
INTERNATIONAL STANDARD



2381

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

**Continuous mechanical handling equipment for unit loads —
Single strand floor truck conveyors (chain below floor) —
Safety code**

First edition — 1972-06-01

STANDARDSISO.COM : Click to view the full PDF of ISO 2381:1972

annulé
see 7149

UDC 621.868 : 614.8

Ref. No. ISO 2381-1972 (E)

Descriptors : materials handling equipment, conveyors, chain conveyors, safety.

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.

International Standard ISO 2381 was drawn up by Technical Committee ISO/TC 101, *Continuous mechanical handling equipment*.

It was approved in October 1971 by the Member Bodies of the following countries:

Belgium	Ireland	South Africa, Rep. of
Czechoslovakia	Italy	Spain
Egypt, Arab Rep. of	Japan	Sweden
Finland	Netherlands	Thailand
France	New Zealand	United Kingdom
Germany	Poland	U.S.A.
India	Romania	U.S.S.R.

No Member Body expressed disapproval of the document.

Continuous mechanical handling equipment for unit loads — Single strand floor truck conveyors (chain below floor) — Safety code

1 SCOPE

This International Standard specifies, in addition to the general safety rules set out in ISO/R 1819, the special safety rules for the following continuous mechanical handling equipment for unit loads: single strand floor truck conveyors (chain below floor).

2 FIELD OF APPLICATION

The safety rules laid down in this International Standard apply regardless of the use for which the equipment is intended.

These safety rules limit the supplier's responsibility to continuous mechanical handling equipment proper, excluding the structures to which such equipment is affixed.

3 REFERENCE

ISO/R 1819, *Continuous mechanical handling equipment — Safety code — General rules.*

4 SPECIAL SAFETY RULES

The construction and operation for single strand floor truck conveyors (chain below floor) shall meet

- the legal and local requirements relating to safety in general¹⁾,
- the principles laid down in section 1 of ISO/R 1819,
- the general rules laid down in section 2 of ISO/R 1819,
- the following special rules:

4.1 In the construction stage (design and manufacture)

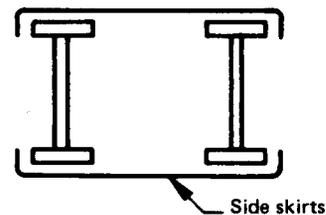
4.1.1 All traction mechanism drives (main sections and branch lines) shall be equipped with load limiters (with or without motor cut-out), which respond when the permissible traction force is exceeded, i.e. independently of the overload safety devices of the electrical switchgear.

If several drives operate in one group, the entire group shall be cut out when the load limiter of one drive responds.

4.1.2 On all floors accessible to operating personnel, the working slot shall not be wider than 30 mm.

4.1.3 On all inclined sections where runaway can occur in service, accidental disengagement of the trucks shall be prevented by means of safety devices.

4.1.4 If any manufacturing or assembling work is carried out on trucks while they are in motion, suitable guards shall be provided to safeguard operating personnel (for instance, floor mounted toe-guards, or skirtings, or guards mounted on the trucks).



4.1.5 Where, for trucks other than those used for manufacturing and assembly work, it is obvious from the operating conditions that dangerous circumstances can arise from a moving truck striking a person or object, a suitable device shall be provided to disengage the truck from the towing chain. This item shall be the subject of agreement between the manufacturer and the user (or his commissioner).

4.2 During the installation stage (design, commissioning and entry into service)

4.2.1 The chain channel cover must be laid in the floor with a uniform stepless transition.

4.2.2 The vehicles shall be painted conspicuously in a standard pattern.

4.2.3 The tracks (transport routes) shall be indicated on the floor by stripes of paint in standard colours, the width corresponding to the clearance of loaded transport trucks.

4.3 During the utilisation stage (operation and maintenance)

1) See Appendix Z of ISO/R 1819.