International Standard 379

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

Gymnastic equipment — Horizontal bar

Engins de gymnastique — Barre fixe

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Descriptors : sport equipment, gymnastic equipment, dimensions, specifications, materials specifications, equipment specifications.

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

International Standard ISO 379 was developed by Technical Committee ISO/TC 83, *Sports and recreational equipment*, in cooperation with the International Gymnastic Federation (IGF) and was circulated to the member bodies in June 1979.

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

Australia	Germany, F. R.	South Africa, Rep. of
Austria	India	Spain
Egypt, Arab Rep. of	New Zealand	Switzerland
France	Poland	USSR

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Italy
Netherlands

This International Standard cancels and replaces ISO Recommendation R 379-1964, of which it constitutes a technical revision.

Printed in Switzerland

Gymnastic equipment — Horizontal bar

1 Scope and field of application

This International Standard specifies the functional and safety requirements for horizontal bars for use in competitions and training, in order to permit a true comparison of performance.

2 Dimensions

The dimensions of the horizontal bar shall be those indicated in figure 1. The dimensions not specified are left to the discretion of the manufacturer.

The horizontal bar need not correspond to figure 1.

The dimension 2 400 mm corresponding to the distance from centre to centre of the bar pins, allowing deflection of the bar in the vertical plane, may be the same as the dimension from centre to centre of the supports.

The height for competitions shall be at 2 550 ± 5 mm.

3 Material

The bar shall be made of stainless steel of at least 1 200 N/mm^2 tensile strength.

The supports shall be of steel or equivalent material.

Dimensions in millimetres

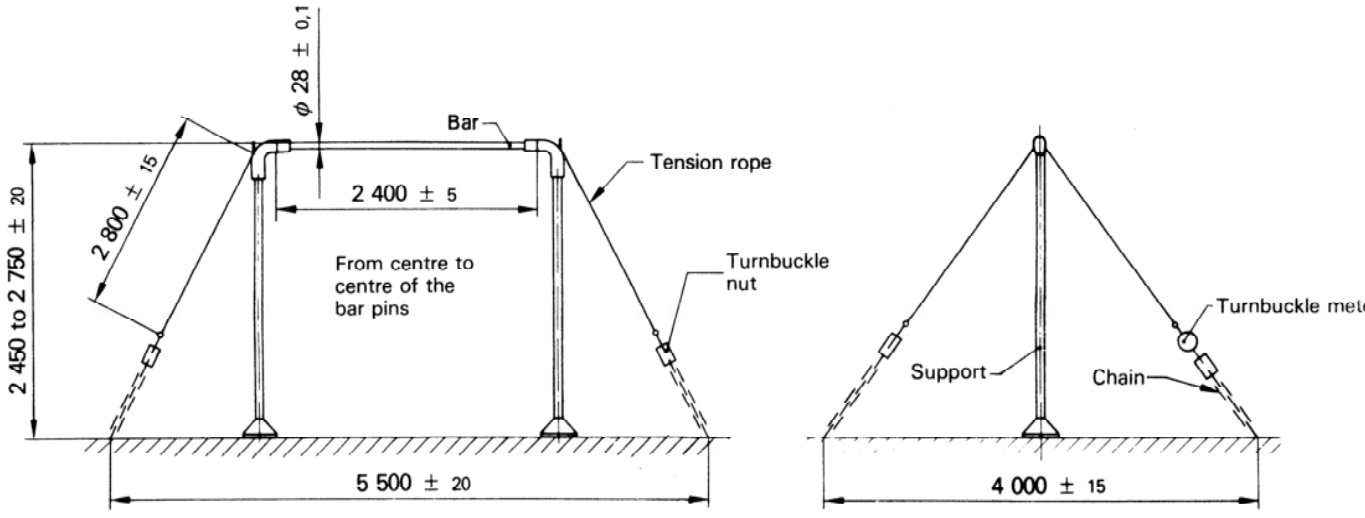

Figure 1 — Dimensions of horizontal bar

4 Execution

The surface finish of the bar shall correspond to R_a = 1,6 to 1,8 µm.

The complete construction shall be protected against corrosion.

5 Design

5.1 General requirements

The bar pins shall not project, in order to avoid all possibility of injury by contact with them.

5.2 Seating

The seating of the bar on the supports shall be designed in such a way that the bar may swing freely and without noise in all directions.

The bar must be secured against rotation around its longitudinal axis.

5.3 Elasticity

The bar shall have a homogeneous elasticity, determined according to the method of test given below (see figure 2).

When a test force F = 2 200 N is applied at the centre of the upper face of the horizontal bar, positioned as for use with the bar at a height of 2 550 mm, the deflection f shall be 90 ± 10 mm.

After removal of the load, the bar shall return to its original position.

5.4 Stretching device

The horizontal bar, ready for use, shall be assembled with a tension of 1 400 ± 100 N, read directly from the turnbuckle meter.

NOTE — The value of 1 400 N is still under consideration. The functional properties of the bar are decisively influenced by this value.

The right-hand thread of the turnbuckle nut (between the support and the stretching device) shall be provided on the side towards the tension rope.

Each of the four connections between support and stretching device, as well as each of the devices for attachment to the floor, shall be capable of being submitted to a test load of at least 8 000 N without any permanent deformation.

5.5 Adjustment of the bar

It shall be possible to adjust the height of the horizontal bar between 2 450 and 2 750 mm by notches in steps of 50 mm.

Dimensions in millimetres

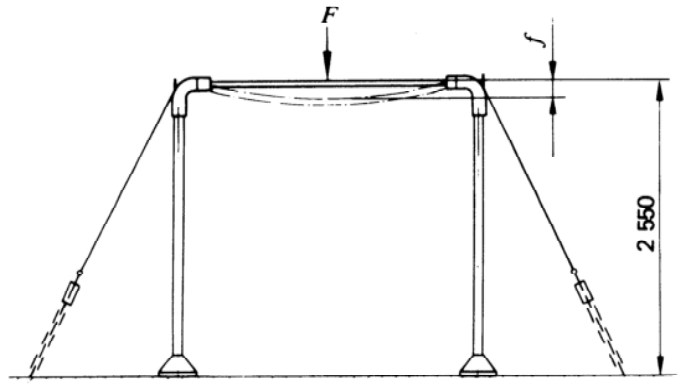

Figure 2 — Elasticity of horizontal bar