
International Standard 3266

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Eyebolts for general lifting purposes

Anneaux à tige pour applications de levage général

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Descriptors : eye screws, dimensions, dimensional tolerances, specifications, marking, load capacity, mechanical properties.

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 3266 was prepared by Technical Committee ISO/TC 111, *Round steel link chains, lifting hooks and accessories*.

Eyebolts for general lifting purposes

1 Scope and field of application

This International Standard specifies the basic dimensions, material, lifting capacity and conditions of use of lifting eyebolts. These eyebolts may be used for vertical and inclined lifting (see the annex).

Eyebolts with and without recessed collar are included in this International Standard (see figure 1) i.e.:

- a) type 1, eyebolt with recessed collar, suitable for use with chamfered or unchamfered holes;
- b) type 2, eyebolt without recessed collar, suitable for use with chamfered holes only.

This International Standard excludes eyebolts which are not forged in one piece.

The dimensions of the eyes of eyebolts covered by this International Standard are such that they are normally capable of permitting direct engagement with eyehooks of the same lifting capacity (working load limit) for use with grade T (8) chain (see ISO 7597).

In the case of eyehooks for use with grade M (4) chain (see ISO 4779), it may be necessary to use an intermediate component such as a shackle to make the connection.

2 References

ISO 261, *ISO general purpose metric screw threads — General plan.*

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

ISO 965, *ISO general purpose metric screw threads — Tolerances.*

ISO 4779, *Forged steel lifting hooks with point and eye for use with steel chains of grade M (4).*¹⁾

ISO 7597, *Forged steel lifting hooks with point and eye for use with steel chains of grade T (8).*¹⁾

3 Nominal size (Thread dimension, d)

Eyebolts are identified according to their basic thread dimensions. The maximum axial lifting capacity (WLL) for each eyebolt is given in table 2.

4 Dimensions and tolerances

The form and basic dimensions of eyebolts shall be in accordance with figure 1 and table 2. They are formulated on the basis of the available threads listed in ISO 261.

A symmetrical tolerance on ovality of + 5 % is permitted in respect of the internal diameter, E .

A symmetrical tolerance of ± 5 % on the diameter, F , is permitted.

5 Material

The steel shall be produced by the open hearth process, the electrical process or by an oxygen blown process.

In its finished state, as supplied to the eyebolt maker, the steel shall meet the following requirements as determined by a cast or product analysis on the bar or on the finished eyebolt.

It shall be fully killed, shall be suitable for forging and shall be capable of being heat-treated to obtain the mechanical properties required by this International Standard.

The proportions of sulfur and phosphorus shall be limited as shown in table 1.

Table 1 — Proportions of sulfur and phosphorus

			Cast analysis	Product analysis
Maximum proportions of	sulfur	%	0,045	0,050
	phosphorus	%	0,040	0,045

1) At present at the stage of draft.