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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Textile glass — Rovings — Determination of compressive strength of rod composites

Verre textile — Stratifils — Détermination de la résistance à la compression sur joncs

Reference number
ISO 3605 : 1987 (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.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 3605 was prepared by Technical Committee ISO/TC 61, *Plastics.*

This second edition cancels and replaces the first edition (ISO 3605 : 1978), clauses 1, 3, 4 and 5 of which have been technically revised.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Textile glass — Rovings — Determination of compressive strength of rod composites

1 Scope and field of application

This International Standard specifies a method for determining the compressive strength of composite rods of circular cross-section made from rovings.

This test may be made on rods as moulded, or on rods that have been in boiling water for a specified time.

This test is intended for inspection testing and quality control of rovings and the results obtained shall not be used for the generation of design data.

2 References

ISO 291, *Plastics — Standard atmospheres for conditioning and testing.*

ISO 1172, *Textile glass reinforced plastics — Determination of the loss on ignition.*

3 Apparatus and material

3.1 Mould, in the form of a straight rigid cylinder having a minimum length of 400 mm and a standard internal diameter of 6 ± 0,1 mm; if other diameters are chosen, these shall be selected by agreement between the interested parties from the range of 4 to 10 mm (with tolerances of ± 0,1 mm).

The mould may be constructed of glass or polytetrafluoroethylene.

3.2 Resin.

Not all resin systems are necessarily suitable and the system to be used shall be at the discretion of the roving supplier. In the event of dispute, the system used shall be declared and shall form the basis for the test, subject to an agreement between the interested parties. The selected resin system shall be mixed in accordance with the resin manufacturer's detailed instructions. (See the annex.)

3.3 Metal wire, for pulling the roving through the mould (3.1).

3.4 Impregnating equipment (figure 1).

This equipment may include one or two impregnating baths. It is recommended that a device for removing air bubbles by means of rollers be included. It is also recommended that for pultrusion of the rods, the machine be adjustable to a constant speed in the range of 1 to 12 mm/s.

3.5 Oven with air circulation, for curing and/or postcuring the resin at the recommended temperature.

3.6 Diamond-tipped saw.

3.7 Micrometer.

3.8 Heating plate and glassware, if test after boiling-water treatment is required.

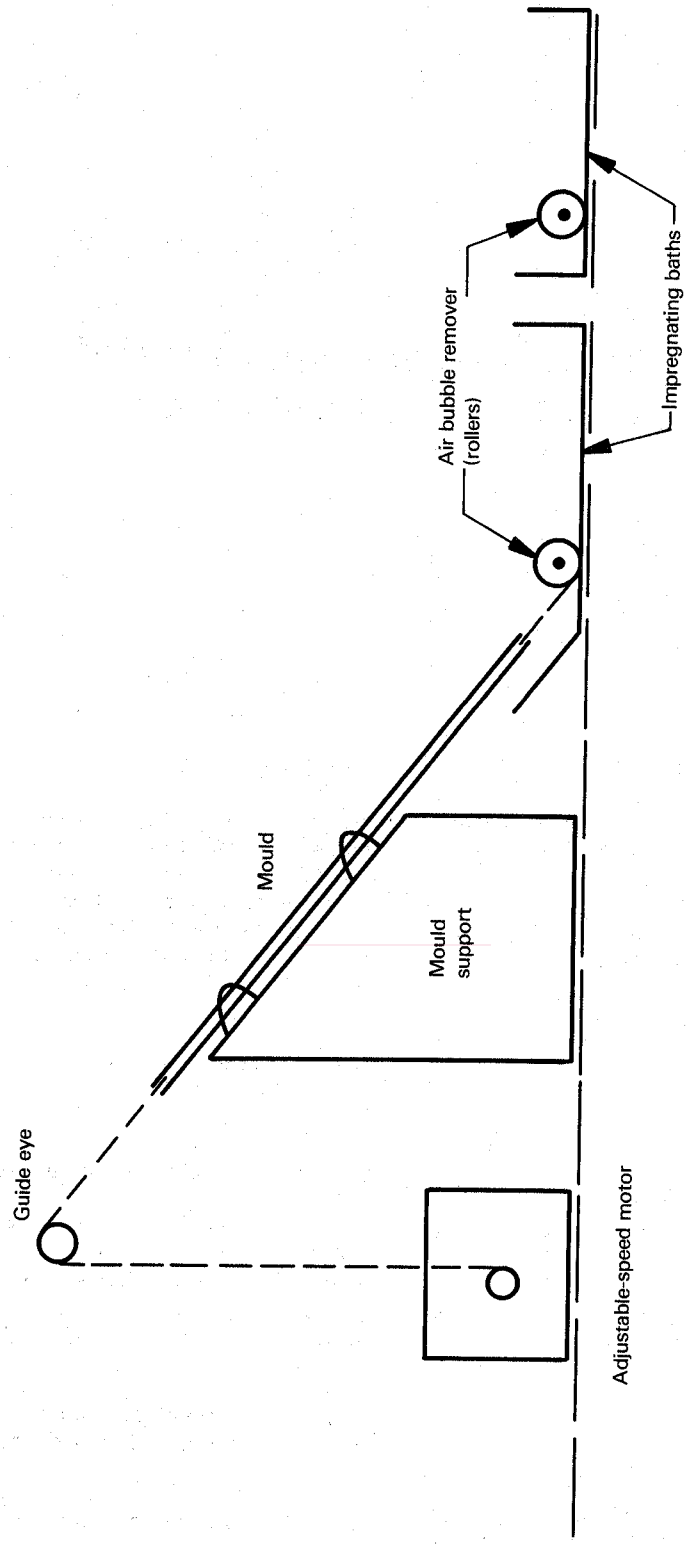

Figure 1 — Example of equipment for impregnation of rovings