
Indexable inserts for cutting tools — Designation

Plaquettes amovibles pour outils coupants — Désignation



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ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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This document was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 9, *Tools with defined cutting edges, cutting items*.

This sixth edition cancels and replaces the fifth edition (ISO 1832:2012), which has been technically revised.

Indexable inserts for cutting tools — Designation

1 Scope

This document establishes a code for the designation of the usual types of indexable inserts for cutting tools in hard cutting materials or any other cutting materials, in order to simplify orders and specifications for such inserts.

It also specifies the designations for cubic boron nitride (BL, BH, BC) inserts, tipped and solid, as well as polycrystalline diamond (DP) inserts, tipped.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 3002-1, *Basic quantities in cutting and grinding — Part 1: Geometry of the active part of cutting tools — General terms, reference systems, tool and working angles, chip breakers*

ISO 16462, *Cubic boron nitride inserts, tipped or solid — Dimensions, types*

ISO 16463, *Polycrystalline diamond inserts, tipped — Dimensions, types*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Explanation of designation code

For indexable inserts, the designation code comprises nine symbols for designating the dimensions and other characteristics; the first seven symbols (symbols ① to ⑦) shall be used in every designation. Symbols ⑧ and ⑨ may be used when necessary.

For tipped inserts in accordance with ISO 16462 and ISO 16463, the designation code comprises 12 symbols for designating the dimensions and other characteristics; symbols ① to ⑦ as well as ⑪ and ⑫ shall be used in every designation. Symbols ⑧, ⑨ and ⑩ may be used when necessary. Symbols ⑪ and ⑫ shall be separated by a dash as shown in [Clause 4](#), example 2.

In addition to the standardized designation for indexable inserts and tipped inserts, a supplementary symbol ⑬ consisting of one or two characters may be added by the manufacturer for a better description of his/her product (for example, different chip breakers), provided this symbol is separated from the standardized designation by a dash and that it does not contain letters specific to references ⑧, ⑨ and ⑩.