International Standard ISO 7793

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Cross-country skis — Binding mounting area — Stripping torque — Requirements and test method

Skis de fond — Zone de montage de la fixation — Résistance au foirage des vis — Spécifications et méthode d'essai

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Foreword

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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.

International Standard ISO 7793 was developed by Technical Committee ISO/TC 83, *Sports and recreational equipment*, and was circulated to the member bodies in May 1983.

It has been approved by the member bodies of the following countries :

Austria	India	Sweden
Czechoslovakia	Italy	USA
Finland	Japan	USSR
France	New Zealand	
Germany, F.R.	South Africa, Rep. of	

The member body of the following country expressed disapproval of the document on technical grounds :

Poland

Printed in Switzerland

Cross-country skis — Binding mounting area — Stripping torque — Requirements and test method

1 Scope and field of application

This International Standard specifies minimum values for the stripping resistance for the binding mounting area of cross-country skis and describes a method of test for the determination of the stripping torque.

This International Standard applies only to skis the bindings of which will be attached by means of screws in areas A_1 and A_2, as defined in ISO 7264. It does not apply to alpine skis and skis intended for use with cable bindings (see ISO 7265).

The area designed for binding mounting is called the "binding mounting area". This area, which shall be provided by the ski manufacturer according to ISO 7264, shall be the only area of the ski subjected to this test and may be specially reinforced.

2 References

ISO 7264, *Cross-country skis — Dimensions of the binding mounting area for toe clip bindings.*

ISO 7265, *Cross-country skis — Binding mounting area — Static screw retention strength — Requirements and test method.*[1)]

ISO 7794, *Cross-country skis — Ski binding screws — Requirements.*

ISO 7795, *Cross-country skis — Ski binding screws — Test methods.*

3 Definition

For the purpose of this International Standard the following definition applies.

stripping torque, T_s : The maximum measurable moment, in newton metres, which causes damage to the internal thread in the ski or to the thread of the screw if the already tightened screw is further loaded by a driving moment.

4 Principle

Quantification of the resistance of the structure to a tightening moment applied on the test screw. Determination of the maximum load resisted without damage to the structure.

5 Stripping resistance of the ski — Requirements

The stripping resistance of the ski shall be 3 N·m in both areas A_1 and A_2, for group 1 and group 2.

1) At present at the stage of draft.

6 Apparatus

6.1 A jig, as shown in figure 2, shall be used for drilling holes, mounting test screws and determining the stripping torque.

Used with a drill bushing the jig shall ensure an exact drill hole and a screw mounting perpendicular to the top surface of the ski.

The jig is equipped with a friction plate, as shown in figure 1, made from aluminium alloy (for example : type 2017 A, T 4). See ISO 7795.

6.2 **Test screws**, with a penetration depth of 10 ± 0,5 mm complying with ISO 7794.

7 Determination of stripping resistance

7.1 Using the test jig (6.1) with a drill bushing, drill a hole of ϕ 3,6 mm H12 ($^{+\,0,12}_{0}$ mm) and depth 10,5 mm in the ski.

Using the test jig, without the drill bushing, as a guide, mount and tighten the screws.

7.2 Apply an increasing torque with a torque wrench screwdriver until a drop in the torque resistance indicates failure of the thread or until the load equals the stripping resistance as specified in clause 5.

Repeat the test, using at least 10 different screws of the same type.

Use a new hole of the friction plate after each test.

Dimensions in millimetres

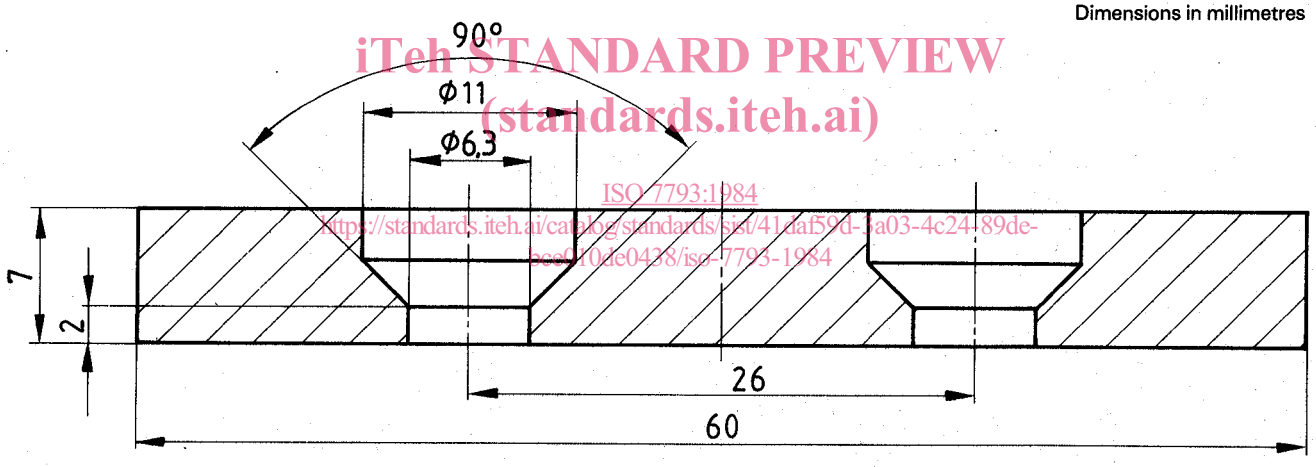

Figure 1 — Friction plate

Dimensions in millimetres

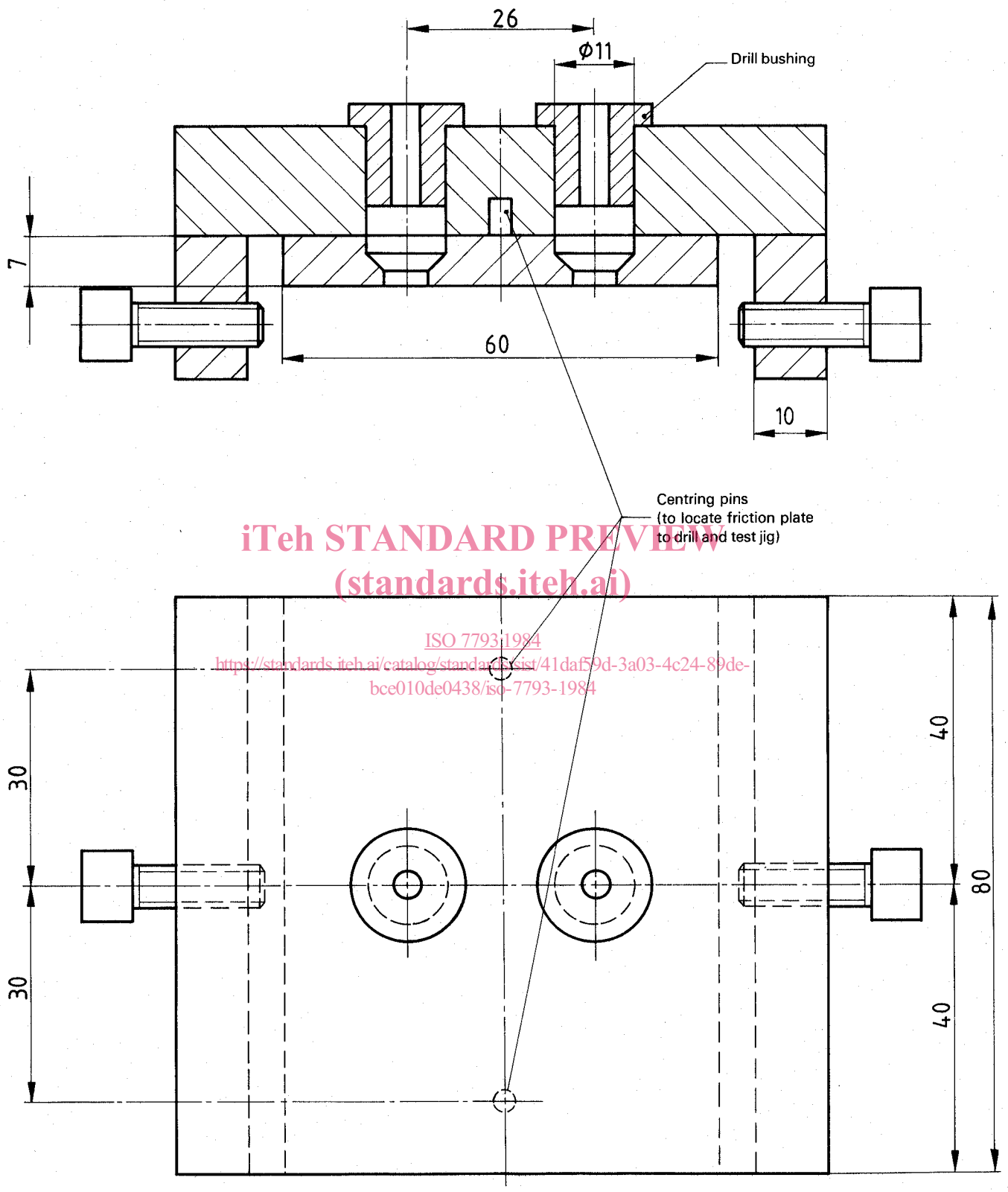

Figure 2 — Drill and test jig