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**Reinforcement yarns — Determination of  
twist**

*Fils de renfort — Détermination de la torsion*



## 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 1890 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 13, *Composites and reinforcement fibres*.

This third edition cancels and replaces the second edition (ISO 1890:1986), which has been technically revised.

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# Reinforcement yarns — Determination of twist

## 1 Scope

This International Standard specifies a method for the determination of twist in yarns made from textile glass, carbon or aramid filaments.

The method applies to single yarns (one twist) and to folded or cabled yarns (two or more twists). For folded and cabled yarns, the method is generally applied only to the final twist step.

This International Standard is applicable to package-wound yarns. If the measurement is carried out on yarns taken from a beam (or warp) or from a fabric, the result is of an indicative nature only.

The method is not applicable to products made from staple fibres.

## 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 2:1973, *Textiles - Designation of the direction of twist in yarns and related products*.

ISO 291:—<sup>1)</sup>, *Plastics - Standard atmospheres for conditioning and testing*.

ISO 1889:1997, *Reinforcement yarns - Determination of linear density*.

## 3 Definition

For the purposes of this International Standard, the following definition applies.

**3.1 Z twist or S twist:** The twist in a product if, when it is held in a vertical position, the spirals or helices formed by the fibres or filaments around its axis incline in the same direction as the central portion of the letter Z or S, respectively. (See ISO 2:1973, clause 2).

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1) To be published. (Revision of ISO 291:1977)