

SVENSK STANDARD

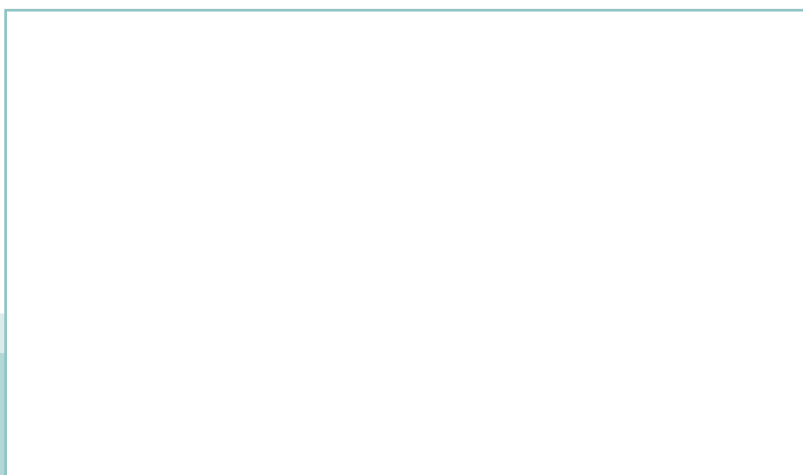
SS-ISO 10679:2010



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Stål – Gjutet verktygsstål (ISO 10679:2010, IDT)

Steel – Cast tool steel (ISO 10679:2010, IDT)



Standarder får världen att fungera

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Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

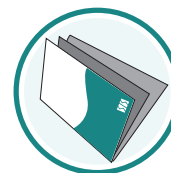
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Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

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Den internationella standarden ISO 10679:2010 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 10679:2010.

I denna standard är det korrigerande dokumentet SS-ISO 10679:2010/Cor 1:2010 bifogat.

The International Standard ISO 10679:2010 has the status of a Swedish Standard. This document contains the official English version of ISO 10679:2010.

In this standard is the correction SS-ISO 10679:2010/Cor 1:2010 attached.

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Uppllysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna uppllysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Standarden är framtagen av kommittén för Gjutet järn och stål, SIS/TK 130.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

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 10679 was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 11, *Steel castings*.

Steel — Cast tool steel

1 Scope

This International Standard covers tool-steel compositions for usable cast shapes in the annealed condition.

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 4990:2003 *Steel castings — General technical delivery requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4990 apply.

4 Information to be supplied by the purchaser

The purchaser shall supply, in the enquiry and order, the following information:

- a) the Brinell hardness required when the part is finished;
- b) the surfaces which will be machined by the purchaser or user;
- c) part drawings for each casting.

5 General conditions for delivery

Materials furnished in accordance with this International Standard shall conform to the applicable requirements of ISO 4990, including the supplementary requirements that are indicated on the enquiry and purchase order. Welding may be carried out only when approved by the purchaser.

6 Chemical composition

The cast steel shall conform to the requirements for chemical composition specified in Table 1.

7 Heat treatment

Castings shall be heat treated as specified in Table 2.

8 Marking

Unless otherwise agreed, alternative markings are permitted (see Table 1).

9 Supplementary requirements

A list of standardized supplementary requirements for use at the option of the purchaser is included in ISO 4990:2003, Annex B and is ordinarily considered suitable for use with this International Standard. Other requirements may be specified upon agreement between the manufacturer and purchaser.

The supplementary requirements shall only apply when agreed upon by the manufacturer and purchaser as specified on the enquiry and purchase order.

Table 1 — Chemical composition, mass fraction in %

Designation	C	Si	Mn	P	S	Cr	Mo	Ni	V	Co	W	Alternative marking
GX100CrMoV5-1	0,95 1,05	≤ 1,50	≤ 0,75	≤ 0,03	≤ 0,030	4,75 5,50	0,90 1,40	—	0,20 0,50	—	—	DA1
GX150CrMoCoV12	1,40 1,60	≤ 1,50	≤ 1,00	≤ 0,03	≤ 0,030	11,00 13,00	0,70 1,20	—	0,40 1,00	0,70 1,00	—	DB1
GX148CrCoMoNiV12-3	1,35 1,60	≤ 1,50	≤ 0,75	≤ 0,03	≤ 0,030	11,00 13,00	0,70 1,20	0,40 0,60	0,35 0,55	2,50 3,50	—	DC1
G58SiMnMo8-3-5	0,50 0,65	1,75 2,25	0,60 1,00	≤ 0,03	≤ 0,030	≤ 0,35	0,20 0,80	—	≤ 0,35	—	—	DD1
GX83WMoCrV6-5-4-2	0,78 0,88	≤ 1,00	≤ 0,75	≤ 0,03	≤ 0,030	3,75 4,50	4,50 5,50	≤ 0,25	1,25 2,20	≤ 0,25	5,50 6,75	DE1
G50CrMo12-1	0,45 0,55	0,60 1,00	0,40 0,80	≤ 0,03	≤ 0,030	3,00 3,50	1,20 1,60	—	—	—	—	DF1
GX35CrMoWV5-2	0,30 0,40	≤ 1,50	≤ 0,75	≤ 0,03	≤ 0,030	4,75 5,75	1,25 1,75	—	0,20 0,50	—	1,00 1,70	DG1
GX37CrMoV5-2	0,30 0,42	≤ 1,50	≤ 0,75	≤ 0,03	≤ 0,030	4,75 5,75	1,25 1,75	—	0,75 1,20	—	—	DH1
G90CrW5-3-2	0,85 1,00	≤ 1,50	1,00 1,30	≤ 0,03	≤ 0,030	0,40 1,00	—	—	≤ 0,30	—	0,40 0,60	DJ1
G105V	1,00 1,10	0,10 0,60	0,10 0,40	≤ 0,030	≤ 0,020	—	—	—	0,10 0,20	—	—	DK1
G50WCrV8-4	0,45 0,55	0,70 1,00	0,15 0,45	≤ 0,030	≤ 0,020	0,90 1,20	—	—	0,10 0,20	—	1,70 2,20	DL1
G60CoCrV8-4	0,55 0,65	0,70 1,00	0,15 0,45	≤ 0,030	≤ 0,020	0,90 1,20	—	—	0,10 0,20	1,70 2,20	—	DM1
G103Cr6	0,95 1,10	0,15 0,60	0,25 0,45	≤ 0,030	≤ 0,020	1,35 1,65	—	—	—	—	—	DO1
G21MnCr5-5	0,18 0,24	0,15 0,60	1,10 1,40	≤ 0,030	≤ 0,020	1,00 1,30	—	—	—	—	—	DP1