STANDARD **1082**

Second edition
1990-08-01

Mining — Shackle type connector units for chain conveyors

Exploitation minière — Étriers de raccordement pour convoyeurs à chaînes

Reference number
ISO 1082 : 1990 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 1082 was prepared by Technical Committee ISO/TC 82, *Mining*.

This second edition cancels and replaces the first edition (ISO 1082 : 1984), of which it constitutes a minor revision. All references to ISO/R 147 have been replaced by a reference to ISO 7500-1.

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Mining — Shackle type connector units for chain conveyors

1 Scope

This International Standard specifies the requirements for a range of shackle type connector units for use with chain conveyors. Each unit consists of the following components:

a) shackle type connector;

b) connector bolt;

c) connector nut.

This International Standard is not intended to indicate a complete design, but it gives sufficient detail to ensure dimensional compatibility with chains complying with ISO 610 and scraper bars complying with ISO 5612. The connector units specified are intended for use as part of 14, 18, 22, 24 and 26 mm diameter chain assemblies in which the connectors are fitted tightly on to scraper bars.

2 Normatives references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 610 : 1990, *High-tensile steel chains (round link) for chain conveyors and coal ploughs.*

ISO 5612 : 1990, *Mining — Scraper bars for chain conveyors.*

ISO 7500-1 : 1986, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tensile testing machines.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 size: The nominal size of the chain for which the connector is made.

3.2 test force: The specified force to which a sample finished connector unit shall be subjected without exceeding the percentage elongation stated in table 3.

3.3 breaking force: The maximum force which a sample finished connector unit withstands during the course of a tensile test to destruction.

3.4 percentage elongation: The extension expressed as a percentage of the outside length.

3.5 processing: Any treatment of the connector units subsequent to forging; for example heat treatment, machining or surface treatment.

3.6 inspector: The representative of the purchaser.

4 Components of connector units

4.1 Shackle type connector

4.1.1 Material

The steel used shall be fully killed, of forgeable quality and of a type not liable to embrittlement, including strain age embrittlement. Within these limitations, and unless otherwise specified, it shall be the responsibility of the connector manufacturer to select the steel so that the finished connector, suitably heat-treated, meets the specified mechanical properties.

4.1.2 Heat treatment

Connectors conforming to this International Standard shall be heat treated in the course of manufacture. Heating to an appropriate temperature above the critical point (Ac_3) of the steel used shall form part of such heat treatment.

4.1.3 Workmanship

All finished connectors shall be sound and free from cracks, surface flaws, laminations and other harmful defects. All flashes or fins produced in manufacture shall be removed.

4.1.4 Surface condition

Unless otherwise agreed between purchaser and manufacturer, connectors shall be supplied unpolished and free from any coating.