SLOVENSKI STANDARD
SIST ISO 1049:1997

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Naprave za kontinuirni transport sipkih materialov - Vibracijski transporterji in dodajalniki s pravokotnim in trapeznim koritom

Continuous mechanical handling equipment for loose bulk materials -- Vibrating conveyors and feeders with rectangular or trapezoidal trough

Engins de manutention continue pour produits en vrac -- Distributeurs et transporteurs vibrants à auges rectangulaires ou trapézoïdales

Ta slovenski standard je istoveten z: ISO 1049:1975

ICS:

53.040.10 Transporterji Conveyors

SIST ISO 1049:1997 **en**

INTERNATIONAL STANDARD 1049

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

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

Engins de manutention continue pour produits en vrac — Distributeurs et transporteurs vibrants à auges rectangulaires ou trapézoïdales

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Descriptors : handling equipment, continuous handling, conveyors, bulk products, oscillating conveyors, mechanical feeders, specifications, dimensions.

Price based on 2 pages

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 1049 and found it technically suitable for transformation. International Standard ISO 1049 therefore replaces ISO Recommendation R 1049-1969 to which it is technically identical.

ISO Recommendation R 1049 was approved by the Member Bodies of the following countries :

Belgium	Germany	Sweden
Brazil	Greece	Switzerland
Canada	India	Turkey
Chile	Israel	United Kingdom
Czechoslovakia	Italy	U.S.S.R.
Egypt, Arab Rep. of	Japan	Yugoslavia
Finland	Netherlands	
France	South Africa, Rep. of	

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

U.S.A.

No Member Body disapproved the transformation of ISO/R 1049 into an International Standard.

Printed in Switzerland

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

1 SCOPE

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

2 FIELD OF APPLICATION

This International Standard applies to vibrating conveyors and feeders, with

- rectangular (see figures 1 and 3) or trapezoidal (see figures 2 and 4) trough;
- flat bottom (see figures 1 and 2) or dished bottom (see figures 3 and 4) trough.

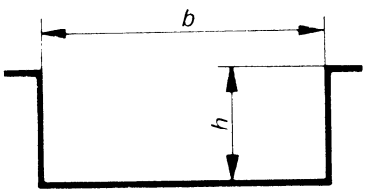

FIGURE 1 — **Rectangular flat-bottom trough**

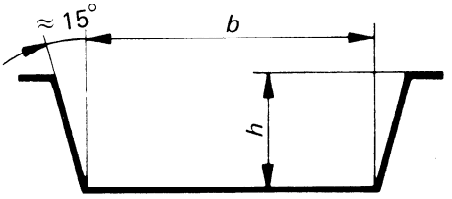

FIGURE 2 — **Trapezoidal flat-bottom trough**

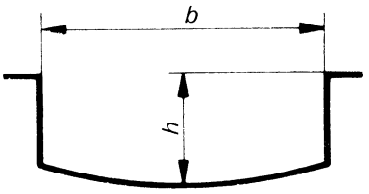

FIGURE 3 — **Rectangular dished-bottom trough**

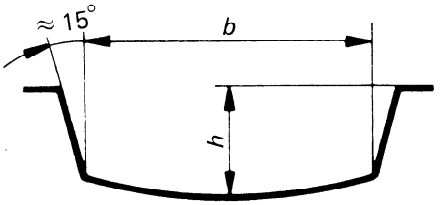

FIGURE 4 — **Trapezoidal dished-bottom trough**

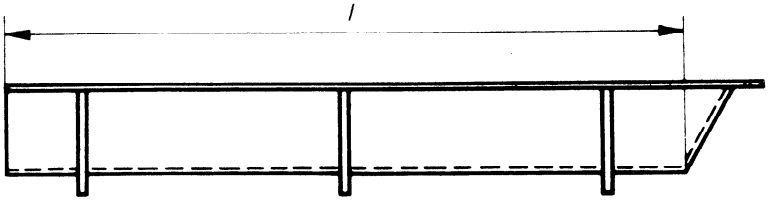

FIGURE 5 — **Length of trough**

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	125	160	200	250	315	400	500	630	800	1000	1250	1 600

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 cover.

h	80	100	125	160	200	250	315	400

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*

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

l	500	750	1 000	1 250	1 500	1 750	2 000	2 500	3 000	3 500	4 000

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

3.2 Physical specifications

3.2.1 *Vibrations*

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

TABLE – **Frequencies and oscillation distances**

Oscillations per minute	750	1 000	1 500	3 000	6 000
f Hz	12,5	16,7	25	50	100
a mm	5 to 32	2,5 to 17	1,2 to 8	0,3 to 3	0,07 to 1

NOTE – The specifications of vibrations given above are based on the frequency of electric current of 50 Hz.

3.3 Specification of construction

For vibrating conveyors, it is possible to allow for several inlet and discharge points.

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