INTERNATIONAL STANDARD 1807

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

Continuous mechanical handling equipment for loose bulk materials — Oscillating conveyors and shaking or reciprocating feeders with rectangular or trapezoidal trough

Engins de manutention continue pour produits en vrac — Transporteurs par secousses ou par inertie et distributeurs à mouvement alternatif à auges rectangulaires ou trapézoïdales

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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 1807 and found it technically suitable for transformation. International Standard ISO 1807 therefore replaces ISO Recommendation R 1807-1970 to which it is technically identical.

ISO Recommendation R 1807 was approved by the Member Bodies of the following countries :

Austria	Germany	Poland
Belgium	Greece	South Africa, Rep. of
Canada	Iran	Sweden
Czechoslovakia	Israel	United Kingdom
Egypt, Arab Rep. of	Italy	U.S.S.R.
Finland	Japan	
France	Peru	

No Member Body expressed disapproval of the Recommendation.

No Member Body disapproved the transformation of ISO/R 1807 into an International Standard.

Printed in Switzerland

Continuous mechanical handling equipment for loose bulk materials — Oscillating conveyors and shaking or reciprocating feeders with rectangular or trapezoidal trough

1 SCOPE

This International Standard specifies the basic characteristics of oscillating conveyors and shaking or reciprocating feeders with rectangular or trapezoidal trough.

2 FIELD OF APPLICATION

This International Standard applies to oscillating conveyors and shaking or reciprocating feeders with

– either rectangular (see figures 1 and 3) or trapezoidal (see figures 2 and 4) trough;

– either flat-bottom (see figures 1 and 2) or dished-bottom (see figures 3 and 4) trough.

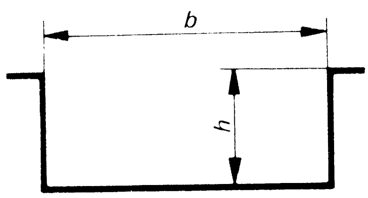

FIGURE 1 – **Rectangular flat-bottom trough**

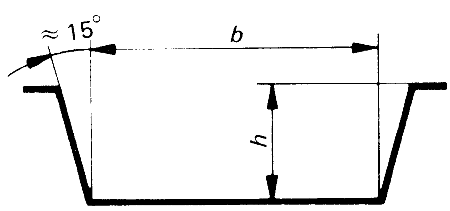

FIGURE 2 – **Trapezoidal flat-bottom trough**

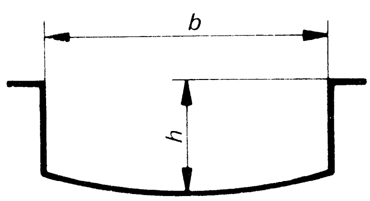

FIGURE 3 – **Rectangular dished-bottom trough**

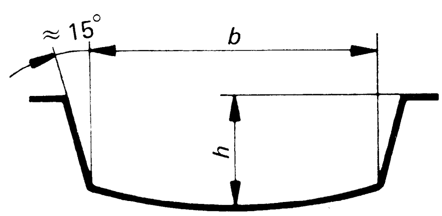

FIGURE 4 – **Trapezoidal dished-bottom trough**

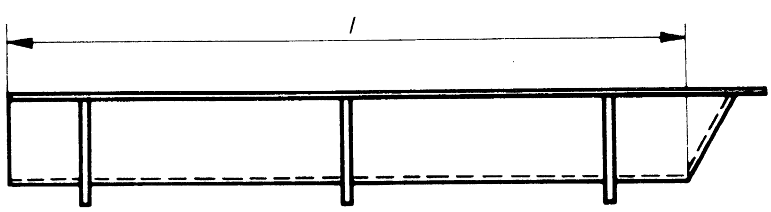

FIGURE 5 – **Length of trough**

3 SPECIFICATIONS

3.1 Geometrical specifications

The following dimensions are given in millimetres.

3.1.1 *Width of trough*

The width of the trough is the inside width *b* of the bottom.

b	200	250	315	400	500	630	800	1 000	1 250	1 600	2 000	2 500

These numbers are taken from the R 10 series of preferred numbers.[1)]

3.1.2 *Height of trough*

The height of the trough is the vertical distance *h* between the bottom and the upper part of the trough.

h	100	125	160	200	250	315	400	500	630	800

These numbers are taken from the R 10 series of preferred numbers.[1)] It is permissible to use the R 20 series of preferred numbers[1)] for intermediate values.

3.1.3 *Length of trough, with one single drive unit*

The length of the trough is the inside length *l* of the bottom.

l	500	750	1 000	1 250	1 500	1 750[2)]	2 000	2 500	3 000	3 500	4 000

It is also permissible to use the R 5 series of preferred numbers and, for intermediate values, the R 10 or R 20 series of preferred numbers.[1)]

3.2 Physical specifications

3.2.1 *Frequency and oscillation distance, for angle of throw 20° maximum*

The frequencies *f* of the shaking or reciprocating movement to apply on the trough, and the corresponding oscillation distances *a* determined with regard to the flow, the characteristics of the material carried, the length of the trough and the type of appliance, shall be chosen from the values given in the table below.

TABLE — **Frequencies and oscillation distances**

Oscillations per minute	from 60 to 600
f Hz	from 1 to 10
a mm	R 20 series[1)]

1) See ISO 3, *Preferred numbers — Series of preferred numbers.*

2) This parameter is taken from the exceptional R 80 series of preferred numbers.