
International Standard



883

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

Indexable hardmetal (carbide) inserts with rounded corners, without fixing hole — Dimensions

Plaquettes amovibles en métaux-durs (carbures métalliques) avec arrondi de pointe, sans trou de fixation — Dimensions

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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 883 was prepared by Technical Committee ISO/TC 29, *Small tools*.

ISO 883 was first published in 1975. This third edition cancels and replaces the second edition, of which it constitutes a technical revision.

Indexable hardmetal (carbide) inserts with rounded corners, without fixing hole — Dimensions

1 Scope and field of application

This International Standard specifies the dimensions of indexable hardmetal (carbide) inserts with rounded corners, without fixing hole and with normal clearance of 0° and 11°. These inserts are primarily intended to be mounted, by top clamping, on turning and boring tools.

2 References

ISO 513, *Application of carbides for machining by chip removal — Designation of the main groups of chip removal and groups of application.*

ISO 1832, *Indexable inserts for cutting tools — Designation.*

ISO 3364, *Indexable hardmetal (carbide) inserts with rounded corners, with cylindrical fixing hole — Dimensions.*

ISO 3365, *Indexable hardmetal (carbide) inserts with wiper edges, without fixing hole — Dimensions.*

ISO 6987/1, *Indexable hardmetal (carbide) inserts with rounded corners, with partly cylindrical fixing hole — Part 1: Dimensions of inserts with 7 degrees normal clearance.*

3 Types of inserts

The types of indexable hardmetal (carbide) inserts specified in this International Standard are the following:

- TN: triangular inserts, with 0° normal clearance;
- TP: triangular inserts, with 11° normal clearance;

- SN: square inserts, with 0° normal clearance;
- SP: square inserts, with 11° normal clearance.

Inserts with 0° normal clearance (TN and SN) are standardized only without chip breakers. Inserts with 11° normal clearance (TP and SP) are provided with and without chip breakers.

At present, neither the shape nor the dimensions of chip breakers are standardized. Thus, if necessary, special features have to be explained by means of a diagram or additional specifications.

Table 4 gives the ranges of sizes for these inserts.

4 Interchangeability

4.1 Tolerances

Indexable hardmetal (carbide) inserts specified in this International Standard are provided in the following tolerance classes, in accordance with ISO 1832:

- a) inserts without chip breakers:
 - tolerance classes U and G;
- b) inserts with chip breakers:
 - tolerance class M.

Inserts with chip breakers and tolerance class G are second preference (see annex C).

The values of the tolerances in accordance with ISO 1832 are given in annex A.

Other tolerances are given in tables 1 and 2.