



**ISO 21182**

**Light conveyor belts —  
Determination of the coefficient of  
friction**

*Courroies transporteuses légères — Détermination du coefficient  
de frottement*

**Third edition  
2025-11**

This is a preview of ISO 21182:2025. [Click here to purchase the full version from the ANSI store.](#)



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<b>Foreword</b> .....	<b>iv</b>
<b>Introduction</b> .....	<b>v</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Principle</b> .....	<b>2</b>
4.1 Dynamic coefficient of friction.....	2
4.2 Static coefficient of friction.....	2
<b>5 Apparatus</b> .....	<b>2</b>
<b>6 Test pieces</b> .....	<b>3</b>
6.1 Test piece material.....	3
6.2 Number and dimensions of test pieces.....	3
6.3 Conditioning.....	4
<b>7 Test method</b> .....	<b>6</b>
7.1 Test room condition.....	6
7.2 Procedure.....	6
<b>8 Calculation and expression of results</b> .....	<b>6</b>
8.1 Dynamic friction, $\mu_D$ .....	6
8.2 Static friction, $\mu_S$ .....	7
8.3 Examples for recorded graph of $\mu_S$ (force/path diagrams).....	7
<b>9 Test report</b> .....	<b>8</b>
<b>Bibliography</b> .....	<b>9</b>

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This document was prepared by Technical Committee ISO/TC 41, *Pulleys and belts (including veebelts)*, Subcommittee SC 3, *Conveyor belts*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 188, *Conveyor belts*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 21182:2013), which has been technically revised.

The main changes are as follows:

- addition of test room condition in [7.1](#).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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The coefficient of friction of light conveyor belts must be seen from two different aspects relevant to the choice of the reference material. One aspect is the friction of the underside of the belt. In practice, this is not critical because it is low. Regardless of whether a table of steel or of wood is used, the coefficient of friction is within the range from 0,2 to 0,3 in most cases.

Contrary to this, the top face covers show values over an extended range dependent on their actual function. To achieve this function, the material itself can be modified as well as the surface pattern but the test procedure is the same in every case. So, it becomes clear that the chosen steel panel represents a compromise. Its main properties are reproducibility of the surface finish and uncritical friction behaviour against any kind of belt cover.

This document allows comparison of all kinds of conveyor belt to obtain reliable results as a reference. This can be helpful to buyers who need guidance in choosing the right belt for their particular application.

Tests in accordance with this document are limited to dynamic coefficients of friction ( $\mu_D$ ) up to 1,0 and static coefficients of friction ( $\mu_S$ ) up to 1,5. Higher values can show a mixture of friction, adhesion, deformation and other effects occurring, especially where the surface texture is coarse and is therefore unsuitable for this test.

The method using the standardized metallic test panel is intended especially to compare the coefficients of friction of different light conveyor belts. The values received under practice conditions always depend on the frictional partners.

To determine these effects, it is possible to choose a different frictional partner instead of the panel if required. This is covered in [Clause 9](#).