



**Protective
Coating System
according to
ISO 12944-5**

TIKKURILA



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The tables show the differences between the old (1998) and the new (2007) versions of the standard.

Low-alloy carbon steel in corrosivity category C2.

Old version No.	NDFT	New version No.	NDFT	Corrosivity category, change, difference and/or other notes
S2.01	80	–	–	Surface preparation grade St2 in old version
S2.02	80	A2.01	80	C2-L, expected durability of old paint system C2-M
S2.03	120	–	–	Surface preparation grade St2 in old version
S2.04	120	A2.02	120	C2-M, same paint system
S2.05	160	–	–	Surface preparation grade St2 in old version
S2.06	160	A2.03	160	C2-H, same paint system; also binders AY, PVC, CR in new version
S2.07	200	–	–	Surface preparation grade St2 in old version
S2.08	100	A2.04	100	C2-M, same paint system
S2.09	160	–	–	Surface preparation grade St2 in old version
S2.10	160	A2.03	160	Compare S2.06 and A2.03
S2.11	100	–	–	
S2.12	120	–	–	
S2.13	160	–	–	Surface preparation grade St2 in old version
S2.14	160	A2.05	160	C2-H, same paint system
S2.15	120	A2.06	120	C2-M, same paint system
S2.16	160	A2.07	160	C2-H, same paint system
S2.17	80	A2.08	60	C2-H, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹ and 1–2 coats in old version and 1 coat in new version
S2.18	80	A2.08	60	C2-H, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹

¹ For zinc-rich primers, the nominal dry film thickness (NDFT) is always 60 µm in the tables. According to the notes to the standard, it is also possible to work with NDFTs of 40 µm and 80 µm, provided that the choice of product is appropriate. The nominal dry film thickness NDFT of the total paint system must be achieved.

Low-alloy carbon steel in corrosivity category C3.

Old version No.	NDFT	New version No.	NDFT	Corrosivity category, change, difference and/or other notes
S3.01	120	–	–	Surface preparation grade St2 in old version
S3.02	120	A3.01	120	C3-L, same paint system
S3.03	160	–	–	Surface preparation grade St2 in old version
S3.04	160	A3.02	160	C3-M, same paint system
S3.05	200	–	–	Surface preparation grade St2 in old version
S3.06	200	A3.03	200	C3-H, same paint system
S3.07	200	A3.04	200	C3-H, same paint system
S3.08	240	–	–	
S3.09	240	–	–	
S3.10	240	–	–	
S3.11	160	–	–	Surface preparation grade St2 in old version
S3.12	160	A3.05	160	C3-M, same paint system
S3.13	200	A3.06	200	C3-H, same paint system
S3.14	240	–	–	Equivalent to paint system A4.05
S3.15	200	–	–	
S3.16	120	A3.07	120	C3-L, same paint system
S3.17	160	A3.08	160	C3-M, same paint system
S3.18	200	A3.09	200	C3-H, same paint system
S3.19	240	–	–	
S3.20	80	A3.10	60	C3-M, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S3.21	160	A3.11	160	C3-H, same paint system, but dry film thickness of zinc-rich primer changed from 40→60 µm ¹ and 2–3 coats in old version and 2 in new version
S3.22	200	–	–	
S3.23	160	A3.12	160	C3-M, same paint system, but dry film thickness of zinc-rich primer changed from 40→60 µm ¹
S3.24	200	A3.13	200	C3-H, same paint system, but dry film thickness of zinc-rich primer changed 40→60 µm ¹ and 3–4 coats in old version and 3 in new version
S3.25	80	A3.10	60	C3-M, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S3.26	160	A3.12	160	C3-M, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S3.27	200	–	–	Equivalent to paint system A4.11
S3.28	160	A3.11	160	C3-H, same paint system, but 2–3 coats in old version and 2 in new version
S3.29	200	–	–	Equivalent to paint system A4.14

¹For zinc-rich primers, the nominal dry film thickness (NDFT) is always 60 µm in the tables. According to the notes to the standard, it is also possible to work with NDFTs of 40 µm and 80 µm, provided that the choice of product is appropriate. The nominal dry film thickness NDFT of the total paint system must be achieved.



Low-alloy carbon steel in corrosivity category C4.

Old version No.	NDFT	New version No.	NDFT	Corrosivity category, change, difference and/or other notes
S4.01	200	A4.01	200	C4-L, same paint system
S4.02	240	–	–	
S4.03	280	–	–	
S4.04	200	A4.02	200	C4-L, same paint system
S4.05	240	A4.03	240	C4-M, same paint system
S4.06	240	–	–	
S4.07	280	–	–	
S4.08	200	A4.04	200	C4-L, same paint system
S4.09	240	A4.05	240	C4-M, same paint system
S4.10	200	A4.06	200	C4-L, same paint system, but 2 coats in old version and 2–3 in new version
S4.11	280	A4.07	280	C4-H, same paint system, but 2 coats in old version and 2–3 in new version
S4.12	200	–	–	
S4.13	240	A4.08	240	C4-M, same paint system, but 3–5 coats in old version and 2–3 in new version
S4.14	280	A4.09	280	C4-H, same paint system, but 3–5 coats in old version and 2–3 in new version
S4.15	320	–	–	Paint system A5I.02 is equivalent, but 4–6 coats in old version and 3–4 in new version
S4.16	160	A4.10	160	C4-L, same paint system, but dry film thickness of zinc-rich primer changed from 40→60 µm ¹
S4.17	200	A4.11	200	C4-M, same paint system, but dry film thickness of zinc-rich primer changed from 40→60 µm ¹ and 3–4 coats in old version and 2–3 in new version
S4.18	240	A4.12	240	C4-H, same paint system, but dry film thickness of zinc-rich primer changed from 40→60 µm ¹
S4.19	160	A4.13	160	C4-L, same paint system, but dry film thickness of zinc-rich primer changed from 40→60 µm ¹
S4.20	200	A4.14	200	C4-M, same paint system, but dry film thickness of zinc-rich primer changed from 40→60 µm ¹ and 3–4 coats in old version and 2–3 in new version
S4.21	240	A4.15	240	C4-H, same paint system, but dry film thickness of zinc-rich primer changed from 40→60 µm ¹
S4.22	280	–	–	
S4.23	320	–	–	Equivalent to paint system A5I.05
S4.24	80	A4.16	60	C4-L, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S4.25	160	A4.10	160	C4-L, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S4.26	200	A4.11	200	C4-M, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹ and 3–4 coats in old version and 2–4 in new version
S4.27	240	A4.12	240	C4-H, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S4.28	160	A4.13	160	C4-L, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S4.29	200	A4.14	200	C4-M, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹ and 3–4 coats in old version and 2–3 in new version
S4.30	240	A4.15	240	C4-H, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S4.31	280	–	–	
S4.32	320	–	–	Equivalent to paint system A5I.05

¹ For zinc-rich primers, the nominal dry film thickness (NDFT) is always 60 µm in the tables. According to the notes to the standard, it is also possible to work with NDFTs of 40 µm and 80 µm, provided that the choice of product is appropriate. The nominal dry film thickness NDFT of the total paint system must be achieved.

Low-alloy carbon steel in corrosivity category C5-I.

Old version No.	NDFT	New version No.	NDFT	Corrosivity category, change, difference and/or other notes
S6.01	200	–	–	
S6.02	200	A5I.01	200	C5I-L, almost equivalent paint system, but expected durability of old system C5I-M
S6.03	280	–	–	
S6.04	320	A5I.02	320	C5I-H, same paint system, but 4–6 coats in old version and 3–4 in new version
S6.05	160	–	–	
–	–	A5I.03	300	C5I-M, 2 x 150 µm
S6.06	240	A5I.04	240	C5I-M, same paint system, but 4 coats in old version and 3–4 in new version; expected durability of old system C5I-H
S6.07	280	–	–	
S6.08	320	A5I.05	320	C5I-H, same paint system, but dry film thickness of zinc-rich primer changed from 80→60 µm ¹
S6.09	240	A5I.04	240	C5I-M, same paint system, but 4 coats in old version and 3–4 coats in new version; expected durability of old system C5I-H
S6.10	280	–	–	
S6.11	320	A5I.06	320	C5I-H, same paint system, but 5 coats in old version and 4–5 in new version

Low-alloy carbon steel in corrosivity category C5-M.

Old version No.	NDFT	New version No.	NDFT	Corrosivity category, change, difference and/or other notes
S7.01	200	–	–	
S7.02	200	–	–	
S7.03	300	A5M.01	300	C5M-M, same paint system
S7.04	320	A5M.02	320	C5M-H, same paint system, but 4–6 coats in old version and 3–4 in new version
S7.05	400	A5M.03	400	C5M-M, same paint system
S7.06	500	A5M.04	500	C5M-H, same paint system
S7.07	240	A5M.05	240	C5M-M, same paint system
S7.08	240	–	–	
S7.09	320	A5M.06	320	C5M-H, same paint system
S7.10	400	–	–	
S7.11	400	–	–	
S7.12	240	A5M.05	240	C5M-M, same paint system
S7.13	280	–	–	
S7.14	320	A5M.06	320	C5M-H, same paint system
S7.15	300	–	–	
S7.16	300	–	–	
–	–	A5M.07	400	C5M-H, epoxy combination as binder
–	–	A5M.08	300	C5M-M, epoxy combination as binder

¹ For zinc-rich primers, the nominal dry film thickness (NDFT) is always 60 µm in the tables. According to the notes to the standard, it is also possible to work with NDFTs of 40 µm and 80 µm, provided that the choice of product is appropriate. The nominal dry film thickness NDFT of the total paint system must be achieved.

Low-alloy carbon steel in immersion categories Im1, Im2 and Im3.

Old version No.	NDFT	New version No.	NDFT	Corrosivity category, change, difference and/or other notes
S8.01	360	A6.01	360	Im1, Im2, Im3-M, zinc-rich primer changed from 40→60 µm
S8.02	540	A6.02	540	Im1, Im2, Im3-H, coal-tar polyurethane in old version and polyurethane combination in new version; 5 coats in old version and 3–5 coats in new version; dry film thickness of zinc-rich primer changed from 40→60 µm
S8.03	440	–	–	
S8.04	380	A6.03	380	Im1, Im2, Im3-M, same paint system
S8.05	480	–	–	
–	–	A6.04	500	Im1, Im2, Im3-H
–	–	A6.05	330	Im1, Im2, Im3-M
S8.06	800	A6.06	800	Im1, Im2, Im3-H, same paint system
S8.07	360	–	–	
S8.08	500	–	–	
S8.09	500	–	–	
S8.10	1000	–	–	
S8.11	400	–	–	
–	–	A6.07	450	Im1, Im2, Im3-H
–	–	A6.08	800	Im1, Im2, Im3-H
–	–	A6.09	400	Im1, Im2, Im3-M
–	–	A6.10	600	Im1, Im2, Im3-H

Paint systems for hot-dip galvanized steel in corrosivity categories C4, C5-I, C5-M and Im1, Im2 and Im3.

Old version No.	NDFT	New version No.	NDFT	Corrosivity category, change, difference and/or other notes
S9.01	80	A7.01	80	C2-H, C3-L, same paint system
S9.02	120	A7.02	120	C2-H, C3-M, same paint system
S9.03	160	A7.03	160	C2-H, C3-H, C4-M, C5-I-L, C5-M-L, same paint system
S9.04	240	A7.04	240	C4-H, C5-I-M, C5-M-M, same paint system
S9.05	80	A7.05	80	C2-H, C3-L, same paint system
S9.06	120	A7.06	120	C2-H, C3-M, same paint system
S9.07	160	A7.07	160	C2-H, C3-H, C4-M, C5-I-L, C5-M-L, same paint system
S9.08	240	A7.08	240	C4-H, C5-I-L, C5-M-L, same paint system
S9.09	80	A7.09	80	C2-H, C3-M, same paint system
S9.10	120	A7.10	120	C2-H, C3-H, C4-M, C5-I-L, C5-M-L, same paint system
S9.11	160	A7.11	160	C4-H, C5-I-M, C5-M-M, same paint system
S9.12	240	A7.12	240	C4-H, C5-I-M, C5-M-M, same paint system
S9.13	320	A7.13	320	C4-H, C5-I-H, C5-M-H, same paint system, but 3–4 coats in old version and 3 in new version

Paint systems for thermally sprayed metal surfaces in corrosivity categories C2...C5-I and C5-M.

Old version No.	NDFT	New version No.	NDFT	Corrosivity category, change, difference and/or other notes
–	–	A8.01	160	C4-H, C5-I-L, C5-M-M
–	–	A8.02	240	C4-H, C5-I-M, C5-M-H
–	–	A8.03	450	C4-H, C5-I-H, C5-M-H, Im1, Im2, Im3-H
–	–	A8.04	320	C4-H, C5-I-M, C5-M-H, Im1, Im2, Im3-H



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