International Standard 4878

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

Flat woven webbing slings made of man-made fibre

Élingues plates en sangles tissées en textiles chimiques

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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 4878 was developed by Technical Committee ISO/TC 38, *Textiles*, and was circulated to the member bodies in September 1979.

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

Australia	Israel	South Africa, Rep. of
Belgium	Italy	Spain
Bulgaria	Japan	Sweden
Canada	Korea, Rep. of	Switzerland
Cyprus	Netherlands	Turkey
Czechoslovakia	New Zealand	United Kingdom
Egypt, Arab Rep. of	Norway	USA
Finland	Poland	USSR
Ghana	Portugal	Yugoslavia
Indonesia	Romania	

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

France
Germany, F.R.

Printed in Switzerland

Flat woven webbing slings made of man-made fibre

1 Scope and field of application

1.1 This International Standard specifies the basic characteristics of flat woven webbing slings made of certain man-made fibres (polyamide, polyester and polypropylene) used for lifting purposes or handling loads, and defines the tests and procedures needed to verify them.

In addition it stipulates the method of manufacture, identification and marking of these slings as well as the means of recording their characteristics.

This International Standard also gives important practical advice on the use, maintenance and inspection of slings (see annexes B and C).

1.2 This International Standard does not apply to special slings or to the types of applications indicated below :

— webbings used for the securing or lashing of cargoes to each other on pallets and platforms or in vehicles;

— slings consisting of webbing with a nominal width below 25 mm[1] or above 320 mm, as well as special slings : bag slings, nets (consisting of several crossed webbings stitched together) "adjustable" slings (containing, for example, intermediate buckles stitched along the webbing), etc.;

— flat slings made from non-woven webbing, such as extruded profile webbing (with or without inclusion of continuous thread cores), monofilament webbing, webbing plaited from cable or rope[2];

— slings used for pre-slinging and not re-used;

— slings of tubular webbing without filling;

— slings formed from strips of cut fabric.

2 References

ISO 3, *Preferred numbers — Series of preferred numbers.*

ISO 17, *Guide to the use of preferred numbers and series of preferred numbers.*

ISO 139, *Textiles — Standard atmospheres for conditioning and testing.*

ISO 1833, *Textiles — Binary fibre mixtures — Quantitative chemical analysis.*

ISO 1968, *Ropes and cordage — Vocabulary.*

ISO 2076, *Man-made fibres — Generic names.*

ISO 2307, *Ropes — Determination of certain physical and mechanical properties.*

3 Definitions

3.1 sling : A flexible component for connecting the lifting appliance and the load during handling and lifting.

NOTE — A distinction is made between :

sling in basic configuration, i.e. a single or endless sling as used for determination of working load limit (see figure 9), and

finished sling or sling assembly, i.e. a sling in the form in which it is actually used (in some cases this will be the same as the sling in basic configuration, in others it will be a form thereof, as in choke hitch, or a derivation or multiple thereof).

3.2 flat woven webbing sling : A sling consisting of webbing with woven edges, sometimes terminating in end fittings to allow fastening.

3.3 woven webbing : A part of the sling comprising a woven area containing one or several woven warps intended to withstand the force exerted by the load.

1) The greatest care should be taken when using narrow or thin slings, because of their greater vulnerability to abrasion, cutting or twisting during use.

2) "**rope** : A textile product not less than 4 mm diameter, generally consisting of three or four strands cabled or plaited together, with or without a core." (Definition from ISO 1968.)