

# INTERNATIONAL STANDARD

**ISO**  
**2232**

Second edition  
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## **Round drawn wire for general purpose non-alloy steel wire ropes and for large diameter steel wire ropes — Specifications**

*Fils tréfilés ronds pour câbles d'usages courants en acier non allié et  
pour câbles en acier de gros diamètre — Spécifications*



Reference number  
ISO 2232:1990(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 2232 was prepared by Technical Committee ISO/TC 105, *Steel wire ropes*.

This second edition cancels and replaces the first edition (ISO 2232:1973), of which it constitutes a technical revision.

Annexes A, B and C form an integral part of this International Standard. Annexes D and E are for information only.

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# Round drawn wire for general purpose non-alloy steel wire ropes and for large diameter steel wire ropes — Specifications

## 1 Scope

This International Standard specifies round non-alloy steel drawn wires to be used in the manufacture of

- general purpose steel wire ropes as defined in ISO 2408;
- large diameter steel wire ropes as defined in ISO 8369.

It specifies

- the dimensional tolerances;
- the mechanical characteristics;
- the conditions with which the coating, if any, shall comply;
- the conditions of sampling, control and the terms of acceptance.

It applies to round bright or galvanized (quality A or B) wires of nominal diameters between 0,2 mm and 6 mm.

It does not apply to steel wire taken from manufactured ropes.

It does not apply to wire for ropes for special applications, such as

- winding ropes for mining purposes;
- ropes for aircraft controls;
- ropes for deep drilling equipment;
- ropes for aerial ropeways;

- ropes for elevators;
- ropes for prestressed concrete.

## 2 Normative 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 2408:1985, *Steel wire ropes for general purposes — Characteristics*.

ISO 6892:1984, *Metallic materials — Tensile testing*.

ISO 7800:1984, *Metallic materials — Wire — Simple torsion test*.

ISO 7801:1984, *Metallic materials — Wire — Reverse bend test*.

ISO 7802:1983, *Metallic materials — Wire — Wrapping test*.

ISO 8369:1986, *Large diameter steel wire ropes*.

## 3 Wire characteristics

### 3.1 General conditions of manufacture

Wire shall be made by the basic open hearth, electric furnace, or basic oxygen steel process, or by equivalent methods.