



SURFACE VEHICLE INFORMATION REPORT

J1249™

MAR2024

Issued 1983-06
Reaffirmed 2008-12
Stabilized 2024-03

Superseding J1249 DEC2008

Former SAE Standard and Former SAE Ex-Steels

RATIONALE

The technical report covers technology, products, or processes which are mature and not likely to change in the foreseeable future.

STABILIZED NOTICE

This document has been declared "STABILIZED" by SAE Metals Technical Committee and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

SAE Executive Standards Committee Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2024 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
<http://www.sae.org>

SAE WEB ADDRESS:

Full document details: SAE J1249_202403

For more information on this standard, visit
https://www.sae.org/standards/content/J1249_202403/

Documents
Document Sharing Hub

1. **Scope**—This SAE Information Report provides a list of those SAE steels which, because of decreased usage, have been deleted from the standard SAE Handbook listings. Included are alloy steels from SAE J778 deleted since 1936, carbon steels from SAE J118 deleted since 1952, and all EX-steels deleted from SAE J1081. Information concerning SAE steels prior to these dates may be obtained from the SAE office on request. With the issuance of this report, SAE J778, Formerly Standard SAE Alloy Steels, and SAE J118, Formerly Standard SAE Carbon Steels, will be retired since they are now combined in SAE J1249. In the future, new assignments to SAE J1081, Chemical Compositions of SAE Experimental Steels, will be given “PS” (Potential Standard) numbers rather than “EX” numbers.

The steels listed in Tables 1 and 2 are no longer considered as standard steels. Producers should be contacted concerning availability. Steel grades can be reinstated based on usage according to the criteria indicated in SAE J403 and J404.

The last column lists the date a steel was last listed as standard in the SAE Handbook. Where applicable, the corresponding AISI and UNS numbers are given.

2. **References**

- 2.1 **Applicable Publications**—The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

- 2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J1081—Potential Standard Steels

SAE J118 Cancelled—Formerly Standard SAE Carbon Steels

SAE J778 Cancelled—Formerly Standard SAE Alloy Steels

TABLE 1—FORMER STANDARD SAE STEELS

SAE No.	UNS No.	C	Mn	P, Max ⁽¹⁾	S, Max ⁽¹⁾	Si	Cr	Ni	Mo	V, Min	AISI No.	Date
1009	—	0.15 max	0.60 max	0.040	0.050	—	—	—	—	—	1009	1965
1011	G10110	0.09–0.14	0.60–0.90	0.040	0.050	—	—	—	—	—	1011	1993
1019 ⁽²⁾	G10190	0.15–0.20	0.70–1.00	0.040	0.050	—	—	—	—	—	—	—
1033	—	0.30–0.36	0.70–1.00	0.040	0.050	—	—	—	—	—	1033	1965
1034	—	0.32–0.38	0.50–0.80	0.040	0.050	—	—	—	—	—	C1034	1968
1037 ⁽²⁾	G10370	0.32–0.38	0.70–1.00	0.040	0.050	—	—	—	—	—	—	—
1059 ⁽²⁾	—	0.55–0.65	0.50–0.80	0.040	0.050	—	—	—	—	—	—	—
1059	G10590	0.55–0.65	0.50–0.80	0.040	0.050	—	—	—	—	—	1059	1968
1062	—	0.54–0.65	0.85–1.15	0.040	0.050	—	—	—	—	—	1059	1993
1064 ⁽²⁾	G10640	0.60–0.70	0.50–0.80	0.040	0.050	—	—	—	—	—	C1062	1953
1069 ⁽²⁾	G10690	0.65–0.75	0.40–0.70	0.040	0.050	—	—	—	—	—	—	—
1074	G10740	0.70–0.80	0.50–0.80	0.040	0.050	—	—	—	—	—	1074	1993
1075 ⁽²⁾	G10750	0.70–0.80	0.40–0.70	0.040	0.050	—	—	—	—	—	—	—
1084 ⁽²⁾	G10840	0.80–0.93	0.60–0.90	0.040	0.050	—	—	—	—	—	—	—
1085	G10850	0.80–0.93	0.70–1.00	0.040	0.050	—	—	—	—	—	—	—
1086 ⁽²⁾	G10860	0.80–0.94	0.30–0.50	0.040	0.050	—	—	—	—	—	—	—
1108 ⁽²⁾	G11080	0.08–0.13	0.50–0.80	0.040	0.08–0.13	—	—	—	—	—	—	—
1109	G11090	0.08–0.13	0.60–0.90	0.040	0.08–0.13	—	—	—	—	—	1109	1977
1110	G11100	0.08–0.13	0.30–0.60	0.040	0.08–0.13	—	—	—	—	—	1110	1993
1111	—	0.13 max	0.60–0.90	0.07–0.12	0.10–0.15	—	—	—	—	—	B1111	1969
1112	—	0.13 max	0.70–1.00	0.07–0.12	0.16–0.23	—	—	—	—	—	B1112	1969
1113	—	0.13 max	0.70–1.00	0.07–0.12	0.24–0.33	—	—	—	—	—	B1113	1969
1114	—	0.10–0.16	1.00–1.30	0.040	0.08–0.13	—	—	—	—	—	C1114	1952
1115	—	0.13–0.18	0.60–0.90	0.040	0.08–0.13	—	—	—	—	—	1115	1965
1116	—	0.14–0.20	1.10–1.40	0.040	0.16–0.23	—	—	—	—	—	C1116	1952
1119	G11190	0.14–0.20	1.00–1.30	0.040	0.24–0.33	—	—	—	—	—	1119	1977
1120	—	0.18–0.23	0.70–1.00	0.040	0.08–0.13	—	—	—	—	—	1120	1965
1123	G11230	0.20–0.27	1.20–1.50	0.040	0.06–0.09	—	—	—	—	—	1123	1993
1139 ⁽²⁾	G11390	0.35–0.43	1.35–1.65	0.040	0.13–0.20	—	—	—	—	—	—	—
1145	G11450	0.42–0.49	0.70–1.00	0.040	0.04–0.07	—	—	—	—	—	1145	1977
1152	G11520	0.48–0.55	0.70–1.00	0.040	0.06–0.09	—	—	—	—	—	1152	1993
1211 ⁽²⁾	G12110	0.13 max	0.60–0.90	0.07–0.12	0.10–0.15	—	—	—	—	—	—	—
1320	—	0.18–0.23	1.60–1.90	0.040	0.040	0.20–0.35	—	—	—	—	A1320	1956
1330	G13300	0.28–0.33	1.60–1.90	0.035	0.040	0.15–0.35	—	—	—	—	1330	1993
1345	G13450	0.43–0.48	1.60–1.90	0.035	0.040	0.15–0.35	—	—	—	—	—	—
1513	G15130	0.10–0.16	1.10–1.40	0.040	0.050	—	—	—	—	—	1513	1993
1518	G15180	0.15–0.21	1.10–1.40	0.040	0.050	—	—	—	—	—	—	—
1525	G15250	0.23–0.29	0.80–1.10	0.040	0.050	—	—	—	—	—	—	—
1533	G15330	0.30–0.37	1.10–1.40	0.040	0.050	—	—	—	—	—	1533	1993
1534	G15340	0.30–0.37	1.20–1.50	0.040	0.050	—	—	—	—	—	1534	1993
1536	G15360	0.30–0.37	1.20–1.50	0.040	0.050	—	—	—	—	—	—	—
1544	G15440	0.40–0.47	0.80–1.10	0.040	0.050	—	—	—	—	—	1544	1993
1545	G15450	0.43–0.50	0.80–1.10	0.040	0.050	—	—	—	—	—	1545	1993
1546	G15460	0.44–0.52	1.00–1.30	0.040	0.050	—	—	—	—	—	1546	1993