

Transformed

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 504

TURNING TOOLS WITH CARBIDE TIPS

DESIGNATION AND MARKING

1st EDITION

October 1966

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BRIEF HISTORY

The ISO Recommendation R 504, *Turning Tools with Carbide Tips — Designation and Marking*, was drawn up by Technical Committee ISO/TC 29, *Small Tools*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this question by the Technical Committee began in 1955 and led, in 1960, to the adoption of a Draft ISO Recommendation.

In April 1964, this Draft ISO Recommendation (No. 668) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

Australia	France	Portugal
Austria	Germany	Spain
Belgium	Hungary	Sweden
Brazil	India	Switzerland
Canada	Italy	Turkey
Chile	Korea, Rep. of	United Kingdom
Colombia	Netherlands	U.S.A.
Czechoslovakia	New Zealand	U.S.S.R.
Denmark	Poland	Yugoslavia

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in October 1966, to accept it as an ISO RECOMMENDATION.

TURNING TOOLS WITH CARBIDE TIPS

DESIGNATION AND MARKING

1. SCOPE

This ISO Recommendation applies to designation and marking of turning tools with carbide tips, metric series, covered by ISO Recommendation R 243* and ISO Recommendation R 514,** which relate to external tools and internal tools respectively.

The designating numbers for "type of tool" are those which appear in these ISO Recommendations.

The designating symbols for "groups of application" are those of ISO Recommendation R 513***

2. INTERNATIONAL DESIGNATION

Enumerate in this sequence,

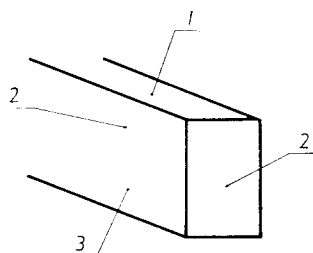
- (a) the mark "ISO" followed by the designating number of the type of tool;
- (b) the designating symbol for the direction of the tool:
 - *R* for right-hand tools,
 - *L* for left-hand tools;
- (c) the symbol for the dimensions of the shank section, in millimetres, in accordance with the following examples:
 - 2525 for a square section of 25 mm per side,
 - 2516 for a rectangular section 25 mm high and 16 mm wide,
 - 25 for a round section of 25 mm diameter;
- (d) the designating symbol for the "group of application" of the carbide grade.

Example of the abridged international designation for a No. 6 ISO tool (right-hand), with a square section 25 mm × 25 mm and carbide tip of the P20 group of application: **Tool: ISO 6 R 2525 — P20.**

3. INTERNATIONAL MARKING

Tools should be marked as shown below, referring for items 1 and 2 to ISO Recommendation R 513***

1. *Distinctive colour of the "main group of chip removal"*, applied on the back part of the shank (or on the whole of it).
2. *Symbol of the "group of application"*, inscribed on the back part of the left-hand lateral face of the shank and on its rear face.
3. *Designating number of the type of tool*, which may be optionally added on the left-hand lateral face of the shank and preferably adjacent to the preceding inscription.



* ISO Recommendation R 243, *Turning Tools with Carbide Tips - Metric Series.*

** ISO Recommendation R 514, *Turning Tools with Carbide Tips - Internal Tools - Metric Series.*

*** ISO Recommendation R 513, *Application of Carbides for Machining by Chip Removal - Designation of the Main Groups of Chip Removal and Groups of Application.*