International Standard 4779

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

Forged steel lifting hooks with point and eye for use with steel chains of grade M(4)

Crochets de levage forgés en acier à bec et à œil destinés à être utilisés avec des chaînes en acier de classe M(4)

First edition — 1986-12-15

UDC 621.86.061 **Ref. No. ISO 4779-1986 (E)**

Descriptors : lifting equipment, lifting hooks, specifications, dimensions, tests, certification, marking.

Price based on 5 pages

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 4779 was prepared by Technical Committee ISO/TC 111, *Round steel link chains, lifting hooks and accessories.*

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.

Printed in Switzerland

Forged steel lifting hooks with point and eye for use with steel chains of grade M(4)

1 Scope and field of application

This International Standard specifies requirements for forged steel lifting hooks with point and eye, as shown in the figure, in a range of sizes having performance compatibility with the corresponding nominal sizes of grade M(4) chain complying with ISO 1835. Performance compatability encompasses component strength and the necessary physical dimensions.

2 References

ISO 643, *Steels — Micrographic determination of the ferritic or austenitic grain size.*

ISO 1835, *Short link chain for lifting purposes — Grade M(4), non-calibrated, for chain slings, etc.*

ISO 4778, *Chain slings of welded construction — Grades M(4), S(6) and T(8).*

3 Definitions

3.1 working load limit (WLL): The maximum mass which a hook is designed to sustain in general service.

3.2 working load (WL): The maximum mass which a hook should be used to sustain in a particular stated service.

3.3 proof force, F_e: A force applied as a test to the hook as specified in clause 9.

3.4 ultimate strength: The maximum force reached during the tensile testing of the hook at the end of which the hook fails to retain the load.

4 Form and dimensions

4.1 Dimensions

The principal dimensions of the hooks shall comply with the requirements of table 1 in which the hook dimensions are related to the nominal size of the chain.

In addition, the following requirements shall be met:

a) the actual point height, B_s, shall be equal to or greater than the actual throat opening, O, of the same hook (see the figure);

b) the actual throat opening, O, shall not exceed 95 % of the actual seat diameter, D, of the same hook;

c) if a safety latch is fitted, it shall be capable of closing over the maximum diameter of the bar which can be admitted through the actual throat opening, O_1, as indicated by the dotted line in the figure.

4.2 Form

The form of the hook is not specified in detail. For example, a minimum value of dimension E (as measured in any direction) is specified so that the eye of the hook can accommodate a pin, but the eye of the hook need not be circular.