101

INTERNATIONAL STANDARD 2196

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

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

Engins de manutention continue pour charges isolées — Convoyeurs au sol entraîneurs de chariot et transporteurs au sol entraîneurs de chariot (chaîne ou poussoir au-dessus du sol) — Code de sécurité

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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 2196 and found it technically suitable for transformation. International Standard ISO 2196 therefore replaces ISO Recommendation R 2196-1971 to which it is technically identical.

ISO Recommendation R 2196 was approved by the Member Bodies of the following countries :

Austria	Greece	South Africa, Rep. of
Belgium	Italy	Spain
Czechsolovakia	Japan	Sweden
Egypt, Arab Rep. of	Korea, Rep. of	Thailand
France	Netherlands	United Kingdom
Germany	New Zealand	U.S.S.R.

No Member Body expressed disapproval of the Recommendation.

No Member Body disapproved the transformation of ISO/R 2196 into an International Standard.

Printed in Switzerland

Continuous mechanical handling equipment for unit loads — Single strand floor mounted truck conveyors (chain above 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 mounted truck conveyors (chain above floor).
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 mounted truck conveyors (chain above floor) shall meet

- the legal and local requirements relating to safety in general[1];
- the principles laid down in clause 1 of ISO/R 1819;
- the general rules laid down in clause 2 of ISO/R 1819;
- the following special rules :

4.1 In the construction stage (design and manufacture)

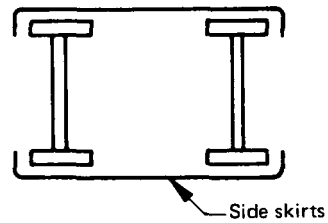
4.1.1 All traction mechanism drives (main sections and branch lines) shall be equipped with load limiters (with or without motor cut-out), which respond when the permissible traction force is exceeded, i.e. independently of the overload safety devices of the electrical switchgear.

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 The drivers shall be of minimum height compatible with reliable engagement with the trucks under all normal working conditions.

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.

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

4.2.1 The chain guides (tracks) shall be painted conspicuously in a standard pattern. Generally speaking, crossing of conveyor sections shall be prohibited. If crossing points are necessary, they shall be installed and marked in a suitable manner.

1) See appendix Z of ISO/R 1819.

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 of a standard colour, the width corresponding to the clearance of loaded transport trucks.

4.3 During the utilisation stage (operation and maintenance)

4.3.1 Precise instructions to the operating personnel concerning the loading of the trucks, especially as regards maximum load, equilibrium and maximum dimensions, shall be displayed in an easily visible position, on each truck if necessary. Loading gauges shall be used, as necessary, for checking.

4.3.2 Personnel shall be given strict instructions as regards transport and stopping prohibitions on the inclined sections and connected low-lying zones.

4.3.3 Heavy vehicles shall not be allowed to pass over the cover plates above the conveyor parts laid below floor-level, unless the cover plates are designed to withstand loads of this type; in this case, the maximum dimensions of the trucks shall be marked and accurate instructions displayed (admissible load, speed, etc.).