

INTERNATIONAL STANDARD

ISO
11054

Second edition
2006-01-15

Cutting tools — Designation of high-speed steel groups

Outils coupants — Désignation des groupes d'aciers rapides

STANDARDSISO.COM : Click to view the full PDF of ISO 11054:2006



Reference number
ISO 11054:2006(E)

© ISO 2006

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

STANDARDSISO.COM : Click to view the full PDF of ISO 11054:2006

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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 11054 was prepared by Technical Committee ISO/TC 29, *Small tools*.

This second edition cancels and replaces the first edition (ISO 11054:1993), which has been technically revised.

Cutting tools — Designation of high-speed steel groups

1 Scope

This International Standard specifies the designation of groups of high-speed steels used for manufacturing high-speed steel (HSS) cutting tools such as taps, drills, end mills, etc. It is not intended to specify the composition of high-speed steels, which is the subject of ISO 4957.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1

conventional high-speed steel

high-speed steel produced by the traditional ingot metallurgy process

2.2

powder metallurgy high-speed steel

high-speed steel produced by the powder metallurgy process

3 Designation

Table 1 gives the code designation of high-speed steels used for cutting tools.

In addition to the standardized code, a supplementary symbol may be added by the manufacturer for a fuller description of his products.

Table 1 — High-speed steel groups

Production process	Designation code	Chemical composition class
Conventional high-speed steels	HSS	High-speed steel containing less than 4,5 % cobalt and less than 2,6 % vanadium
	HSS-E	High-speed steel containing at least 4,5 % cobalt or at least 2,6 % vanadium
Powder metallurgy high-speed steels	HSS-PM	High-speed steel containing less than 4,5 % cobalt and less than 2,6 % vanadium
	HSS-E-PM	High-speed steel containing at least 4,5 % cobalt or at least 2,6 % vanadium

4 Examples

EXAMPLE 1 High-speed steel HS6-5-2, according to ISO 4957, containing 0 % cobalt and 1,8 % vanadium produced by a conventional process is designated as follows:

HSS

EXAMPLE 2 High-speed steel HS6-5-2-5, according to ISO 4957, containing 5 % cobalt and 1,8 % vanadium produced by a conventional process is designated as follows:

HSS-E

EXAMPLE 3 High-speed steel HS6-5-2, according to ISO 4957, containing 0 % cobalt and 1,8 % vanadium produced by the powder metallurgy process is designated as follows:

HSS-PM

EXAMPLE 4 High-speed steel HS6-5-3-8, according to ISO 4957, containing 8 % cobalt and 3 % vanadium produced by the powder metallurgy process is designated as follows:

HSS-E-PM

STANDARDSISO.COM : Click to view the full PDF of ISO 11054:2006