os}} \times 10^3$$

where

B_s is the breaking strength, in kilonewtons per millimetre;

ML_a is the maximum load applied, in kilonewtons per millimetre; and

W_{os} is the width of the specimen, in millimetres.

Record the average of three results as the breaking strength of the belting.

6.4.4.2 Elongation at break

Calculate the elongation at break of each specimen as follows:

$$E@B = \frac{L - L_o}{L_o} \times 100$$

where

$E@B$ is the elongation at break, as a percentage;

L is the distance between reference lines at rupture, in millimetres; and

L_o is the original distance between reference lines, in millimetres.

Record the average of three results as the elongation at break of the belting.

6.4.4.3 Elongation at reference load

Calculate the elongation at reference load as follows:

$$E@RL = \frac{L_R - L_o}{L_o} \times 100$$

where

$E@RL$ is the elongation at reference load, as a percentage;

L_R is the distance between reference lines when the reference load is applied, in millimetres;

L_o is the original distance between reference lines, in millimetres.

Record the average of three results as the elongation at reference load of the belting.

Check for compliance with 4.8.

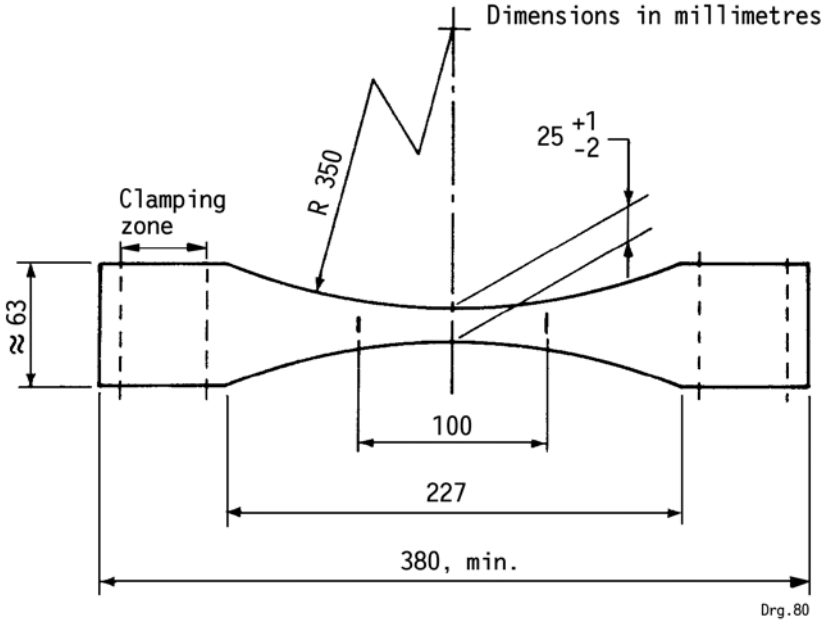


Figure 1 — Die dimensions

6.5 Troughability

6.5.1 Apparatus

6.5.1.1 Two clamps (see figure 2), such that

a) each holds an end of a test specimen across a width of at least 140 mm and to a depth into the clamp of not more than 15 mm,
b) they prevent curvature across the ends of the test specimen,

c) they are balanced about a horizontal axis of rotation, and

d) they permit suspension of the test specimen so that the horizontal axis of rotation of each clamp coincides with a line across the clamped end of the test specimen midway between its top and bottom surfaces.

6.5.1.2 Suspension frame (see figure 3), such that it

a) maintains the axes of rotation of parallel clamps and in the same horizontal plane,

b) permits such free rotation of each clamp that frictional forces are reduced to a negligible value, and

c) can be adjusted to ensure that the suspending forces act through the axes of rotation of the clamps.

6.5.1.3 Steel rule, graduated in millimetre divisions.

6.5.2 Test specimen

Cut one specimen of length 150 mm ± 2 mm from across the full width of the belting. Then place the specimen on a flat surface under standard test conditions (see 3.5) for a period of at least 24 h.

6.5.3 Procedure

Measure the length and thickness of the specimen. With the carrying face of the specimen uppermost and so supporting the specimen along its length or width (as relevant) that it does not sag, clamp its end in the clamps.

Remove the support and allow the specimen to fall, under its own weight, from the flat to the troughed position, adjusting the apparatus so that the suspending forces act vertically throughout the period of the test. After 5 min measure the distances A_1 and A_2 as shown in figure 4.

6.5.4 Calculation

Calculate the troughability as follows:

$$T_r = \frac{F}{L}$$

where

T_r is the troughability;

F is the deflection of the specimen, in millimetres

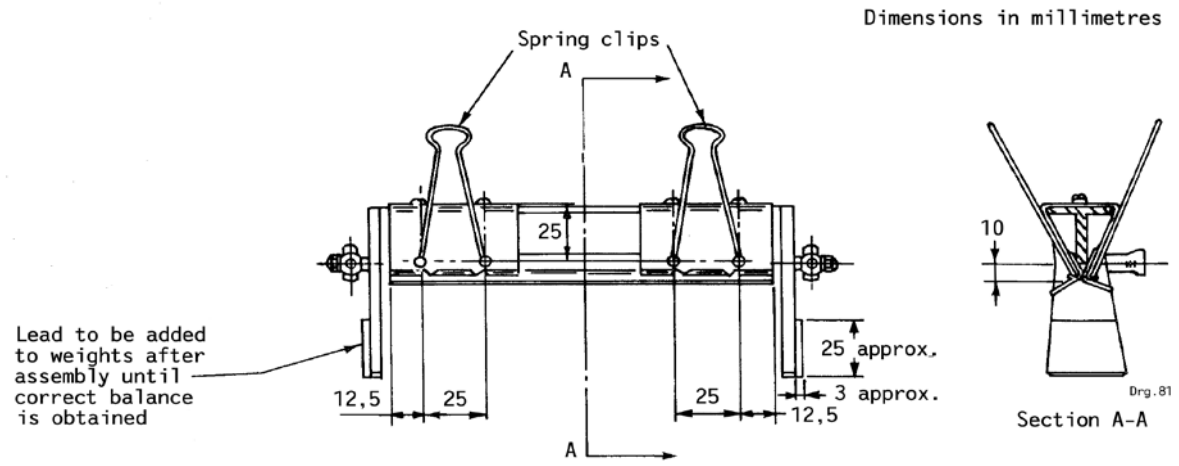
$= \left(A_1 - A_2 + \frac{t}{2} \right)$ mm (see figure 6);

L is the length of the specimen, in millimetres; and

t is the thickness of the specimen, in millimetres.

Record the result so obtained as the troughability of the belting.

Check for compliance with 4.9.



NOTE This design of clamp is not mandatory but conforms to the requirements of the method.

Figure 2 — Clamp

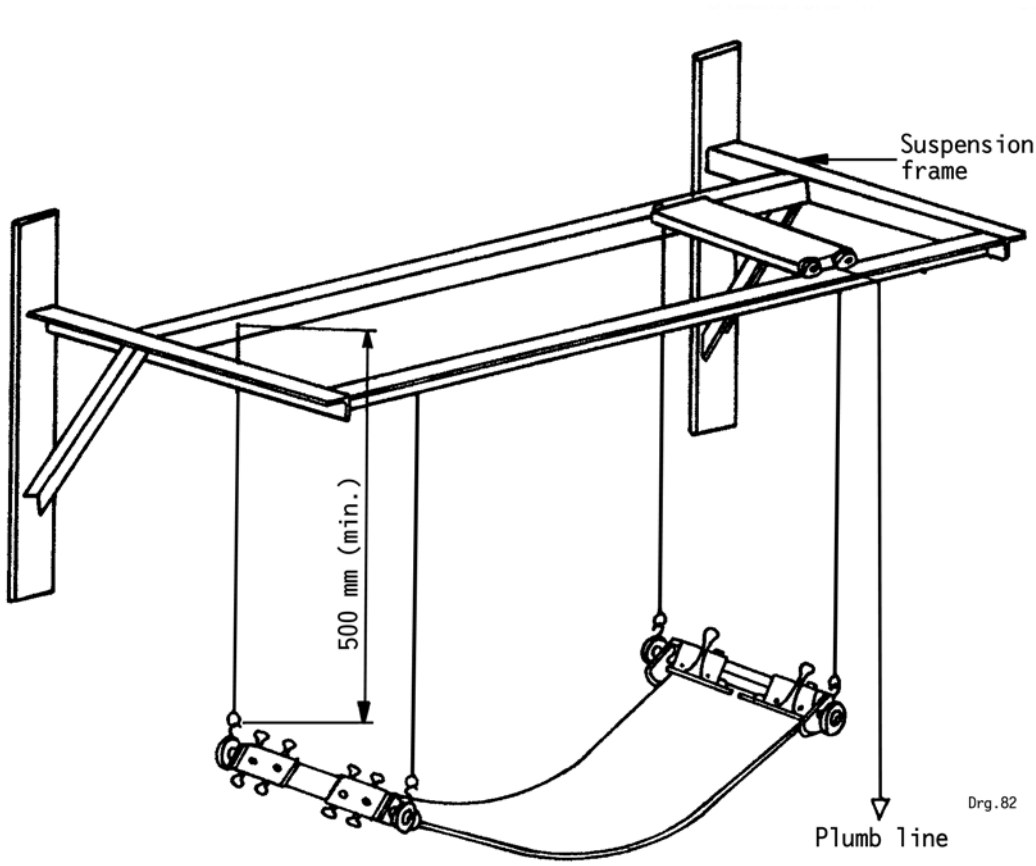


Figure 3 — Apparatus for measuring troughability

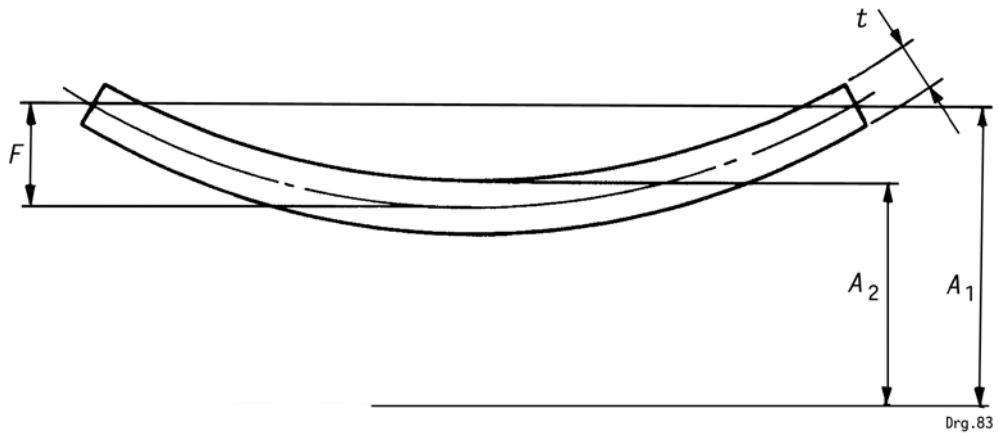


Figure 4 — Reference plane for measuring troughability

6.6 Adhesion

6.6.1 Apparatus

6.6.1.1 Tensile testing machine, as in SANS 10037, except that the rate of travel of the moving jaw shall be 100 mm/min ± 10 mm/min.

6.6.1.2 Planimeter, a travelling planimeter.

6.6.2 Test specimens

From the sample cut six specimens, each of width 25 mm ± 0,5 mm and of length at least 200 mm, three specimens being cut in the longitudinal direction and three in the transverse direction of the belting.

6.6.3 Procedure

At one end of a specimen separate a cover from the carcass for a distance great enough to ensure adequate gripping in the jaws of the tensile testing machine. Secure one of the separated parts of that end in each jaw of the machine, and operate the machine for the maximum distance possible. Using the same specimen, repeat the above procedure to separate, in turn, each pair of adjacent plies and, when relevant, the other cover from the carcass. If separation occurs at any position other than the interface under test, discard the result and record the type of failure.

Repeat the test on the remaining specimens.

6.6.4 Calculations

By means of the planimeter, determine from the graphical record (produced by the indicator of the testing machine), the average force required to separate each pair of adjacent components of each specimen. For each specimen calculate, as follows, the adhesion between each pair of adjacent components:

$$A = \frac{F}{25}$$

where

A is the adhesion, in newtons per millimetre; and

F is the force, in newtons.

Record, for each direction, the average of each set of three results so obtained, as the adhesion between the corresponding components of the belting.

Check for compliance with 4.10.

6.7 Thickness of belt and covers

6.7.1 Apparatus

6.7.1.1 Hand micrometer gauge, each arm of which ends in a plate, with graduations in divisions of 0,1 mm.

6.7.1.2 Measuring instrument, consisting of an optical magnifier incorporating a scale graduated in divisions of 0,1 mm.

6.7.2 Test specimens

A rectangular specimen, taken from the total thickness of the belting including the covers, cut at right angles to the surface and of the following dimensions:

a) Width: approximately 50 mm; and

b) Length: the total width of the belting.

6.7.3 Procedure

Mark eight points distributed evenly along the axis of the test specimen as shown in figure 5.

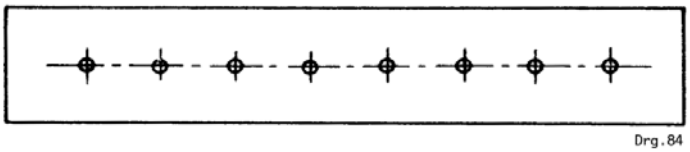


Figure 5 — Points of measuring cover thickness

Measure the total thickness *h* of the test specimen at each of these eight points. Remove one cover completely, then measure the thickness, h_1, of the test specimen at the same points. Remove the other cover completely and measure the thickness, h_2, of the test specimen at the same points.

6.7.4 Calculations

Calculate the thickness of the covers e_1 and e_2 from the following equations:

$$e_1 = h - h_1$$

$$e_2 = h_1 - h_2$$

and express the thickness of each cover as the minimum value of the eight points.

NOTE If the removal of the covers is impractical, use the optical magnifier to determine the thickness of the covers at eight points as shown in figure 5.

Check for compliance with 4.7.2.

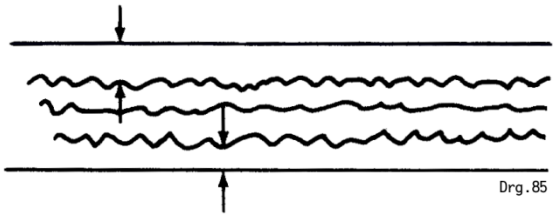


Figure 6 — Measuring cover thickness by means of optical magnifier

6.8 Abrasion resistance

Use the procedure given in SANS 4649.

Check for compliance with 4.4.2.3.

6.9 Tear strength

Use the procedure given in ISO 505.

Check for compliance with 4.11.

7 Packing and marking

7.1 Packing

Each length of belting shall be rolled and so packed as to prevent it from being damaged during normal transportation and storage, as required (see annex A). The gross mass of the roll of belting shall be specified on the wrapping.

7.2 Marking

Belting shall bear, on the pulley cover or bottom cover, the following information, neatly and legibly embossed in letters ± 1 mm deep, ± 25 mm high, at intervals of approximately 10 m, 50 mm to 100 mm from one edge, parallel to the edge and 5 m from the roll ends of the belting (see figure 7):

a) the standard to which the belt was manufactured;

b) the manufacturer's trade name, or trademark (or both);

c) the ply material – the code letter of the warp (longitudinal) material shall be quoted first, followed by the code letter of the weft (transverse). (See table 1 for an explanation of the code letters.)

   If either comprises more than one type of material the major component shall be stated first in upper case, followed by the minor component in lower case;

d) the class of belting – minimum breaking load in kN/m separated by a "/" from the number of plies of reinforcement;

e) the type of rubber cover (see 4.3);

f) the thickness of the top cover followed by the thickness of the bottom cover, expressed in millimetres;

g) the width in millimetres;

h) the month and year of manufacture; and

i) the roll, serial or identification number, unique to endless length.

NOTE 1 In belting having covers less than 1 mm thick it is permissible to print the required information.

SANS 1173	**XX**	**EP**[a]	**630/3**	**N**	**6 × 2**	**1200**	**10/2004**	**25126**	**P**
↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Standard to which belt was manufactured	Manufacturer's trade name or trademark (or both)	Ply material	Class/No. of plies	Cover material	Top cover × bottom cover	Belt width	Month/Year of manufacture	Serial No. or ID No.	Roll No.

a where EP denotes a ply material with polyester warp and nylon weft.
EpP denotes a polyester/nylon warp and nylon weft.

Figure 7 — Example of marking

Annex A
(normative)

Notes to purchasers

The following requirements shall be specified in tender invitations and in each order or contract:

a) the class of belting (see 4.2);

b) the type of covers (see 4.3);

c) the type of material and material properties such as lump size and bulk density (see 4.4);

d) special requirements (see 4.5.1); breaker ply, edge protection, etc.;

e) the type of carcass, i.e. multi-ply and number of plies and the type of construction (see 4.5.2);

f) the thickness of belting (see 4.7.1);

g) the cover thickness (see 4.7.2);

h) nominal width of the belting (see 4.7.3);

i) the length (see 4.7.4);

j) the troughing angle (see 4.9);

k) the test conditions (see 6.1); and

l) special packing requirements to be detailed by the purchaser on the purchase order (see 7.1).

NOTE For belt selection, manufacturers should be contacted.

Annex B
(normative)

Quality verification of textile-reinforced conveyor belts

When a purchaser requires ongoing verification of the quality of the textile-reinforced conveyor belts, it is suggested that, instead of concentrating solely on evaluation of the final product, he also direct his attention to the manufacturer's quality system. In this connection it should be noted that SANS 9001 covers the provision of an integrated quality system.

Bibliography

ISO 251, *Conveyor belts with textile carcass – Widths and lengths.*

ISO 5285, *Conveyor belts – Guidance for storage and handling*.

SANS 484-1, *Conveyor belting – Step splicing for multi-ply textile-reinforced rubber covered conveyor belting – Part 1: Hot-splicing method.*

SANS 484-2, *Conveyor belting – Step splicing for multi-ply textile-reinforced rubber covered conveyor belting – Part 1: Cold-splicing method.*

SANS 9001/ISO 9001, *Quality management systems – Requirements*.

SANS 10284/ISO 284, *Conveyor belts – Electrical conductivity – Specification and test method*.

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