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**Welding — Grouping systems for  
materials — European materials**

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



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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.

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is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.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 20172 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).

This second edition cancels and replaces the first edition (ISO/TR 20172:2006), which has been technically revised.

## Introduction

This Technical Report reflects the situation in November 2007. Changes in European material standards will be taken into account in the next revision of this Technical Report.

Lists of former designations can be found in the relevant European materials standards.

For the materials not listed in this Technical Report, ISO/TR 20173:2005 and ISO/TR 20174:2005 are applicable.



# Welding — Grouping systems for materials — European materials

## 1 Scope

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

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

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

- a) steel;
- b) aluminium and its alloys;
- c) copper and its alloys;
- d) cast irons.

In case of dispute, for example where variations in properties such as thickness and yield strength occur, ISO/TR 15608 applies.

## 2 International grouping system for European materials

### 2.1 Types of steel in accordance with the grouping system of ISO/TR 15608:2005, Table 1

See Table 1.

**Table 1 — Steel materials, classification according to the grouping of material**

Designation		Group	Standard(s)
Name	Number		
10CrMo5-5	1.7338	5.1	EN 10216-2
10CrMo9-10	1.7380	5.2	EN 10028-2, EN 10216-2, EN 10273
11CrMo9-10	1.7383	5.2	EN 10028-2, EN 10216-2, EN 10222-2, EN 10273
11MnNi5-3	1.6212	9.1	EN 10028-4, EN 10216-4
12Ni14	1.5637	9.2	EN 10028-4, EN 10216-4, EN 10222-3
12Ni19	1.5680	9.2	EN 10028-4
13CrMo4-5	1.7335	5.1	EN 10028-2, EN 10216-2, EN 10222-2, EN 10273
13MnNi6-3	1.6217	9.1	EN 10028-4, EN 10216-4, EN 10222-3
14MoV6-3	1.7715	6.1	EN 10216-2, EN 10222-2
15MnCrMoNiV5-3	1.6920	4.1	EN 10222-2
15MnMoV4-5	1.5402	1.2	EN 10222-2
15NiCuMoNb5-64	1.6368	4.2	EN 10216-2
15NiMn6	1.6228	9.1	EN 10028-4, EN 10222-3
16MnCr5	1.7131	1.4	EN 10132-2
16Mo3	1.5415	1.1	EN 10222-2, EN 10216-2, EN 10217-2, EN 10217-5, EN 10273, EN 10028-2
17Cr3	1.7016	1.4	EN 10132-2
18MnMoNi5-5	1.6308	4.1	EN 10222-2
20CrMoV13-5-5	1.7779	6.3	EN 10216-2
20Mn5	1.1133	1.4	EN 10250-2
20MnB5	1.5353	3.2	EN 10083-3
20MnNb6	1.0471	1.2	EN 10216-2
20NiCrMo2-2	1.6523	4.1	EN 10297-1
20NiCrMoS2-2	1.6526	4.1	EN 10297-1
24CrMo13-6	1.8516	5.2	EN 10085
25CrMo4	1.7218	5.1	EN 10083-3, EN 10132-2, EN 10216-2, EN 10297-1
25CrMoS4	1.7213	5.1	EN 10083-3, EN 10277-5
25Mn4	1.1177	1.3	EN 10132-2



Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
26CrMo4-2	1.7219	5.1	EN 10216-4
27MnCrB5-2	1.7182	11.1	EN 10083-3
28Mn6	1.1170	1.4	EN 10083-2, EN 10250-2
30CrMo4	1.7216	5.1	EN 10297-1
30MnB5	1.5531	11.1	EN 10083-3
30NiCrMo16-6	1.6747	9.2	EN 10083-3
31CrMo12	1.8515	5.2	EN 10085
31CrMoV9	1.8519	6.2	EN 10085
32CrAlMo7-10	1.8505	5.1	EN 10085
33CrMoV12-9	1.8522	6.2	EN 10085
34Cr4	1.7033	5.2	EN 10083-3
34CrAlMo5-10	1.8507	5.1	EN 10085
34CrAlNi7-10	1.8550	5.1	EN 10085
34CrMo4	1.7220	5.1	EN 10083-3, EN 10132-2, EN 10297-1
34CrMoS4	1.7226	11.2	EN 10083-3
34CrNiMo6	1.6582	4.2	EN 10277-5
34CrS4	1.7037	5.1	EN 10083-3
35NiCr6	1.5815	9.1	EN 10083-3
36NiCrMo16	1.6773	9.2	EN 10083-3
37Cr4	1.7034	5.1	EN 10083-3
37CrS4	1.7038	5.1	EN 10083-3
38Cr2	1.7003	5.1	EN 10083-3
38Mn6	1.1127	11.2	EN 10297-1
39MnCrB6-2	1.7189	5.1	EN 10083-3
39NiCrMo3	1.6510	9.2	EN 10083-3
40CrMoV13-9	1.8523	6.2	EN 10085
41Cr4	1.7035	11.2	EN 10083-3
41CrAlMo7-10	1.8509	5.1	EN 10085
41CrS4	1.7039	11.2	EN 10083-3
42CrMo4	1.7225	5.1	EN 10083-3, EN 10132-2, EN 10297-1
42CrMoS4	1.7227	5.1	EN 10083-3, EN 10277-5
46Cr2	1.7006	5.1	EN 10083-3
50CrMo4	1.7228	5.1	EN 10083-3
51CrV4	1.8159	6.1	EN 10083-3
8MoB5-4	1.5450	1.3	EN 10216-2

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
C10	1.0301	1.1	EN 10277-2
C10E	1.1121	1.1	EN 10132-2, EN 10297-1
C15	1.0401	1.1	EN 10277-2
C15E	1.1141	1.1	EN 10132-2, EN 10297-1
C15R	1.1114	1.1	EN 10297-1
C16	1.0407	1.1	EN 10277-2
C22	1.0402	1.2	EN 10250-2
C22E	1.1151	1.1	EN 10132-2, EN 10083-2, EN 10297-1
C22R	1.1149	1.1	EN 10083-2
C25	1.0406	1.2	EN 10250-2
C25E	1.1158	1.2	EN 10250-2
C30	1.0528	11.1	EN 10250-2
C30E	1.1178	11.1	EN 10132-2
C35	1.0501	11.1	EN 10083-2, EN 10250-2, EN 10277-2
C35E	1.1181	11.1	EN 10083-2, EN 10250-2, EN 10297-1, EN 10132-2, EN 10277-5
C35R	1.1180	11.1	EN 10277-5
C35R	1.1180	11.2	EN 10083-2
C40	1.0511	11.2	EN 10083-2, EN 10250-2, EN 10277-2
C40E	1.1186	11.2	EN 10083-2, EN 10132-2, EN 10277-5
C40R	1.1189	11.2	EN 10083-2, EN 10277-5
C45	1.0503	11.2	EN 10083-2, EN 10250-2, EN 10277-2
C45E	1.1191	11.2	EN 10083-2, EN 10250-2, EN 10297-1, EN 10132-2
C45R	1.1201	11.2	EN 10083-2, EN 10277-5
C50	1.0540	11.2	EN 10250-2, EN 10277-2
C50E	1.1206	11.2	EN 10132-2, EN 10277-5
C50E	1.1206	11.3	EN 10083-2
C50R	1.1241	11.2	EN 10083-2, EN 10277-5
C55	1.0535	11.3	EN 10250-2, EN 10083-2
C55E	1.1203	11.3	EN 10083-2, EN 10250-2, EN 10132-2
C55R	1.1209	11.3	EN 10083-2

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
C60	1.0601	11.3	EN 10083-2, EN 10277-2, EN 10250-2
C60E	1.1221	11.3	EN 10083-2, EN 10132-2, EN 10250-2, EN 10297-1, EN 10277-5
C60R	1.1223	11.3	EN 10083-2, EN 10277-5
E155	1.0033	1.1	EN 10296-1, EN 10305-2, EN 10305-3, EN 10305-6
E190	1.0031	1.1	EN 10296-1, EN 10305-3
E195	1.0034	1.1	EN 10296-1, EN 10305-3, EN 10305-6, EN 10305-2
E215	1.0212	1.1	EN 10305-1, EN 10305-4
E220	1.0215	1.1	EN 10296-1, EN 10305-3, EN 10305-5
E235	1.0308	1.1	EN 10296-1, EN 10297-1, EN 10305-1, EN 10305-2, EN 10305-3, EN 10305-4, EN 10305-6
E260	1.0220	1.1	EN 10296-1, EN 10305-3
E260	1.0221	1.1	EN 10305-3
E275	1.0225	1.1	EN 10296-1, EN 10297-1, EN 10305-2, EN 10305-3, EN 10305-5, EN 10305-6
E275K2	1.0456	1.1	EN 10296-1, EN 10297-1
E275M	1.8895	1.1	EN 10296-1
E295GC	1.0533	1.2	EN 10277-2
E315	1.0236	1.2	EN 10297-1
E320	1.0237	1.2	EN 10296-1, EN 10305-3, EN 10305-5
E335GC	1.0543	1.2	EN 10277-2
E355	1.0580	1.2	EN 10296-1, EN 10305-2, EN 10305-3, EN 10305-4, EN 10305-6, EN 10305-1, EN 10297-1
E355K2	1.0599	1.2	EN 10297-1
E355K2	1.0920	1.2	EN 10296-1
E355M	1.8896	1.2	EN 10296-1
E370	1.0261	1.3	EN 10296-1, EN 10305-3, EN 10305-5
E420	1.0575	1.3	EN 10305-3, EN 10305-5
E420J2	1.0920	1.3	EN 10297-1
E420M	1.8897	1.3	EN 10296-1

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
E460K2	1.8891	1.3	EN 10296-1, EN 10297-1
E460M	1.8898	1.3	EN 10296-1
E470	1.0536	1.3	EN 10297-1
E590K2	1.0644	1.3	EN 10297-1
E730K2	1.8893	1.3	EN 10297-1
G12MoCrV5-2	1.7720	6.1	EN 10213
G17CrMo5-5	1.7357	5.1	EN 10213
G17CrMo9-10	1.7379	5.2	EN 10213
G17CrMoV5-10	1.7706	6.2	EN 10213
G17Mn5	1.1131	1.1	EN 10213
G17NiCrMo13-6	1.6781	9.2	EN 10213
G18Mo5	1.5422	1.2	EN 10213
G20Mn5	1.6220	1.2	EN 10213
G20Mo5	1.5419	3.1	EN 10213-2
G9Ni10	1.5636	9.1	EN 10213
G9Ni14	1.5638	9.2	EN 10213
GP240GH	1.0619	1.1	EN 10213
GP240GR	1.0621	1.1	EN 10213
GP280GH	1.0625	1.2	EN 10213
GX15CrMo5	1.7365	5.3	EN 10213
GX23CrMoV12-1	1.4931	6.4	EN 10213
GX2CrNi19-11	1.4309	8.1	EN 10213
GX2CrNiMo19-11-2	1.4409	8.1	EN 10213
GX2CrNiMoCuN25-6-3-3	1.4517	10.2	EN 10213
GX2CrNiMoN22-5-3	1.4470	10.1	EN 10213
GX2CrNiMoN26-7-4	1.4469	10.2	EN 10213
GX2NiCrMo28-20-2	1.4458	8.1	EN 10213
GX3CrNi13-4	1.6982	7.2	EN 10213
GX4CrNi13-4	1.4317	7.2	EN 10213
GX4CrNiMo16-5-1	1.4405	8.1	EN 10132-2
GX5CrNi19-10	1.4308	8.1	EN 10213
GX5CrNiMo19-11-2	1.4408	8.1	EN 10213
GX5CrNiMoNb19-11-2	1.4581	8.1	EN 10213
GX5CrNiNb19-11	1.4552	8.1	EN 10213
GX8CrNi12	1.4107	7.2	EN 10213
HC180B	1.0395	1.1	EN 10268

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
HC180P	1.0342	1.1	EN 10268
HC180Y	1.0922	1.1	EN 10268
HC220B	1.0396	1.1	EN 10268
HC220I	1.0346	1.1	EN 10268
HC220P	1.0397	1.1	EN 10268
HC220Y	1.0925	1.1	EN 10268
HC260B	1.0400	1.1	EN 10268
HC260I	1.0349	1.1	EN 10268
HC260LA	1.0480	1.1	EN 10268
HC260P	1.0417	1.1	EN 10268
HC260Y	1.0928	1.1	EN 10268
HC300B	1.0444	1.2	EN 10268
HC300I	1.0447	1.2	EN 10268
HC300LA	1.0489	1.2	EN 10268
HC300P	1.0448	1.2	EN 10268
HC340LA	1.0548	1.2	EN 10268
HC380LA	1.0550	1.3	EN 10268
HC420LA	1.0556	1.3	EN 10268
L210GA	1.0319	1.1	EN 10208-1
L235	1.0252	1.1	EN 10224
L235GA	1.0458	1.1	EN 10208-1
L245GA	1.0459	1.1	EN 10208-1
L245MB	1.0418	1.1	EN 10208-2
L245NB	1.0457	1.1	EN 10208-2
L275	1.0260	1.1	EN 10224
L290GA	1.0483	1.2	EN 10208-1
L290MB	1.0429	1.2	EN 10208-2
L290NB	1.0484	1.2	EN 10208-2
L355	1.0419	1.2	EN 10224
L360GA	1.0499	1.2	EN 10208-1
L360MB	1.0578	1.2	EN 10208-2
L360NB	1.0582	1.2	EN 10208-2
L360QB	1.8948	1.2	EN 10208-2
L415MB	1.8973	2.1	EN 10208-2
L415NB	1.8972	1.3	EN 10208-2
L415QB	1.8947	3.1	EN 10208-2

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
L450MB	1.8975	2.1	EN 10208-2
L450QB	1.8952	3.1	EN 10208-2
L485MB	1.8977	2.2	EN 10208-2
L485QB	1.8955	3.1	EN 10208-2
L550QB	1.8957	3.1	EN 10208-2
L555MB	1.8978	2.2	EN 10208-2
P195GH	1.0348	1.1	EN 10216-2, EN 10217-2
P195TR1	1.0107	1.1	EN 10216-1, EN 10217-1
P195TR2	1.0108	1.1	EN 10216-1, EN 10217-1
P215NL	1.0451	1.1	EN 10216-4, EN 10217-4, EN 10217-6
P235GH	1.0345	1.1	EN 10216-2, EN 10217-2, EN 10217-5, EN 10273, EN 10028-2
P235S	1.0112	1.1	EN 10207
P235TR1	1.0254	1.1	EN 10216-1, EN 10217-1
P235TR2	1.0255	1.1	EN 10216-1, EN 10217-1
P245GH	1.0352	1.1	EN 10222-2
P245NB	1.0111	1.1	EN 10120
P250GH	1.0460	1.1	EN 10273
P255QL	1.0452	1.1	EN 10216-4
P265GH	1.0425	1.1	EN 10216-2, EN 10217-2, EN 10217-5, EN 10273, EN 10028-2
P265NB	1.0423	1.1	EN 10120, EN 10149-3
P265NL	1.0453	1.1	EN 10216-4, EN 10217-4, EN 10217-6
P265S	1.0130	1.1	EN 10207
P265TR1	1.0258	1.1	EN 10216-1, EN 10217-1
P265TR2	1.0259	1.1	EN 10216-1, EN 10217-1
P275N	1.0486	1.1	EN 10028-3
P275NH	1.0487	1.1	EN 10273, EN 10028-3
P275NL1	1.0488	1.1	EN 10216-3, EN 10217-3, EN 10028-3
P275NL2	1.1104	1.1	EN 10216-3, EN 10217-3, EN 10028-3
P275S	1.1100	1.1	EN 10207
P280GH	1.0426	1.2	EN 10222-2
P285NH	1.0477	1.2	EN 10222-4
P285QH	1.0478	1.2	EN 10222-4
P295GH	1.0481	1.2	EN 10273, EN 10028-2

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
P305GH	1.0436	1.2	EN 10222-2
P310NB	1.0437	1.2	EN 10120
P355GH	1.0473	1.2	EN 10273, EN 10028-2
P355M	1.8821	1.2	EN 10028-5
P355ML1	1.8832	1.2	EN 10028-5
P355ML2	1.8833	1.2	EN 10028-5
P355N	1.0562	1.2	EN 10216-3, EN 10217-3, EN 10028-3
P355NB	1.0557	1.2	EN 10120
P355NH	1.0565	1.2	EN 10216-3, EN 10217-3, EN 10273, EN 10028-3, EN 10222-4
P355NL1	1.0566	1.2	EN 10216-3, EN 10217-3, EN 10028-3
P355NL2	1.1106	1.2	EN 10216-3, EN 10217-3, EN 10028-3
P355Q	1.8866	1.2	EN 10028-6
P355QH	1.8867	1.2	EN 10273, EN 10028-6
P355QH1	1.0571	1.2	EN 10222-4
P355QL1	1.8868	1.2	EN 10028-6
P355QL2	1.8869	1.2	EN 10028-6
P420M	1.8824	2.1	EN 10028-5
P420ML1	1.8835	2.1	EN 10028-5
P420ML2	1.8828	2.1	EN 10028-5
P420NH	1.8932	1.3	EN 10222-4
P420QH	1.8936	3.1	EN 10222-4
P460M	1.8826	2.1	EN 10028-5
P460ML1	1.8837	2.1	EN 10028-5
P460ML2	1.8831	2.1	EN 10028-5
P460N	1.8905	1.3	EN 10216-3, EN 10217-3, EN 10028-3
P460NH	1.8935	1.3	EN 10273, EN 10216-3, EN 10217-3
P460NH	1.8935	1.3	EN 10028-3
P460NL1	1.8915	1.3	EN 10216-3, EN 10217-3, EN 10028-3
P460NL2	1.8918	1.3	EN 10216-3, EN 10217-3, EN 10028-3
P460Q	1.8870	3.1	EN 10028-6
P460QH	1.8871	3.1	EN 10273, EN 10028-6
P460QL1	1.8872	3.1	EN 10028-6

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
P460QL2	1.8864	3.1	EN 10028-6
P500Q	1.8873	3.1	EN 10028-6
P500QH	1.8874	3.1	EN 10028-6
P500QL1	1.8875	3.1	EN 10028-6
P500QL2	1.8865	3.1	EN 10028-6
P620Q	1.8876	3.1	EN 10216-3
P620QH	1.8877	3.1	EN 10216-2
P620QL	1.8890	3.1	EN 10216-2
P690Q	1.8879	3.1	EN 10216-2, EN 10028-6
P690QH	1.8880	3.1	EN 10216-2, EN 10028-6
P690QL1	1.8881	3.1	EN 10216-2, EN 10028-6
P690QL2	1.8888	3.1	EN 10216-2, EN 10028-6
R200	1.0521	11.3	EN 13674-1
R220	1.0524	11.3	EN 13674-1
R260	1.0623	11.3	EN 13674-1
R260Mn	1.0624	11.3	EN 13674-1
R320Cr	1.0915	11.3	EN 13674-1
R350LHT	1.0632	11.3	EN 13674-1
R50HT	1.0631	11.3	EN 13674-1
S195T	1.0026	1.1	EN 10255
S235J0	1.0114	1.1	EN 10025-2
S235J0W	1.8958	1.4	EN 10025-5
S235J2G3	1.0116	1.1	EN 10250-2, EN 10025-2
S235J2G3C	1.0118	1.1	EN 10025-2
S235J2G4	1.0117	1.1	EN 10025-2
S235J2G4C	1.0119	1.1	EN 10025-2
S235JR	1.0037	1.1	EN 10025-2
S235JRG1	1.0036	1.1	EN 10025-2
S235JRG2	1.0038	1.1	EN 10025-2, EN 10250-2
S235JRG2	1.0122	1.1	EN 10277-2
S235JRH	1.0039	1.1	EN 10210-1, EN 10219-1
S240GP	1.0021	1.1	EN 10248-1
S260NC	1.0971	1.1	EN 10149-3
S270GP	1.0023	1.1	EN 10248-1
S275J0	1.0143	1.1	EN 10025-2
S275J0H	1.0149	1.1	EN 10210-1, EN 10219-1



Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
S275J2G3	1.0144	1.1	EN 10025-2
S275J2G3C	1.0141	1.1	EN 10025-2
S275J2G4	1.0145	1.1	EN 10025-2
S275J2G4C	1.0142	1.1	EN 10025-2
S275J2H	1.0138	1.1	EN 10210-1, EN 10219-1
S275J2W	1.8961	1.4	EN 10025-5
S275JR	1.0044	1.1	EN 10025-2
S275M	1.8818	1.1	EN 10025-4
S275MH	1.8843	1.1	EN 10219-1
S275ML	1.8819	1.1	EN 10025-4
S275MLH	1.8844	1.1	EN 10219-1
S275N	1.0490	1.1	EN 10025-3
S275NH	1.0493	1.1	EN 10210-1, EN 10219-1
S275NL	1.0491	1.1	EN 10025-3
S275NLH	1.0497	1.1	EN 10210-1, EN 10219-1
S315MC	1.0972	1.2	EN 10149-2
S315NC	1.0973	1.2	EN 10149-3
S320GP	1.0046	1.2	EN 10248-1
S355 G4+M	1.8803+M	1.2	EN 10225
S355G1	1.8814	1.2	EN 10225
S355G1+N	1.8814+N	1.2	EN 10225
S355G10+M	1.8813+M	1.2	EN 10225
S355G10+N	1.8813+N	1.2	EN 10225
S355G11	1.8806	1.2	EN 10225
S355G11+M	1.8806+M	1.2	EN 10225
S355G11+N	1.8806+N	1.2	EN 10225
S355G12	1.8809	1.2	EN 10225
S355G12+M	1.8809+M	1.2	EN 10225
S355G12+N	1.8809+N	1.2	EN 10225
S355G13+N	1.1182+N	1.2	EN 10225
S355G13+Q	1.1182+Q	1.2	EN 10225
S355G14+N	1.1184+N	1.2	EN 10225
S355G14+Q	1.1184+Q	1.2	EN 10225
S355G15+N	1.1190+N	1.2	EN 10225
S355G15+Q	1.1190+Q	1.2	EN 10225
S355G15+Q	1.8852+Q	1.2	EN 10225

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
S355G1N	1.8814+N	1.2	EN 10225
S355G2+N	1.8801+N	1.2	EN 10225
S355G3+N	1.8802+N	1.2	EN 10225
S355G4	1.8803	1.2	EN 10225
S355G4+M	1.8803+M	1.2	EN 10225
S355G5+M	1.8804+M	1.2	EN 10225
S355G6+M	1.8805+M	1.2	EN 10225
S355G7+M	1.8808+M	1.2	EN 10225
S355G7+N	1.8808+N	1.2	EN 10225
S355G8+M	1.8810+M	1.2	EN 10225
S355G8+N	1.8810+N	1.2	EN 10225
S355G9+M	1.8811+M	1.2	EN 10225
S355G9+N	1.8811+N	1.2	EN 10225
S355GP	1.0083	1.2	EN 10248-1
S355J0	1.0553	1.2	EN 10025-2
S355J0C	1.0554	1.2	EN 10025-2
S355J0H	1.0547	1.2	EN 10210-1, EN 10219-1
S355J0W	1.8959	1.4	EN 10025-5
S355J0WP	1.8945	1.4	EN 10025-5
S355J2	1.0577	1.2	EN 10025-2
S355J2C	1.0579	1.2	EN 10025-2
S355J2G3	1.0570	1.2	EN 10250-2
S355J2G3C	1.0569	1.1	EN 10277-2
S355J2H	1.0576	1.2	EN 10210-1, EN 10219-1
S355J2W	1.8965	1.4	EN 10025-5
S355J2WP	1.8946	1.4	EN 10025-5
S355JR	1.0045	1.2	EN 10025-2
S355JRC	1.0551	1.2	EN 10025-2
S355K2	1.0596	1.2	EN 10025-2
S355K2C	1.0594	1.2	EN 10025-2
S355K2G3C	1.0593	1.2	EN 10025-2
S355K2G4C	1.0594	1.2	EN 10025-2
S355K2W	1.8967	1.4	EN 10025-5
S355M	1.8823	1.2	EN 10025-4
S355MC	1.0976	1.2	EN 10149-2
S355MH	1.8845	1.2	EN 10219-1

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
S355ML	1.8834	1.2	EN 10025-4
S355MLH	1.8846	1.2	EN 10219-1
S355N	1.0545	1.2	EN 10025-3
S355NC	1.0977	1.2	EN 10149-3
S355NH	1.0539	1.2	EN 10210-1, EN 10219-1
S355NL	1.0546	1.2	EN 10025-3
S355NLH	1.549	1.2	EN 10210-1, EN 10219-1
S390GP	1.0522	1.3	EN 10248-1
S420G1+M	1.8830+M	2.1	EN 10225
S420G1+M	1.8830	2.1	EN 10225
S420G1+Q	1.8830+Q	3.1	EN 10225
S420G1+Q	1.8830	3.1	EN 10225
S420G2+M	1.8857+M	2.1	EN 10225
S420G2+M	1.8857	2.1	EN 10225
S420G2+Q	1.8857+Q	3.1	EN 10225
S420G2+Q	1.8857	3.1	EN 10225
S420G3	1.8851	1.3	EN 10225
S420G3+M	1.8851+M	2.1	EN 10225
S420G4	1.8859	1.3	EN 10225
S420G4+M	1.8859+M	2.1	EN 10225
S420G5+Q	1.8853+Q	3.1	EN 10225
S420G6+Q	1.8852+Q	3.1	EN 10225
S420M	1.8825	2.1	EN 10025-4
S420MC	1.0980	2.1	EN 10149-2
S420MH	1.8847	2.1	EN 10219-1
S420ML	1.8836	2.1	EN 10025-4
S420MLH	1.8848	2.1	EN 10219-1
S420N	1.8902	1.3	EN 10025-3
S420NC	1.0981	1.3	EN 10149-3
S420NL	1.8912	1.3	EN 10025-3
S430GP	1.0523	1.3	EN 10248-1
S450J00	1.0590	1.3	EN 10025-2
S460G1+M	1.8878+M	2.1	EN 10225
S460G1+Q	1.8878+Q	3.1	EN 10225
S460G2+M	1.8887+M	2.1	EN 10225
S460G2+Q	1.8887+Q	3.1	EN 10225

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
S460G3	1.8883	1.3	EN 10225
S460G3+M	1.8883+M	2.1	EN 10225
S460G4	1.8889	1.3	EN 10225
S460G4+M	1.8889+M	2.1	EN 10225
S460G5+Q	1.8885+Q	3.1	EN 10225
S460G6+Q	1.8884+Q	3.1	EN 10225
S460M	1.8827	2.1	EN 10025-4
S460MC	1.0982	2.1	EN 10149-2
S460MH	1.8849	2.1	EN 10219-1
S460ML	1.8838	2.1	EN 10025-4
S460MLH	1.8850	2.1	EN 10219-1
S460N	1.8901	1.3	EN 10025-3
S460NH	1.8953	1.3	EN 10210-1, EN 10219-1
S460NL	1.8903	1.3	EN 10025-3
S460NLH	1.8956	1.3	EN 10210-1, EN 10219-1
S460Q	1.8908	3.1	EN 10025-6
S460QL	1.8906	3.1	EN 10025-6
S460QL1	1.8916	3.1	EN 10025-6
S500A	1.8980	3.3	EN 10137-3
S500AL	1.8990	3.3	EN 10137-3
S500Q	1.8924	3.1	EN 10025-6
S500QL	1.8909	3.1	EN 10025-6
S500QL1	1.8984	3.1	EN 10025-6
S550A	1.8991	3.3	EN 10137-3
S550AL	1.8992	3.3	EN 10137-3
S550MC	1.0986	2.2	EN 10149-2
S550Q	1.8904	3.1	EN 10025-6
S550QL	1.8926	3.1	EN 10025-6
S550QL1	1.8986	3.1	EN 10025-6
S600MC	1.8969	2.1	EN 10149-2
S620A	1.8993	3.3	EN 10137-3
S620AL	1.8994	3.3	EN 10137-3
S620Q	1.8914	3.1	EN 10025-6
S620QL	1.8927	3.1	EN 10025-6
S620QL1	1.8987	3.1	EN 10025-6
S650MC	1.8976	2.1	EN 10149-2

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
S690A	1.8995	3.3	EN 10137-3
S690AL	1.8996	3.3	EN 10137-3
S690Q	1.8931	3.1	EN 10025-6
S690QL	1.8928	3.1	EN 10025-6
S690QL1	1.8988	3.1	EN 10025-6
S700MC	1.8974	2.1	EN 10149-2
S890Q	1.8940	3.2	EN 10025-6
S890QL	1.8983	3.2	EN 10025-6
S890QL1	1.8925	3.2	EN 10025-6
S960Q	1.8941	3.2	EN 10025-6
S960QL	1.8933	3.2	EN 10025-6
X105CrMo17	1.4125	7.2	EN 10088-1
X10CrAlSi13	1.4724	7.1	EN 10088-1
X10CrAlSi18	1.4742	7.1	EN 10088-1
X10CrAlSi25	1.4762	7.1	EN 10088-1
X10CrMoVNb9-1	1.4903	6.4	EN 10216-2, EN 10222-2
X10CrNi18-8	1.4310	8.1	EN 10088-1
X10CrNiMoMnNbVb15-10-1	1.4981	8.1	EN 10088-1
X10CrNiMoMnNbVB15-10-1	1.4982	8.1	EN 10216-5
X10Ni9	1.5682	9.3	EN 10216-4
X11CrMo5+L	1.7362+L	5.3	EN 10216-2
X11CrMo5+NT1	1.7362+NT1	5.3	EN 10216-2
X11CrMo5+NT2	1.7362+NT2	5.3	EN 10216-2
X11CrMo9-1+L	1.7386+L	5.4	EN 10216-2
X11CrMo9-1+NT	1.7386+NT	5.4	EN 10216-2
X11CrNiMnN19-8-6	1.4369	8.3	EN 10088-1
X12Cr13	1.4006	7.2	EN 10088-1, EN 10272
X12CrCoNi21-20	1.4971	8.2	EN 10088-1
X12CrMnNiN17-7-5	1.4372	8.3	EN 10088-1
X12CrMnNiN18-9-5	1.4373	8.3	EN 10088-1
X12CrNi23-13	1.4833	8.2	EN 10088-1
X12CrNiMoV12-3	1.4938	7.2	EN 10088-1
X12CrNiWTiB16-13	1.4962	8.1	EN 10088-1
X12CrS13	1.4005	7.2	EN 10088-1
X12Ni5	1.5680	9.2	EN 10028-4, EN 10216-4, EN 10222-3
X14CrMoS17	1.4104	7.2	EN 10088-1

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
X15Cr13	1.4024	7.2	EN 10088-1
X15CrNiSi20-12	1.4828	8.2	EN 10088-1
X15CrNiSi25-21	1.4841	8.2	EN 10088-1
X15CrNiSi25-4	1.4821	10.2	EN 10088-1
X16CrMo5-1	1.7366	5.3	EN 10222-2
X17CrNi16-2	1.4057	7.2	EN 10088-1
X18CrN28	1.4749	7.1	EN 10088-1
X19CrMoNbVN11-1	1.4913	7.2	EN 10088-1
X1CrNb15	1.4595	7.1	EN 10088-1
X1CrNi25-21	1.4335	8.2	EN 10088-1, EN 10216-5, EN 10028-7
X1CrNiMoAlTi12-10-2	1.4596	7.3	EN 10088-1
X1CrNiMoAlTi12-9-2	1.4530	7.3	EN 10088-1
X1CrNiMoCu12-5-2	1.4422	7.2	EN 10088-1
X1CrNiMoCu12-7-3	1.4423	7.2	EN 10088-1
X1CrNiMoCuN20-18-7	1.4547	8.2	EN 10272, EN 10216-5, EN 10028-7, EN 10296-2, EN 10217-7
X1CrNiMoCuN20-18-7a	1.4547a	8.2	EN 10088-1
X1CrNiMoCuN25-25-5	1.4537	8.2	EN 10088-1, EN 10028-7
X1CrNiMoCuNW24-22-6	1.4659	8.2	EN 10088-1
X1CrNiMoN25-22-2	1.4466	8.2	EN 10088-1, EN 10216-5, EN 10028-7
X1CrNiSi18-15-4	1.4361	8.1	EN 10088-1
X1NiCrMoCu25-20-5	1.4539	8.2	EN 10216-5, EN 10028-7, EN 10217-7, EN 10272, EN 10088-1, EN 10296-2
X1NiCrMoCu31-27-4	1.4563	8.2	EN 10216-5, EN 10028-7, EN 10217-7, EN 10272, EN 10088-1
X1NiCrMoCuN25-20-7	1.4529	8.2	EN 10216-5, EN 10028-7, EN 10217-7, EN 10272, EN 10088-1
X20Cr13	1.4021	7.2	EN 10088-1
X20CrMoV11-1	1.4922	6.4	EN 10088-1, EN 10216-2, EN 10222-2
X20CrMoWV12-1	1.4935	7.2	EN 10088-1
X22CrMoV12-1	1.4923	7.2	EN 10088-1
X25CrMnNiN25-9-7	1.4872	8.2	EN 10088-1
X29CrS13	1.4029	7.2	EN 10088-1
X2CrMnNiN17-7-5	1.4371	8.3	EN 10088-1
X2CrMoTi17-1	1.4513	7.1	EN 10088-1
X2CrMoTi18-2	1.4521	7.1	EN 10088-1, EN 10296-2

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
X2CrMoTi29-4	1.4592	7.1	EN 10088-1
X2CrMoTiS18-2	1.4523	7.1	EN 10088-1
X2CrNbZr17	1.4590	7.1	EN 10088-1
X2CrNi12	1.4003	7.1	EN 10088-1, EN 10296-2
X2CrNi18-9	1.4307	8.1	EN 10028-7, EN 10088-1, EN 10216-5, EN 10217-7, EN 10222-2, EN 10222-5, EN 10272, EN 10296-2
X2CrNi19-11	1.4306	8.1	EN 10216-5, EN 10217-7, EN 10028-7, EN 10088-1, EN 10272, EN 10296-2
X2CrNiCu19-10	1.4650	8.1	EN 10088-1, EN 10222-5
X2CrNiCuN23-4	1.4655	10.1	EN 10088-1
X2CrNiMnMoN25-18-6-5	1.4565	8.2	EN 10088-1
X2CrNiMo17-12-2	1.4404	8.1	EN 10216-5, EN 10217-7, EN 10028-7, EN 10088-1, EN 10222-5, EN 10272, EN 10296-2
X2CrNiMo17-12-3	1.4432	8.1	EN 10217-7, EN 10028-7, EN 10088-1, EN 10222-5, EN 10272, EN 10296-2
X2CrNiMo18-12-3	1.4449	8.1	EN 10088-1
X2CrNiMo18-14-3	1.4435	8.1	EN 10216-5, EN 10217-7, EN 10028-7, EN 10088-1, EN 10222-5, EN 10272, EN 10296-2
X2CrNiMo18-15-4	1.4438	8.1	EN 10217-7, EN 10028-7, EN 10088-1
X2CrNiMoCuN25-6-3	1.4507	10.2	EN 10088-1, EN 10028-7, EN 10216-5, EN 10272
X2CrNiMoCuS17-10-2	1.4598	8.1	EN 10088-1
X2CrNiMoCuWN25-7-4	1.4501	10.2	EN 10088-1, EN 10028-7, EN 10216-5, EN 10272, EN 10217-7,
X2CrNiMoN17-11-2	1.4406	8.1	EN 10028-7, EN 10088-1, EN 10222-5, EN 10272
X2CrNiMoN17-13-3	1.4429	8.1	EN 10216-5, EN 10217-7, EN 10028-7, EN 10088-1, EN 10222-5, EN 10272, EN 10296-2
X2CrNiMoN17-13-5	1.4439	8.1	EN 10216-5, EN 10217-7, EN 10028-7, EN 10088-1, EN 10272, EN 10296-2
X2CrNiMoN18-12-4	1.4434	8.1	EN 10028-7, EN 10088-1
X2CrNiMoN22-5-3	1.4462	10.1	EN 10028-7, EN 10217-7, EN 10222-5, EN 10088-1, EN 102962, EN 10216-5, EN 10272
X2CrNiMoN25-7-4	1.4410	10.2	EN 10222-5, EN 10028-7, EN 10216-5, EN 10272, EN 10217-7, EN 10296-2

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
X2CrNiMoN25-7-4	1.4410	10.2	EN 10088-1
X2CrNiMoN29-7-2	1.4477	10.2	EN 10088-1
X2CrNiMoSi18-5-3	1.4424	10.1	EN 10216-5, EN 10088-1
X2CrNiMoV13-5-2	1.4415	7.2	EN 10088-1
X2CrNiN18-10	1.4311	8.1	EN 10216-5, EN 10217-7, EN 10222-5, EN 10028-7, EN 10088-1, EN 10296-2, EN 10272
X2CrNiN18-7	1.4318	8.1	EN 10028-7, EN 10088-1, EN 10296-2
X2CrNiN23-4	1.4362	10.1	EN 10028-7, EN 10216-5, EN 10217-7, EN 10272, EN 10296-2
X2CrTi12	1.4512	7.1	EN 10088-1, EN 10296-2
X2CrTi17	1.4520	7.1	EN 10088-1
X2CrTiNb18	1.4509	7.1	EN 10088-1, EN 10296-2
X2NiCrAlTi32-20	1.4558	8.2	EN 10216-5
X30Cr13	1.4028	7.2	EN 10088-1
X38CrMo14	1.4419	7.2	EN 10088-1
X39Cr13	1.4031	7.2	EN 10088-1
X39CrMo17-1	1.4122	7.2	EN 10088-1
X3CrAlTi18-2	1.4736	7.1	EN 10088-1
X3CrNb17	1.4511	7.1	EN 10088-1
X3CrNiCu18-9-4	1.4567	8.1	EN 10088-1
X3CrNiCu19-9-2	1.4560	8.1	EN 10088-1
X3CrNiCuMo17-11-3-2	1.4578	8.1	EN 10088-1
X3CrNiMo13-4	1.4313	7.2	EN 10028-7, EN 10088-1, EN 10222-5
X3CrNiMo17-13-3	1.4436	8.1	EN 10088-1, EN 10222-5, EN 10272, EN 10216-5, EN 10217-7, EN 10296-2
X3CrNiMo18-12-3	1.4449	8.1	EN 10222-5
X3CrNiMoBN17-13-3	1.4910	8.1	EN 10088-1, EN 10216-5, EN 10028-7
X3CrNiMoN17-13-3	1.4910	8.1	EN 10028-7, EN 10222-5
X3CrNiMoN27-5-2	1.4460	10.2	EN 10088-1
X3CrTi17	1.4510	7.1	EN 10088-1, EN 10296-2
X40CrMoVN16-2	1.4123	7.2	EN 10088-1
X46Cr13	1.4034	7.2	EN 10088-1
X46CrS13	1.4035	7.2	EN 10088-1
X4CrNi18-12	1.4303	8.1	EN 10088-1
X4CrNiMo16-5-1	1.4418	7.2	EN 10088-1



Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
X50CrMoV15	1.4116	7.2	EN 10088-1
X55CrMo14	1.4110	7.2	EN 10088-1
X5CrNi17-7	1.4319	8.1	EN 10088-1
X5CrNi18-10	1.4301	8.1	EN 10216-5, EN 10217-7, EN 10222-2, EN 10028-7, EN 10088-1, EN 10222-5, EN 10272, EN 10296-2
X5CrNiCuNb16-4	1.4542	7.3	EN 10088-1
X5CrNiMo17-12-2	1.4401	8.1	EN 10216-5, EN 10217-7, EN 10222-5, EN 10028-7, EN 10088-1, EN 10296-2, EN 10272
X5CrNiMoCuNb14-5	1.4594	7.3	EN 10088-1
X5CrNiMoTi15-2	1.4589	7.1	EN 10088-1
X5CrNiN19-9	1.4315	8.1	EN 10028-7, EN 10088-1
X5NiCrAlTi31-20	1.4958	8.2	EN 10216-5, EN 10028-7, EN 10088-1
X5NiCrAlTi31-20+RA	1.4958+RA	8.2	EN 10028-7
X5NiCrTiMoVB25-15-2	1.4606	7.3	EN 10088-1
X6Cr13	1.4000	7.1	EN 10088-1
X6Cr17	1.4016	7.1	EN 10088-1, EN 10296-2
X6CrAl13	1.4002	7.1	EN 10088-1
X6CrMo17-1	1.4113	7.1	EN 10088-1
X6CrMoNb17-1	1.4526	7.1	EN 10088-1, EN 10296-2
X6CrMoS17	1.4105	7.1	EN 10088-1
X6CrNi17-1	1.4017	7.1	EN 10088-1
X6CrNi18-10	1.4948	8.1	EN 10088-1, EN 10216-5, EN 10028-7, EN 10222-5
X6CrNi23-13	1.4950	8.2	EN 10088-1, EN 10028-7
X6CrNi25-20	1.4951	8.2	EN 10088-1, EN 10028-7
X6CrNiCuS18-9-2	1.4570	8.1	EN 10088-1
X6CrNiMo17-13-2	1.4918	8.1	EN 10088-1
X6CrNiMoB17-12-2	1.4919	8.1	EN 10088-1
X6CrNiMoNb17-12-2	1.4580	8.1	EN 10216-5, EN 10028-7, EN 10088-1, EN 10272
X6CrNiMoTi17-12-2	1.4571	8.1	EN 10216-5, EN 10217-7, EN 10222-5, EN 10028-7, EN 10088-1, EN 10296-2, EN 10272
X6CrNiMoTiB17-13	1.4983	8.1	EN 10088-1
X6CrNiNb18-10	1.4550	8.1	EN 10216-5, EN 10217-7, EN 10222-5, EN 10028-7, EN 10088-1, EN 10296-2, EN 10272

Table 1 (continued)

Designation		Group	Standard(s)
Name	Number		
X6CrNiSiNc19-10	1.4818	8.1	EN 10088-1
X6CrNiTi12	1.4516	7.1	EN 10088-1
X6CrNiTi18-10	1.4541	8.1	EN 10216-5, EN 10217-7, EN 10222-5, EN 10028-7, EN 10088-1, EN 10296-2, EN 10272
X6CrNiTiB18-10	1.4941	8.1	EN 10088-1, EN 10222-5, EN 10028-7
X6CrNiWNB16-16	1.4945	8.1	EN 10088-1
X6NiCrTiMoVB25-15-2	1.4980	8.1	EN 10088-1
X70CrMo15	1.4109	7.2	EN 10088-1
X7CrNiAl17-7	1.4568	7.3	EN 10088-1
X7CrNiMoNB16-16	1.4986	8.1	EN 10088-1
X7CrNiNb18-10	1.4912	8.1	EN 10088-1, EN 10216-5, EN 10222-5
X7CrNiTi18-10	1.4940	8.1	EN 10088-1, EN 10216-5, EN 10222-5
X7Ni9	1.5663	9.3	EN 10028-4
X8CrMnCuNB17-8-3	1.4597	8.3	EN 10088-1
X8CrMnNi18-9-5	1.4374	8.3	EN 10088-1
X8CrNi25-21	1.4845	8.2	EN 10088-1
X8CrNiMoNb16-16	1.4981	8.1	EN 10088-1, EN 10216-5
X8CrNiMoVNb16-13	1.4988	8.1	EN 10088-1, EN 10216-5
X8CrNiNb16-13	1.4961	8.1	EN 10088-1, EN 10216-5, EN 10028-7
X8CrNiS18-9	1.4305	8.1	EN 10088-1
X8CrTi18-10	1.4878	8.1	EN 10088-1
X8Ni9	1.5662	9.3	EN 10028-4, EN 10222-3
X8NiCrAlTi32-21	1.4959	8.2	EN 10216-5, EN 10028-7, EN 10088-1
X90CrMoV18	1.4112	7.2	EN 10088-1
X9CrNi18-9	1.4325	8.1	EN 10088-1
X9CrNiSiNc21-11-2	1.4835	8.2	EN 10088-1

## 2.2 Types of aluminium and aluminium alloy in accordance with the grouping system of ISO/TR 15608:2005, Table 2

See Table 2.

**Table 2 — Aluminium and aluminium alloys**

Designation		Group	Standard(s)
Name	Number		
EN AC-AI Cu4MgTi	EN AC-21000	26	EN 573
EN AC-AI Cu4Ti	EN AC-21100	26	EN 573, EN 1706
EN AC-AI Mg	EN AC-51100	22.3	EN 573
EN AC-AI Mg3	EN AC-51100	22.3	EN 1706
EN AC-AI Mg5	EN AC-51300	22.4	EN 573, EN 1706
EN AC-AI Mg5(Si)	EN AC-51400	22.4	EN 573, EN 1706
EN AC-AI Mg9	EN AC-51200	22.4	EN 573, EN 1706
EN AC-AI Si10Mg	EN AC-43000 EN AC-43100	24.2	EN 573, EN 1706
EN AC-AI Si10Mg(Cu)	EN AC-43200	24.2	EN 573, EN 1706
EN AC-AI Si10Mg(Fe)	EN AC-43400	24.2	EN 573, EN 1706
EN AC-AI Si11	EN AC-44000	24.1	EN 573, EN 1706
EN AC-AI Si11Cu2(Fe)	EN AC-46100	25	EN 573, EN 1706
EN AC-AI Si12	EN AC-44100	24.1	EN 573, EN 1706
EN AC-AI Si12(Cu)	EN AC-47000	24.1	EN 573, EN 1706
EN AC-AI Si12(Fe)	EN AC-44300	24.1	EN 573, EN 1706
EN AC-AI Si12Cu1(Fe)	EN AC-47100	25	EN 573, EN 1706
EN AC-AI Si12CuNiMg	EN AC-48000	25	EN 573
EN AC-AI Si2Mg	EN AC-41000	23.1	EN 1706
EN AC-AI Si5Cu1Mg	EN AC-45300	25	EN 573, EN 1706
EN AC-AI Si5Cu3	EN AC-45400	25	EN 573, EN 1706
EN AC-AI Si5Cu3Mg	EN AC-45100	25	EN 573, EN 1706
EN AC-AI Si5Cu3Mn	EN AC-45200	25	EN 573, EN 1706
EN AC-AI Si6Cu4	EN AC-45000	25	EN 573, EN 1706
EN AC-AI Si7Cu2	EN AC-46600	25	EN 573, EN 1706
EN AC-AI Si7Cu3Mg	EN AC-46300	25	EN 573, EN 1706
EN AC-AI Si7Mg	EN AC-42000	23.1	EN 1706
EN AC-AI Si7Mg	EN AC-42000	24.2	EN 573, EN 1706
EN AC-AI Si7Mg0,3	EN AC-42100	24.2	EN 573, EN 1706
EN AC-AI Si7Mg0,6	EN AC-42200	24.2	EN 573, EN 1706
EN AC-AI Si8Cu3	EN AC-46200	25	EN 573, EN 1706
EN AC-AI Si9	EN AC-44400	24.1	EN 573, EN 1706

Table 2 (continued)

Designation		Group	Standard(s)
Name	Number		
EN AC-AI Si9Cu1Mg	EN AC-46400	25	EN 573, EN 1706
EN AC-AI Si9Cu3(Fe)	EN AC-46000	25	EN 573, EN 1706
EN AC-AI Si9Cu3(Fe)(Zn)	EN AC-46500	25	EN 573, EN 1706
EN AC-AI Si9Mg	EN AC-43300	23.1	EN 1706
EN AC-AI Si9Mg	EN AC-43300	24.2	EN 573, EN 1706
EN AC-AI Zn5Mg	EN AC-71000	23	EN 1706
EN AW-AI 99,0	EN AW-1200	21	EN 573
EN AW-AI 99,0Cu	EN AW-1100	21	EN 573
EN AW-AI 99,5	EN AW-1050A	21	EN 573
EN AW-AI 99,5Ti	EN AW-1450	21	EN 573
EN AW-AI 99,6	EN AW-1060	21	EN 573
EN AW-AI 99,7	EN AW-1070A	21	EN 573
EN AW-AI 99,8	EN AW-1080A	21	EN 573
EN AW-AI 99,85	EN AW-1085	21	EN 573
EN AW-AI 99,90	EN AW-1090	21	EN 573
EN AW-AI 99,98	EN AW-1098	21	EN 573
EN AW-AI 99,98A	EN AW-1198A	21	EN 573
EN AW-AI Ag1Si0,8Cu	EN AW-6013	23.1	EN 573
EN AW-AI Mg0,7Si	EN AW-6063	23.1	EN 573
EN AW-AI Mg1	EN AW-5005	22.2	EN 573
EN AW-AI Mg1,5(C)	EN AW-5050	22.2	EN 573
EN AW-AI Mg1SiCu	EN AW-6061	23.1	EN 573
EN AW-AI Mg2	EN AW-5251	22.3	EN 573
EN AW-AI Mg2,5	EN AW-5052	22.3	EN 573
EN AW-AI Mg2Mn0,8	EN AW-5149	22.3	EN 573
EN AW-AI Mg2Mn0,8Zr	EN AW-5249	22.3	EN 573
EN AW-AI Mg3	EN AW-5754	22.3	EN 573
EN AW-AI Mg3,5	EN AW-5154 A	22.3	EN 573
EN AW-AI Mg3,5Mn0,3	EN AW-5154 B	22.3	EN 573
EN AW-AI Mg3Mn	EN AW-5454	22.3	EN 573
EN AW-AI Mg4	EN AW-5086	22.4	EN 573
EN AW-AI Mg4,5Mn0,7	EN AW-5083	22.4	EN 573
EN AW-AI Mg4,5Mn0,9	EN AW-5383	22.4	EN 573
EN AW-AI Mg4Mn0,4	EN AW-5186	22.4	EN 573
EN AW-AI Mg5	EN AW-5056A	22.4	EN 573
EN AW-AI Mg5Mn1	EN AW-5456A	22.4	EN 573

Table 2 (continued)

Designation		Group	Standard(s)
Name	Number		
EN AW-Al MgSi	EN AW-6060	23.1	EN 573
EN AW-Al MgSiMn	EN AW-6106	23.1	EN 573
EN AW-Al Mn0,5Mg0,5	EN AW-3105	22.1	EN 573
EN AW-Al Mn1	EN AW-3103	22.1	EN 573
EN AW-Al Mn1Cu	EN AW-3003	22.1	EN 573
EN AW-Al Mn1Mg0,5	EN AW-3005	22.1	EN 573
EN AW-Al Mn1Mg1	EN AW-3004	22.1	EN 573
EN AW-Al Si0,9MgMn	EN AW-6081	23.1	EN 573
EN AW-Al Si1MgMn	EN AW-6082	23.1	EN 573
EN AW-Al SiMg	EN AW-6005 A	23.1	EN 573
EN AW-Al Zn4,5Mg1	EN AW-7020	23.2	EN 573
EN AW-Al Zn6Mg0,8Zr	EN AW-7003	23.2	EN 573

### 2.3 Types of copper and copper alloy in accordance with the grouping system of ISO/TR 15608:2005, Table 3

See Table 3.

Table 3 — Copper and copper alloys

Designation		Group	Standard(s)
Name	Number		
CW004A	Cu-ETP	31	EN 1652
CW006A	Cu-FRTP	31	EN 1652
CW008A	Cu-OF	31	EN 1652
CW023A	Cu-DLP	31	EN 1652, EN 1653
CW024A	Cu-DHP	31	EN 1652, EN 1653
CW100C	CuBe1,7	37	EN 1654
CW101C	CuBe2	37	EN 1652, EN 1654
CW104C	CuCo2Be	37	EN 1652, EN 1654
CW107C	CuFe2P	37	EN 1654
CW110C	CuNi2Be	37	EN 1652, EN 1654
CW111C	CuNi2Si	37	EN 1652, EN 1654
CW119C	CuZn0,5	37	EN 1652
CW303G	CuAl8Fe3	35	EN 1652, EN 1653
CW304G	CuAl9Ni3Fe2	35	EN 1653
CW307G	CuAl10Ni5Fe4	35	EN 1653

Table 3 (continued)

Designation		Group	Standard(s)
Name	Number		
CW350H	CuNi25	34	EN 1652
CW351H	CuNi9Sn2	34	EN 1652, EN 1654
CW352H	CuNi10Fe1Mn	34	EN 1652, EN 1653
CW354H	CuNi30Mn1Fe	34	EN 1652, EN 1653
CW401J	CuNi10Zn27	36	EN 1652
CW403J	CuNi12Zn24	36	EN 1652, EN 1654
CW404J	CuNi12Zn25Pb1	36	EN 1652
CW405J	CuNi12Zn29	36	EN 1654
CW409J	CuNi18Zn20	36	EN 1652, EN 1654
CW410J	CuNi18Zn27	36	EN 1652, EN 1654
CW450K	CuSn4	33	EN 1652, EN 1654
CW451K	CuSn5	33	EN 1652, EN 1654
CW452K	CuSn6	33	EN 1652, EN 1654
CW453K	CuSn8	33	EN 1652, EN 1654
CW454K	CuSn3Zn9	33	EN 1652, EN 1654
CW500L	CuZn5	32.1	EN 1652
CW501L	CuZn10	32.1	EN 1652
CW502L	CuZn15	32.1	EN 1652, EN 1654
CW503L	CuZn20	32.1	EN 1652
CW505L	CuZn30	32.1	EN 1652, EN 1654
CW506L	CuZn33	32.1	EN 1652
CW507L	CuZn36	32.1	EN 1652, EN 1654
CW508L	CuZn37	32.1	EN 1652
CW509L	CuZn40	32.1	EN 1652
CW702R	CuZn20Al2As	32.2	EN 1652, EN 1653
CW703R	CuZn23Al2Co	32.2	EN 1653, EN 1654
CW715R	CuZn38AlFeNiPbSn	32.2	EN 1653
CW717R	CuZn38Sn1As	32.2	EN 1653
CW719R	CuZn39Sn1	32.2	EN 1653

## 2.4 Types of cast iron in accordance with the grouping system of ISO/TR 15608:2005, Table 7

See Table 4.

**Table 4 — Cast iron materials**

Designation		Group	Standard(s)
Name	Number		
EN-JL1010	EN-GJL-100	71	EN 1561
EN-JL1020	EN-GJL-150	71	EN 1561
EN-JL1030	EN-GJL-200	71	EN 1561
EN-JL1040	EN-GJL-250	71	EN 1561
EN-JL1050	EN-GJL-300	71	EN 1561
EN-JL1060	EN-GJL-350	71	EN 1561
EN-JL2010	EN-GJL-HB155	71	EN 1561
EN-JL2020	EN-GJL-HB175	71	EN 1561
EN-JL2030	EN-GJL-HB195	71	EN 1561
EN-JL2040	EN-GJL-HB215	71	EN 1561
EN-JL2050	EN-GJL-HB235	71	EN 1561
EN-JL2060	EN-GJL-HB255	71	EN 1561
EN-JM1010	EN-GJMW-350-4	73.2	EN 1562
EN-JM1020	EN-GJMW-360-12	73.1	EN 1562
EN-JM1030	EN-GJMW-400-5	73.2	EN 1562
EN-JM1040	EN-GJMW-450-7	73.2	EN 1562
EN-JM1050	EN-GJMW-500-4	73.2	EN 1562
EN-JM1110	EN-GJMB-300-6	73.3	EN 1562
EN-JM1130	EN-GJMB-350-10	73.3	EN 1562
EN-JM1140	EN-GJMB-450-6	73.3	EN 1562
EN-JM1150	EN-GJMB-500-5	73.3	EN 1562
EN-JM1160	EN-GJMB-550-4	73.3	EN 1562
EN-JM1170	EN-GJMB-600-3	73.3	EN 1562
EN-JM1180	EN-GJMB-650-2	73.3	EN 1562
EN-JM1190	EN-GJMB-700-2	73.3	EN 1562
EN-JM1200	EN-GJMB-800-1	73.3	EN 1562
EN-JN2010	EN-GJN-HV350	76.1	prEN 12513
EN-JN2020	EN-GJN-HV520	76.1	prEN 12513
EN-JN2030	EN-GJN-HV550	76.1	prEN 12513
EN-JN2040	EN-GJN-HV600	76.1	prEN 12513
EN-JN2050	EN-GJN-HV600 (XCr11)	76.1	prEN 12513
EN-JN2060	EN-GJN-HV600 (XCr14)	76.1	prEN 12513
EN-JN2070	EN-GJN-HV600 (XCr18)	76.1	prEN 12513
EN-JN2080	EN-GJN-HV600 (XCr23)	76.1	prEN 12513
EN-JS1010	EN-GJS-350-22	72.1	EN 1563

Table 4 (continued)

Designation		Group	Standard(s)
Name	Number		
EN-JS1014	EN-GJS-350-22-RT	72.2	EN 1563
EN-JS1015	EN-GJS-350-22-LT	72.2	EN 1563
EN-JS1019	EN-GJS-350-22U-LT	72.2	EN 1563
EN-JS1020	EN-GJS-400-18	72.1	EN 1563
EN-JS1024	EN-GJS-400-18-RT	72.2	EN 1563
EN-JS1025	EN-GJS-400-18-LT	72.2	EN 1563
EN-JS1029	EN-GJS-350-22U-RT	72.2	EN 1563
EN-JS1030	EN-GJS-400-15	72.1	EN 1563
EN-JS1032	EN-GJS-350-22U	72.1	EN 1563
EN-JS1040	EN-GJS-450-10	72.1	EN 1563
EN-JS1049	EN-GJS-400-18U-LT	72.2	EN 1563
EN-JS1050	EN-GJS-500-7	72.1	EN 1563
EN-JS1059	EN-GJS-400-18U-RT	72.2	EN 1563
EN-JS1060	EN-GJS-600-3	72.1	EN 1563
EN-JS1062	EN-GJS-400-18U	72.1	EN 1563
EN-JS1070	EN-GJS-700-2	72.1	EN 1563
EN-JS1072	EN-GJS-400-15U	72.1	EN 1563
EN-JS1080	EN-GJS-800-2	72.1	EN 1563
EN-JS1082	EN-GJS-500-7U	72.1	EN 1563
EN-JS1090	EN-GJS-900-2	72.1	EN 1563
EN-JS1092	EN-GJS-600-3U	72.1	EN 1563
EN-JS1100	EN-GJS-800-8	74	EN 1564
EN-JS1102	EN-GJS-700-2U	72.1	EN 1563
EN-JS1104	EN-GJS-800-8-RT	74	EN 1564
EN-JS1109	EN-GJS-800-8-S-RT	74	EN 1564
EN-JS1110	EN-GJS-1000-5	74	EN 1564
EN-JS1112	EN-GJS-800-2U	72.1	EN 1563
EN-JS1120	EN-GJS-1200-2	74	EN 1564
EN-JS1122	EN-GJS-900-2U	72.1	EN 1563
EN-JS1130	EN-GJS-1400-1	74	EN 1564
EN-JS1132	EN-GJS-450-10U	72.1	EN 1563
EN-JS2010	EN-GJS-HB130	72.1	EN 1563
EN-JS2020	EN-GJS-HB150	72.1	EN 1563
EN-JS2030	EN-GJS-HB155	72.1	EN 1563
EN-JS2040	EN-GJS-HB185	72.1	EN 1563
EN-JS2050	EN-GJS-HB200	72.1	EN 1563
EN-JS2060	EN-GJS-HB230	72.1	EN 1563
EN-JS2070	EN-GJS-HB265	72.1	EN 1563
EN-JS2080	EN-GJS-HB300	72.1	EN 1563
EN-JS2090	EN-GJS-HB330	72.1	EN 1563



## 2.5 Types of cast iron in accordance with the grouping system of ISO/TR 15608:2005, Table 7, additional

See Table 5.

**Table 5 — Cast iron materials**

Designation		Group	Standard(s)
Name	Number		
EN-JL1010	EN-GJL-100	71	EN 1561
EN-JL1020	EN-GJL-150		
EN-JL1030	EN-GJL-200		
EN-JL1040	EN-GJL-250		
EN-JL1050	EN-GJL-300		
EN-JL1060	EN-GJL-350		
EN-JL2010	EN-GJL-HB155		
EN-JL2020	EN-GJL-HB175		
EN-JL2030	EN-GJL-HB195		
EN-JL2040	EN-GJL-HB215		
EN-JL2050	EN-GJL-HB235		
EN-JL2060	EN-GJL-HB255		
EN-JS1010	EN-GJS-350-22	72.1	EN 1563
EN-JS1032	EN-GJS-350-22U		
EN-JS1020	EN-GJS-400-18		
EN-JS1062	EN-GJS-400-18U		
EN-JS1030	EN-GJS-400-15		
EN-JS1072	EN-GJS-400-15U		
EN-JS1040	EN-GJS-450-10		
EN-JS1132	EN-GJS-450-10U		
EN-JS1050	EN-GJS-500-7		
EN-JS1082	EN-GJS-500-7U		
EN-JS1060	EN-GJS-600-3		
EN-JS1092	EN-GJS-600-3U		
EN-JS1070	EN-GJS-700-2		
EN-JS1102	EN-GJS-700-2U		
EN-JS1080	EN-GJS-800-2		
EN-JS1112	EN-GJS-800-2U		
EN-JS1090	EN-GJS-900-2		
EN-JS1122	EN-GJS-900-2U		
EN-JS2010	EN-GJS-HB130		
EN-JS2020	EN-GJS-HB150		
EN-JS2030	EN-GJS-HB155		
EN-JS2040	EN-GJS-HB185		
EN-JS2050	EN-GJS-HB200		
EN-JS2060	EN-GJS-HB230		
EN-JS2070	EN-GJS-HB265		
EN-JS2080	EN-GJS-HB300		
EN-JS2090	EN-GJS-HB330		

Table 5 (continued)

Designation		Group	Standard(s)
Name	Number		
EN-JS1015	EN-GJS-350-22-LT	72.2	EN 1563
EN-JS1019	EN-GJS-350-22U-LT		
EN-JS1014	EN-GJS-350-22-RT		
EN-JS1029	EN-GJS-350-22U-RT		
EN-JS1025	EN-GJS-400-18-LT		
EN-JS1049	EN-GJS-400-18U-LT		
EN-JS1024	EN-GJS-400-18-RT		
EN-JS1059	EN-GJS-400-18U-RT		
EN-JM1020	EN-GJMW-360-12	73.1	EN 1562
EN-JM1010	EN-GJMW-350-4	73.2	EN 1562
EN-JM1030	EN-GJMW-400-5		
EN-JM1040	EN-GJMW-450-7		
EN-JM1050	EN-GJMW-500-4		
EN-JM1110	EN-GJMB-300-6	73.3	EN 1562
EN-JM1130	EN-GJMB-350-10		
EN-JM1140	EN-GJMB-450-6		
EN-JM1150	EN-GJMB-500-5		
EN-JM1160	EN-GJMB-550-4		
EN-JM1170	EN-GJMB-600-3		
EN-JM1180	EN-GJMB-650-2		
EN-JM1190	EN-GJMB-700-2		
EN-JM1200	EN-GJMB-800-1		
EN-JS1100	EN-GJS-800-8		
EN-JS1104	EN-GJS-800-8-RT		
EN-JS1109	EN-GJS-800-8-S-RT		
EN-JS1110	EN-GJS-1000-5		
EN-JS1120	EN-GJS-1200-2		
EN-JS1130	EN-GJS-1400-1		
EN-JN2010	EN-GJN-HV350	76.1	prEN 12513
EN-JN2020	EN-GJN-HV520		
EN-JN2030	EN-GJN-HV550		
EN-JN2040	EN-GJN-HV600		
EN-JN2050	EN-GJN-HV600 (XCr11)		
EN-JN2060	EN-GJN-HV600 (XCr14)		
EN-JN2070	EN-GJN-HV600 (XCr18)		
EN-JN2080	EN-GJN-HV600 (XCr23)		

## Bibliography

### List of ISO International Standards conforming to European standards

European standard given in Clause 2	Corresponding ISO International Standard	Title of the standard
EN 573-1	Under revision ISO/TC 79	<i>Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 1: Numerical designation system</i>
EN 573-2	—	<i>Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 2: Chemical symbol based designation system</i>
EN 573-3	ISO 209	<i>Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products</i>
EN 1412	—	<i>Copper and copper alloys — European numbering system</i>
EN 1560	Under revision ISO/TC 25	<i>Founding — Designation system for cast iron — Material symbols and material numbers</i>
EN 1561	—	<i>Founding — Grey cast irons</i>
EN 1562	—	<i>Founding — Malleable cast irons</i>
EN 1563	—	<i>Founding — Spheroidal graphite cast irons</i>
EN 1652	—	<i>Copper and copper alloys — Plate, sheet, strip and circles for general purposes</i>
EN 1653	—	<i>Copper and copper alloys — Plate, sheet and circles for boilers, pressure vessels and hot water storage units</i>
EN 1654	—	<i>Copper and copper alloys — Strip for springs and connectors</i>
EN 1706	ISO 3522	<i>Aluminium and aluminium alloys — Castings — Chemical composition and mechanical properties</i>
EN 1780-1	—	<i>Aluminium and aluminium alloys — Designation of alloyed aluminium ingots for remelting, master alloys and castings — Part 1: Numerical designation system</i>
EN 1780-2	—	<i>Aluminium and aluminium alloys — Designation of alloyed aluminium ingots for remelting, master alloys and castings — Part 2: Chemical symbol based designation system</i>
EN 10025-2	ISO 630	<i>Structural steels — Plates, wide flats, bars, sections and profiles</i>
—	ISO 1052	<i>Steels for general engineering purposes</i>
—	ISO 4995	<i>Hot-rolled steel sheet of structural quality</i>
—	ISO 6316	<i>Hot-rolled steel strip of structural quality</i>
—	ISO 13976	<i>Hot-rolled steel sheet in coils of structural quality and heavy thickness</i>
EN 10025-3	ISO 4950-1	<i>High yield strength flat steel products — Part 1: General requirements</i>
—	ISO 4950-2	<i>High yield strength flat steel products — Part 2: Products supplied in the normalized or controlled rolled condition</i>
—	ISO 4996	<i>Hot-rolled steel sheet of high yield stress structural quality</i>

European standard given in Clause 2	Corresponding ISO International Standard	Title of the standard
EN 10025-4	ISO 4950-1	<i>High yield strength flat steel products — Part 1: General requirements</i>
—	ISO 4950-2	<i>High yield strength flat steel products — Part 2: Products supplied in the normalized or controlled rolled condition</i>
—	ISO 4996	<i>Hot-rolled steel sheet of high yield stress structural quality</i>
EN 10025-5	ISO 4952	<i>Structural steels with improved atmospheric corrosion resistance</i>
—	ISO 5952	<i>Continuously hot-rolled steel sheet of structural quality with improved atmospheric corrosion resistance</i>
EN 10025-6	—	<i>Hot rolled products of structural steels — Part 6: Technical delivery conditions for flat products of high yield strength structural steels in the quenched and tempered condition</i>
EN 10028-2	ISO 9328-2	<i>Steel flat products for pressure purposes — Technical delivery conditions — Part 2: Non-alloy and alloy steels with specified elevated temperature properties</i>
EN 10028-3	ISO 9328-4	<i>Steel flat products for pressure purposes — Technical delivery conditions — Part 4: Nickel-alloy steels with specified low temperature properties</i>
EN 10028-4	ISO 9328-3	<i>Steel flat products for pressure purposes — Technical delivery conditions — Part 3: Weldable fine grain steels, normalized</i>
EN 10028-5	ISO 9328-4	<i>Steel flat products for pressure purposes — Technical delivery conditions — Part 4: Nickel-alloy steels with specified low temperature properties</i>
EN 10028-6	ISO 9328-4	<i>Steel flat products for pressure purposes — Technical delivery conditions — Part 4: Nickel-alloy steels with specified low temperature properties</i>
EN 10083-2	—	<i>Steels for quenching and tempering — Part 2: Technical delivery conditions for non alloy steels</i>
EN 10083-3	—	<i>Steels for quenching and tempering — Part 3: Technical delivery conditions for alloy steels</i>
EN 10085	—	<i>Nitriding steels — Technical delivery conditions</i>
EN 10088-1	—	<i>Stainless steels — Part 1: List of stainless steels</i>
EN 10120	ISO 4978	<i>Flat rolled steel products for welded gas cylinders</i>
EN 10132-2	—	<i>Cold rolled narrow steel strip for heat treatment — Technical delivery conditions — Part 2: Case hardening steels</i>
EN 10137-3	—	<i>Plates and wide flats made of high yield strength structural steels in the quenched and tempered or precipitation hardened conditions — Part 3: Delivery conditions for precipitation hardened steels</i>
EN 10149-2	ISO 6930-1	<i>High yield strength steel plates and wide flats for cold forming — Part 1: Delivery conditions for thermomechanically-rolled steels</i>
EN 10149-3	ISO 5951	<i>Hot-rolled steel sheet of higher yield strength with improved formability</i>

European standard given in Clause 2	Corresponding ISO International Standard	Title of the standard
EN 10164	—	<i>Steel products with improved deformation properties perpendicular to the surface of the product — Technical delivery conditions</i>
EN 10207	—	<i>Steels for simple pressure vessels — Technical delivery requirements for plates, strips and bars</i>
EN 10208-1	—	<i>Steel pipes for pipelines for combustible fluids — Technical delivery conditions — Part 1: Pipes of requirement class A</i>
EN 10208-2	—	<i>Steel pipes for pipelines for combustible fluids — Technical delivery conditions — Part 2: Pipes of requirement class B</i>
EN 10210-1	ISO 630-2	<i>Structural steels — Part 2: Technical delivery requirements for hot-finished hollow sections</i>
EN 10213	ISO 4991	<i>Steel castings for pressure purposes</i>
EN 10216-1	—	<i>Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 1: Non-alloy steel tubes with specified room temperature properties</i>
EN 10216-2	—	<i>Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties</i>
EN 10216-3	—	<i>Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 3: Alloy fine grain steel tubes</i>
EN 10216-4	—	<i>Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 4: Non-alloy and alloy steel tubes with specified low temperature properties</i>
EN 10216-5	—	<i>Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 5: Stainless steel tubes</i>
EN 10217-1	—	<i>Welded steel tubes for pressure purposes — Technical delivery conditions — Part 1: Non-alloy steel tubes with specified room temperature properties</i>
EN 10217-2	—	<i>Welded steel tubes for pressure purposes — Technical delivery conditions — Part 2: Electric welded non-alloy and alloy steel tubes with specified elevated temperature properties</i>
EN 10217-3	—	<i>Welded steel tubes for pressure purposes — Technical delivery conditions — Part 3: Alloy fine grain steel tubes</i>
EN 10217-4	—	<i>Welded steel tubes for pressure purposes — Technical delivery conditions — Part 4: Electric welded non-alloy steel tubes with specified low temperature properties</i>
EN 10217-5	—	<i>Welded steel tubes for pressure purposes — Technical delivery conditions — Part 5: Submerged arc welded non-alloy and alloy steel tubes with specified elevated temperature properties</i>
EN 10217-6	—	<i>Welded steel tubes for pressure purposes — Technical delivery conditions — Part 6: Submerged arc welded non-alloy steel tubes with specified low temperature properties</i>
EN 10217-7	—	<i>Welded steel tubes for pressure purposes — Technical delivery conditions — Part 7: Stainless steel tubes</i>

European standard given in Clause 2	Corresponding ISO International Standard	Title of the standard
EN 10219-1	ISO 10799	<i>Structural steels — Cold-formed, welded, steel structural hollow sections — Technical delivery requirements</i>
EN 10222-2	ISO 9327-2	<i>Steel forgings and rolled or forged bars for pressure purposes — Technical delivery conditions — Part 2: Non-alloy and alloy (Mo, Cr and CrMo) steels with specified elevated temperature properties</i>
EN 10222-3	ISO 9327-3	<i>Steel forgings and rolled or forged bars for pressure purposes — Technical delivery conditions — Part 3: Nickel steels with specified low temperature properties</i>
EN 10222-4	ISO 9327-4	<i>Steel forgings and rolled or forged bars for pressure purposes — Technical delivery conditions — Part 4: Weldable fine grain steels with high proof strength</i>
EN 10222-5	ISO 9327-5	<i>Steel forgings and rolled or forged bars for pressure purposes — Technical delivery conditions — Part 5: Stainless steels</i>
EN 10224	—	<i>Non-alloy steel tubes and fittings for the conveyance of aqueous liquids including water for human consumption — Technical delivery conditions</i>
EN 10225	—	<i>Weldable structural steels for fixed offshore structures — Technical delivery conditions</i>
EN 10248-1	—	<i>Hot rolled sheet piling of non-alloy steels — Part 1: Technical delivery conditions</i>
EN 10250-2	—	<i>Open die steel forgings for general engineering purposes — Part 2: Non-alloy quality and special steels</i>
EN 10255	—	<i>Non-Alloy steel tubes suitable for welding and threading — Technical delivery conditions</i>
EN 10268	—	<i>Cold rolled steel flat products with high yield strength for cold forming — Technical delivery conditions</i>
EN 10273	—	<i>Hot rolled weldable steel bars for pressure purposes with specified elevated temperature properties</i>
EN 10277-2	—	<i>Bright steel products — Technical delivery conditions — Part 2: Steels for general engineering purposes</i>
EN 10277-5	—	<i>Bright steel products — Technical delivery conditions — Part 5: Steels for quenching and tempering</i>
EN 10296-1	—	<i>Welded circular steel tubes for mechanical and general engineering purposes — Technical delivery conditions — Part 1: Non-alloy and alloy steel tubes</i>
EN 10296-2	—	<i>Welded circular steel tubes for mechanical and general engineering purposes — Technical delivery conditions — Part 2: Stainless steel tubes</i>
EN 10297-1	—	<i>Seamless circular steel tubes for mechanical and general engineering purposes — Technical delivery conditions — Part 1: Non-alloy and alloy steel tubes</i>

European standard given in Clause 2	Corresponding ISO International Standard	Title of the standard
EN 10305-1	—	<i>Steel tubes for precision applications — Technical delivery conditions — Part 1: Seamless cold drawn tubes</i>
EN 10305-2	—	<i>Steel tubes for precision applications — Technical delivery conditions — Part 2: Welded cold drawn tubes</i>
EN 10305-3	—	<i>Steel tubes for precision applications — Technical delivery conditions — Part 3: Welded cold sized tubes</i>
EN 10305-4	—	<i>Steel tubes for precision applications — Technical delivery conditions — Part 4: Seamless cold drawn tubes for hydraulic and pneumatic power systems</i>
EN 10305-5	—	<i>Steel tubes for precision applications — Technical delivery conditions — Part 5: Welded and cold sized square and rectangular tubes</i>
EN 10305-6	—	<i>Steel tubes for precision applications — Technical delivery conditions — Part 6: Welded cold drawn tubes for hydraulic and pneumatic power systems</i>
prEN 12513	—	<i>Founding — Abrasion resistant cast irons</i>
EN 13674-1	—	<i>Railway applications — Track — Rail — Part 1: Vignole railway rails 46 kg/m and above</i>
CEN/TR 15608	ISO/TR 15608	<i>Welding — Guidelines for a metallic materials grouping system</i>

