
INTERNATIONAL STANDARD



2109

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Continuous mechanical handling equipment — Light duty belt conveyors for loose bulk materials

Engins de manutention continue — Transporteurs à courroie pour produits en vrac pour service modéré

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Descriptors : handling equipment, continuous handling, bulk products, conveyors, belt conveyors, dimensions, specifications.

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 101 has reviewed ISO Recommendation R 2109 and found it technically suitable for transformation. International Standard ISO 2109 therefore replaces ISO Recommendation R 2109-1971 to which it is technically identical.

ISO Recommendation R 2109 was approved by the Member Bodies of the following countries :

Austria	India	Sweden
Belgium	Ireland	Thailand
Czechoslovakia	Japan	Turkey
Egypt Arab, Rep. of	Netherlands	United Kingdom
France	South Africa, Rep. of	U.S.A.
Germany	Spain	U.S.S.R.

No Member Body expressed disapproval of the Recommendation.

No Member Body disapproved the transformation of ISO/R 2109 into an International Standard.

Continuous mechanical handling equipment – Light duty belt conveyors for loose bulk materials

1 SCOPE

This International Standard lays down the main dimensions of belts, idlers and pulleys used for the various types of light duty belt conveyors for loose bulk materials.

2 FIELD OF APPLICATION

This International Standard applies to light duty belt conveyors for loose bulk materials. It does not apply to either portable and mobile conveyors, or mining conveyors.

3 SPECIFICATIONS

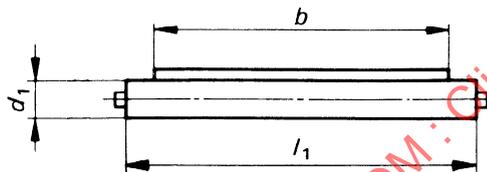


FIGURE 1 – Flat belt (one idler)

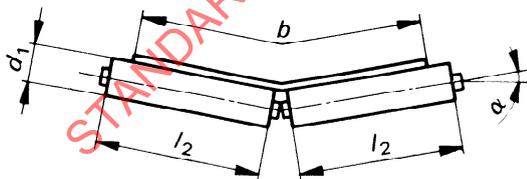


FIGURE 2 – Troughed belt (with two roller idlers)

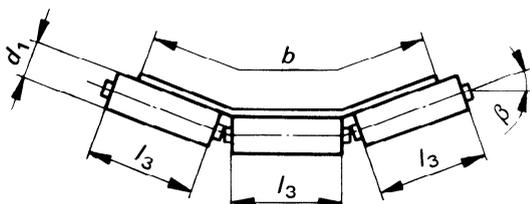


FIGURE 3 – Troughed belt (with three roller idlers)

3.1 Carrying idlers

3.1.1 Length for given belt widths

Dimensions in millimetres

b	300	400	500	650	800	1 000
l_1	380	480/500	600	750	950	1 150
l_2	200	250	315	380	480/465	600
l_3	—	—	200	250	315	380

3.1.2 Nominal diameter

Dimensions in millimetres

d_1^*	63,5	(76,1)	88,9	(101,6)	108

* Preferred dimensions are shown without parentheses.

3.1.3 Angle of inclination of side idlers

Values in degrees

a	15	20	—	—	—	—
β	—	20	25	30	35	45

3.1.4 Gap between idlers

Where there is a chance of the belt being pinched between the idler rollers, the gap between the rollers shall not exceed 10 mm.