INTERNATIONAL STANDARD

ISO 16462

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Cubic boron nitride inserts, tipped or solid — Dimensions, types

Plaquettes en nitrure de bore cubique, brasées ou monobloc — Dimensions, types

Reference number
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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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 16462 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 9, *Tools with cutting edges made of hard cutting materials*.

In this corrected version, the word “without” in Subclause 4.2.1, line 3, has been replaced by “with” so that the text reads: “with chamfered and rounded edges”.

Cubic boron nitride inserts, tipped or solid — Dimensions, types

1 Scope

This International Standard applies to inserts with insert shapes in accordance with ISO 883, ISO 3364, ISO 3365 and ISO 6987, tipped with cubic boron nitride (BL, BH, BC) or made of solid cubic boron nitride (BL, BH, BC).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 513, *Classification and application of hard cutting materials for metal removal with defined cutting edges — Designation of the main groups and groups of application*

ISO 883, *Indexable hardmetal (carbide) inserts with rounded corners, without fixing hole — Dimensions*

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, *Indexable hard material inserts with rounded corners, with partly cylindrical fixing hole — Dimensions*

3 Insert shapes and design

3.1 Insert shapes

Triangular (T), square (S), rhombic 80° (C), 55° (D) and 35° (V), round (R), and trigon (W).

3.2 Normal clearance α_n

Normal clearance 0° (N), 5° (B), 7° (C) and 11° (P).

3.3 Cutting edge corner

Inserts for turning with corner radius r_ε 0,2 mm; 0,4 mm; 0,8 mm; 1,2 mm and 1,6 mm.

Inserts for milling with wiper edge.

NOTE The design of non-tipped corners is optional.