



# SLOVENSKI STANDARD

## SIST-TP CEN ISO/TR 20174:2006

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Welding - Grouping systems for materials - Japanese materials (ISO/TR 20174:2005)

Schweißen - Werkstoffgruppeneinteilung - Japanische Werkstoffe (ISO/TR 20174:2005)

Soudage - Systemes de groupement des matériaux - Matériaux japonais (ISO/TR 20174:2005)

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Ta slovenski standard je istoveten z: CEN ISO/TR 20174:2005

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### ICS:

25.160.20      Potrošni material pri varjenju      Welding consumables

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TECHNICAL REPORT  
RAPPORT TECHNIQUE  
TECHNISCHER BERICHT

**CEN ISO/TR 20174**

December 2005

ICS 25.160.20

English Version

**Welding - Grouping systems for materials - Japanese materials  
(ISO/TR 20174:2005)**

Soudage - Systèmes de groupement des matériaux -  
Matériaux japonais (ISO/TR 20174:2005)

Schweißen - Werkstoffgruppeneinteilung - Japanische  
Werkstoffe (ISO/TR 20174:2005)

This Technical Report was approved by CEN on 22 November 2005. It has been drawn up by the Technical Committee CEN/TC 121.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

**CEN ISO/TR 20174:2005 (E)****Foreword**

This document (CEN ISO/TR 20174:2005) has been prepared by Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 44 "Welding and allied processes".

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# TECHNICAL REPORT

**ISO/TR  
20174**

First edition  
2005-12-15

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## **Welding — Grouping systems for materials — Japanese materials**

*Soudage — Systèmes de groupement des matériaux — Matériaux  
japonais*

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Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

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## Contents

Page

Foreword.....	iv
<b>1 Scope .....</b>	<b>1</b>
<b>2 Japanese grouping system for materials .....</b>	<b>2</b>
<b>2.1 Types of steels in accordance with the grouping system of ISO/TR 15608:2000, Table 1 .....</b>	<b>2</b>
<b>2.2 Types of aluminium and aluminium alloys in accordance with the grouping system of ISO/TR 15608:2000, Table 2 .....</b>	<b>16</b>
<b>2.3 Types of titanium and titanium alloys in accordance with the grouping system of ISO/TR 15608:2000, Table 5 .....</b>	<b>21</b>
<b>Bibliography .....</b>	<b>25</b>

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<https://standards.iteh.ai/catalog/standards/sist/a94495ab-58b9-4c6d-b0b1-b0a23f908897/sist-tp-cen-iso-tr-20174-2006>

## 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.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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/TR 20174 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 121, *Welding*, in collaboration with Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 10, *Unification of requirements in the field of metal welding*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).



# Welding — Grouping systems for materials — Japanese materials

## 1 Scope

This Technical Report provides a Japanese grouping system for materials for welding purposes, classified in accordance with the grouping system of ISO/TR:15608.

It may also apply for other purposes, such as heat treatment, forming, and non-destructive testing.

This Technical Report covers grouping systems for the following standardized materials:

- steel;
- aluminium and its alloys;
- titanium and its alloys.

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## 2 Japanese grouping system for materials

### 2.1 Types of steels in accordance with the grouping system of ISO/TR 15608:2000, Table 1

See Table 1.

Table 1 — Japanese grouping system for steels

Group	Reference standard	Designation
1.1	JIS G 3101	SS330
		SS400
	JIS G 3103	SB410
		SB450
		SB480
		SB450M
		SB480M
	JIS G 3106	SM400A
		SM400B
		SM400C
	JIS G 3113	SAPH310
	JIS G 3116	SG255
	JIS G 3115	SPV235
	JIS G 3118	SGV410
		SGV450
		SGV480
	JIS G 3126	SLA235A
		SLA235B
	JIS G 3131	SPHC
		SPHD
		SPHE
	JIS G 3135	SPFC340
		SPFC370
		SPFC390
		SPFC440
		SPFC490Y
		SPFC540Y
		SPFC590Y
		SPFC340H
	JIS G 3136	SN400A
		SN400B
		SN400C
	JIS G 3444	STK290
		STK400
		STK500
		STK490

Table 1 (continued)

Group	Reference standard	Designation
1.1	JIS G 3452	SGP
	JIS G 3454	STPG370
		STPG410
	JIS G 3455	STS370
		STS410
		STS480
	JIS G 3456	STPT370
		STPT410
		STPT480
	JIS G 3457	STPY400
	JIS G 3458	STPA12
	JIS G 3460	STPL380
	JIS G 3461	STB340
		STB410
	JIS G 3462	STBA12
		STBA13
	JIS G 3464	STBL380
	JIS G 3467	STF410
		STFA12
	JIS G 3472	STAM290GA
		STAM290GB
		STAM340G
		STAM390G
	JIS G 3473	STC370
	JIS G 3475	STKN400W
		STKN400B
	JIS G 3201	SF340A
		SF390A
		SF440A
		SF490A
		SF540A

Table 1 (continued)

Group	Reference standard	Designation
1.1	JIS G 3202	SFVC1
		SFVC2A
		SFVC2B
	JIS G 3203	SFVAF1
	JIS G 3205	SFL1
		SFL2
1.2	JIS G 3101	SS490
	JIS G 3106	SM490A
		SM490B
		SM490C
		SM490YA
		SM490YB
	JIS G 3115	SPV315
		SPV355
	JIS G 3116	SG295
		SG325
	JIS G 3119	SBV1A
		SBV1B
		SBV2
	JIS G 3120	SQV1A
		SQV2A
	JIS G 3126	SLA325A
		SLA325B
	JIS G 3134	SPFH490
		SPFH540
		SPFH540Y
		SPFH590Y
	JIS G 3135	SPFC490
		SPFC540
		SPFC590
	JIS G 3136	SN490B
		SN490C
	JIS G 3461	STB510