
INTERNATIONAL STANDARD



1537

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

Continuous mechanical handling equipment for loose bulk materials — Troughed belt conveyors (other than portable conveyors) — Idlers

Engins de manutention continue pour produits en vrac — Transporteurs à courroie en auge (autres que mobiles) — Rouleaux de soutien

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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 1537 and found it technically suitable for transformation. International Standard ISO 1537 therefore replaces ISO Recommendation R 1537-1970 to which it is technically identical.

ISO Recommendation R 1537 was approved by the Member Bodies of the following countries :

Belgium	Greece	Spain
Canada	India	Sweden
Colombia	Israel	Switzerland
Czechoslovakia	Italy	Thailand
Egypt, Arab Rep. of	Netherlands	Turkey
Finland	New Zealand	United Kingdom
France	Norway	U.S.A.
Germany	South Africa, Rep. of	U.S.S.R.

The Member Body of the following country expressed disapproval of the Recommendation on technical grounds :

Japan

No Member Body disapproved the transformation of ISO/R 1537 into an International Standard.

Continuous mechanical handling equipment for loose bulk materials — Troughed belt conveyors (other than portable conveyors) — Idlers

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the dimensions of idlers and their arrangement and clearances for troughed belt conveyors (other than portable conveyors) with three carrying idlers.

2 REFERENCE

ISO 64, *Steel tubes — Outside diameters*.

3 CLASSIFICATION

Idlers for belts include

- a) carrying idlers in line, of equal length, supporting the carrying belt;
- b) return idlers of two types, supporting the return belt, namely :
 - 1) with one single return idler;
 - 2) with one set of two return idlers of equal length, the axes of which are equally inclined to the horizontal to form a V. The angle of inclination is 10° .

The latter arrangement is applicable to conveyors with belts at least 800 mm wide.

4 SPECIFICATIONS

4.1 Materials

4.1.1 Steel

Where the idlers, carrying and return, are constructed from steel tubes, their diameters shall be extracted from ISO 64 (see table 1).

4.1.2 Other materials

The subject of idlers made of other materials will be considered at a later date.

4.2 Dimensions

4.2.1 External diameters, d_1 , of carrying idlers and return idlers

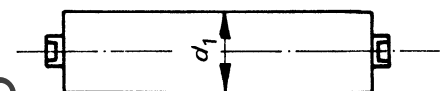


FIGURE 1 — Idler

TABLE 1 — External diameters, d_1 , of carrying idlers and return idlers

mm	in
63,5	2 1/2
76,1	3
88,9	3 1/2
101,6	4
108	4 1/4
127	5
133	5 1/4
152,4	6
159	6 1/4
168,3	6 5/8
193,7	7 5/8
219,1	8 5/8