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**Varjenje – Sistemi za razvrščanje materialov v skupine – Evropski materiali
(ISO/TR 20172:2005)**

Welding - Grouping systems for materials - European materials (ISO/TR
20172:2005)

ICS 25.160.20

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English version

**Welding - Grouping systems for materials - European materials
(ISO/TR 20172:2005)**

Soudage - Systèmes de groupement des matériaux -
Matériaux européens (ISO/TR 20172:2005)

This draft Technical Report is submitted to CEN members for Technical Committee Approval. It has been drawn up by the Technical Committee CEN/TC 121.

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Foreword

This document (prCEN ISO/TR 20172:2005) 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".

This document is currently submitted to the parallel Technical Committee for approval.

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

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

PROOF/ÉPREUVE



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Foreword

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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).

Welding — Grouping systems for materials — European materials

1 Scope

This Technical Report provides a European 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 as heat treatment, forming, non destructive testing. Types of steels in accordance with the grouping system of ISO/TR 15608:2005, Table 1.

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

- steel;
- aluminium and its alloys;
- nickel and its alloys;
- copper and its alloys;
- titanium and its alloys;
- zirconium and its alloys;
- cast iron.

2 European grouping system for materials

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

See Table 1.

Table 1 — European grouping system for steels

Group	Reference standard	Designation	
		Name	Number
1.1	EN 10025-2	S235JR	1.0037
		S235JRG1	1.0036
		S235JRG2	1.0038
		S235JO	1.0114
		S235J2G3	1.0116
		S235J2G4	1.0117
		S235J2G3C	1.0118
		S235J2G4C	1.0119
		S275JR	1.0044
		S275JO	1.0143
		S275J2G3	1.0144
		S275J2G4	1.0145
		S275J2G3C	1.0141
		S275J2G4C	1.0142
	EN 10028-2	P235GH	1.0345
		P265GH	1.0425
	EN 10028-3	P275N	1.0486
		P275NH	1.0487
		P275NL1	1.0488
		P275NL2	1.1104
	EN 10025-3	S275N	1.0486
		S275NL	1.0488
	EN 10025-4	S275M	1.8818
		S275ML	1.8819

Table 1 (continued)

Group	Reference standard	Designation	
		Name	Number
1.1	EN 10120	P245NB	1.0111
	EN 10149-3	P265NB	1.0423
		S260NC	1.0971
	EN 10207	P235S	1.0112
		P265S	1.0130
		P275S	1.1100
	EN 10208-1	L210GA	1.0319
		L235GA	1.0458
		L245GA	1.0459
	EN 10208-2	L245NB	1.0457
		L245MB	1.0418
		16Mo3	1.5415
	EN 10210-1	S235JRH	1.0039
		S275JOH	1.0149
		S275J2H	1.0138
		S275NH	1.0493
		S275NLH	1.0497
	EN 10213-2	GP240GR	1.0621
		GP240GH	1.0619
	EN 10213-3	G17Mn5	1.1131
EN 10216-1	P195TR1	1.0107	
	P195TR2	1.0108	
	P235TR1	1.0254	
	P235TR2	1.0255	
	P265TR1	1.0258	
EN 10219-1	S235JRH	1.0039	
	S275JOH	1.0149	
	S275J2H	1.0138	
	S275NH	1.0493	
	S275NLH	1.0497	
	S275MLH	1.8844	
EN 10224	L235	1.0252	
	L275	1.0260	
EN 10248-1	S240GP	1.0021	
	S270GP	1.0023	
EN 10216-2	P195GH	1.0348	
	P235GH	1.0345	
	P265GH	1.0425	
	16Mo3	1.5415	