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Covered Electrodes (SMAW)

Product Name	Standard			Page
	AWS	JIS	EN	
For mild steel				
SC-10	A5.1 E6010	Z3211 D4310	EN499 E 38 0 C 2 5	1-1
SC-11	A5.1 E6011	Z3211 D4311	EN499 E 38 0 C 1 5	1-2
SM-13	A5.1 E6013	Z3211 D4313	EN499 E 38 0 R 1 2	1-3
For high tensile steel				
SL-50	A5.1 E7016	Z3212 D5016	EN499 E 42 2 B 1 2	1-4
SL-56	A5.1 E7028	Z3212 D5026	EN499 E 42 2 B 7 4	1-5
SL-58	A5.1 E7018	Z3212 D5016	EN499 E 42 3 B 3 2	1-6
SL-108M	A5.5 E10018M	Z3212 D7016	EN757 62 4 B 4 2	1-7
SL-118M	A5.5 E11018M	Z3212 D8016	EN757 62 4 B 4 2	1-8
SL-110	A5.5 E11016-G	Z3212 D8016	EN757 62 2 Mn2NiMo B 1 2	1-9
For low alloy steel				
SR-76A1	A5.5 E7016-A1	Z3223 DT1216	EN1599 E Mo B 1 2	1-10
SR-78A1	A5.5 E7018-A1	Z3223 DT1216	EN1599 E Mo B 3 2	1-11
SR-86B2	A5.5 E8016-B2	Z3223 DT2316	EN1599 E CrMo1 B 1 2	1-12
SR-88B2	A5.5 E8018-B2	Z3223 DT2318	EN1599 E CrMo1 B 3 2	1-13
SR-96B3	A5.5 E9016-B3	Z3223 DT2416	EN1599 E CrMo2 B 1 2	1-14
SR-98B3	A5.5 E9018-B3	Z3223 DT2418	EN1599 E CrMo2 B 3 2	1-15
SR-86B6	A5.5 E8016-B6	Z3223 DT2516	--	1-16
SR-86B8	A5.5 E8016-B8	Z3223 DT2616	--	1-17
SN-86C1	A5.5 E8016-C1	Z3241 DL5016-6P2	EN499 E 46 5 2Ni B 1 2	1-18
SN-88C1	A5.5 E8018-C1	Z3241 DL5026-6P2	EN499 E 46 5 2Ni B 3 2	1-19
SN-86C2	A5.5 E8016-C2	Z3241 DL5016-6P3	EN499 E 46 6 3Ni B 1 2	1-20
SN-88C2	A5.5 E8018-C2	Z3241 DL5026-6P3	EN499 E 46 6 3Ni B 3 2	1-21
SN-86C3	A5.5 E8016-C3	Z3241 DL5016-4A1	EN499 E 46 4 1Ni B 1 2	1-22
SN-88C3	A5.5 E8018-C3	Z3241 DL5026-4A1	EN499 E46 4 1Ni B 3 2	1-23
For stainless steel				
SS-307	A5.4/A5.4M E307-16	Z3221 D307-16	EN1600 E 18 9 MnMo R 1 2	1-24
SS-307HM	--	--	--	1-25
SS-308	A5.4/A5.4M E308-16	Z3221 D308-16	EN1600 E 19 9 R 1 2	1-26
SS-308H	A5.4/A5.4M E308H-16	Z3221 D308-16	EN1600 E 19 9 R 1 2	1-27
SS-308L	A5.4/A5.4M E308L-16	Z3221 D308L-16	EN1600 E 19 9 L R 1 2	1-28
SS-309	A5.4/A5.4M E309-16	Z3221 D309-16	EN1600 E 23 12 R 1 2	1-29
SS-309L	A5.4/A5.4M E309L-16	Z3221 D309L-16	EN1600 E 23 12 L R 1 2	1-30
SS-309MoL	A5.4/A5.4M E309LMo-16	Z3221 D309MoL-16	EN1600 E 23 12 2 L R 1 2	1-31
SS-310	A5.4/A5.4M E310-16	Z3221 D310-16	EN1600 E 25 20 R 1 2	1-32
SS-312	A5.4/A5.4M E312-16	Z3221 D312-16	EN1600 E 29 9 R 1 2	1-33
SS-316	A5.4/A5.4M E316-16	Z3221 D316-16	EN1600 E 19 12 2 R 1 2	1-34
SS-316L	A5.4/A5.4M E316L-16	Z3221 D316L-16	EN1600 E 19 12 3 L R 1 2	1-35
SS-317L	A5.4/A5.4M E317L-16	Z3221 D317L-16	EN1600 E 19 13 4 L R 1 2	1-36

Covered Electrodes (SMAW)

Product Name	Standard			Page
	AWS	JIS	EN	
For stainless steel				
SS-318	A5.4/A5.4M E318-16	Z3221 D318-16	EN1600 E 19 12 3 Nb R 1 2	1-37
SS-347	A5.4/A5.4M E347-16	Z3221 D347-16	EN1600 E 19 9 Nb R 1 2	1-38
SS-410	A5.4/A5.4M E410-16	Z3221 D410-16	EN1600 E13 R 1 2	1-39
SS-2209	A5.4/A5.4M E2209-16	--	EN1600 E 22 9 3 N L R 12	1-40
For cast iron				
SN-55	A5.15 ENiFe-CI	Z3252 DFCNiFe	--	1-41
SN-99	A5.15 ENi-CI	Z3252 DFCNi	--	1-42
For nickel and nickel alloy				
SNF-1	A5.11 ENiCrFe-1	Z3224 DNiCrFe-1J	--	1-43
SNF-2	A5.11 ENiCrFe-2	Z3224 DNiCrFe-2	--	1-44
SNF-3	A5.11 ENiCrFe-3	Z3224 DNiCrFe-3	--	1-45
SNM-3	A5.11 ENiCrMo-3	Z3224 DNiCrMo-3	--	1-46
SNM-4	A5.11 ENiCrMo-4	Z3224 DNiCrMo-4	--	1-47
For hardfacing				
SH-50	--	--	--	1-48
SH-50N4	--	--	--	1-49
SH-80	--	--	--	1-50
SH-80W	--	--	--	1-51
SH-90	--	--	--	1-52
SH-95HC	A5.13 EFeCr-A1	--	--	1-53
SH-95HN	--	--	--	1-54
SH-WM	--	--	--	1-55
SH-MN	A5.13 EFeMn-A	--	--	1-56

Flux Cored Wires (FCAW)

Product Name	Standard			Page
	AWS	JIS	EN	
For mild steel / high tensile steel				
SFC-71	A5.20 E71T-1C/1M	Z3313 YFW-C0DR	EN 758 T42 2 P C/M 1 H10	2-1
SFC-70C	A5.20 E70T-1C	Z3313 YFW-C50DM	EN 758 T42 2 R C 3 H10	2-2
SFC-71Ni	A5.20 E71T-1C/M-J	Z3313 YFW-A503R	EN-758 T42 4 P C/M 1 H10	2-3
SFC-71J	A5.20 E71T-1C/M-J	Z3313 YFW-A503R	EN-758 T42 4 P C/M 1 H10	2-4
SFC-71M	A5.18 E70C-3C/3M	Z3313 YFW-A50DR	EN-758 T42 2 PM1 H10	2-5
SFC-75	A5.20 E71T-5C/5M	Z3313 YFW-C/A502R	T42 4 BM1 H5/T42 3 BC2 H5	2-6
SFC-71G	A5.20 E71T-G	Z3313 YFW-S50GB	--	2-7
For low alloy steel				
SFC-81A1	A5.29 E81T1-A1	Z3318 YF1CM-C	--	2-8
SFC-81B2	A5.29 E81T1-B2	Z3318 YF1CM-C	EN 12071 T Cr Mo1 P C 1 H10	2-9
SFC-91B3	A5.29 E91T1-B3	Z3318 YF2CM-C	EN 12071 T Cr Mo2 P C 1 H10	2-10
SFC-81Ni1	A5.29 E81T1-Ni1	Z3313 YFW-C602R	--	2-11
SFC-81Ni2	A5.29 E81T1-Ni2	--	--	2-12
SFC-91Ni2	A5.29 E91T1-Ni2	--	--	2-13
SFC-81K2	A5.29 E81T1-K2	Z3313 YFL-C506R	T46 6 1.5Ni PC1 H5	2-14
SFC-81W2	A5.29 E81T1-W2	Z3320 YFA-58W	--	2-15
For stainless steel				
SFC-308L	A5.22 E308LT1-1	Z3323 YF308LC	EN 12073 T 19 9 L P C/M 1	2-16
SFC-309L	A5.22 E309LT1-1	Z3323 YF309LC	EN 12073 T 23 12 L P C/M 1	2-17
SFC-309MoL	A5.22 E309LMoT1-1	Z3323 YF309MoLC	EN 12073 T 23 12 2 L P C/M 1	2-18
SFC-316L	A5.22 E316LT1-1	Z3323 YF316LC	EN 12073 T 19 12 3 L P C/M 1	2-19
SFC-317L	A5.22 E317T1-1	Z3323 YF317LC	EN 12073 T 19 13 4 L P C/M 1	2-20
SFC-347L	A5.22 E347T1-1	Z3323 YF347C	EN 12073 T 19 9 Nb P C/M1	2-21
SFC-410	A5.22 E410T1-1	Z3323 YF410C	EN 12073 T 13 P C/M 1	2-22
SFC-410NM	A5.22 E410NiMoT1-1	--	EN 12073 T 13 4 P C/M 1	2-23
SFC-2209	A5.22 E2209T1-1	--	EN 12073 T 22 9 3 N L P C/M 1	2-24
SFC-409Ti	A5.9 EC409	--	--	2-25
SFC-439Ti	A5.9 EC439	--	--	2-26

Solid Wires (MAG 、MIG 、TIG)

Product Name	Standard			Page
	AWS	JIS	EN	
For mild steel / high tensile steel				
SMG-4	A5.18 ER70S-4	Z3312 YGW12	--	3-1
SMG-6	A5.18 ER70S-6	Z3312 YGW12	--	3-2
SMG-8	A5.18 ER70S-G	Z3312 YGW11	--	3-3
STG-50	A5.18 ER70S-G	Z3316 YGT50	--	3-4
STG-60	A5.28 ER80S-G	Z3316 YGT60	--	3-5
For low alloy steel				
STG-80B2	A5.28 ER80S-B2	Z3316 YGT1CM	--	3-6
STG-90B3	A5.28 ER90S-B3	Z3316 YGT2CM	--	3-7
For stainless steel				
SMG-307Si STG-307Si	--	--	--	3-8
SMG-308L STG-308L	A5.9 ER308L	Z3321 Y308L	EN12072 G 19 9 L	3-9
SMG-308LSi STG-308LSi	A5.9 ER308LSi	Z3321 Y308LSi	--	3-10
SMG-309L STG-309L	A5.9 ER309L	Z3321 Y309L	EN12072 G 23 12 L	3-11
SMG-309LSi STG-309LSi	A5.9 ER309LSi	--	--	3-12
SMG-310 STG-310	A5.9 ER310	Z3321 Y310	EN12072 G 25 20	3-13
SMG-312 STG-312	A5.9 ER312	Z3321 Y312	--	3-14
SMG-316L STG-316L	A5.9 ER316L	Z3321 Y316L	--	3-15
SMG-316LSi STG-316LSi	A5.9 ER316LSi	Z3321 Y316LSi	--	3-16
SMG-317L STG-317L	A5.9 ER317L	Z3321 Y317L	--	3-17
SMG-347 STG-347	A5.9 ER347	Z3321 Y347	--	3-18
SMG-409Cb STG-409Cb	A5.9 ER409Cb	--	--	3-19
SMG-410 STG-410	A5.9 ER410	Z3321 Y410	--	3-20
SMG-420 STG-420	A5.9 ER420	--	--	3-21
SMG-430 STG-430	A5.9 ER430	--	--	3-22
SMG-439Ti STG-439Ti	A5.9 ER439	--	--	3-23

Solid Wires (MAG、MIG、TIG)

Product Name	Standard			Page
	AWS	JIS	EN	
For stainless steel				
SMG-630 STG-630	A5.9 ER630	--	--	3-24
For nickel and nickel alloy				
SMG-751 STG-751	A5.14 ERNiCr-3	Z3334 YNiCr-3	--	3-25
SMG-625 STG-625	A5.14 ERNiCrMo-3	Z3334 YNiCrMo-3	--	3-26
SMG-276 STG-276	A5.14 ERNiCrMo-4	Z3334 YNiCrMo-4	--	3-27
SMG-622 STG-622	A5.14 ERNiCrMo-10	--	--	3-28
SMG-400 STG-400	A5.14 ERNiCu-7	Z3334 YNiCu-7	--	3-29
SMG-200 STG-200	A5.14 ERNi-1	Z3334 Yni-1	--	3-30

Fluxes / Wires (SAW)

Product Name	Standard			Page
	AWS	JIS	EN	
For mild steel / high tensile steel				
SF-38 SW-M12K	A5.17 F7A2-EM12K	Z3183 S502-H	--	4-1
SF-65 SW-M12K	A5.17 F7A2-EM12K	Z3183 S502-H	--	4-2
SF-65 SW-H14	A5.17 F7A2-EH14	Z3183 S502-H	--	4-3
SF-68 SW-60G	A5.23 F8A2-EG-G	Z3183 S503-H	--	4-4
For stainless steel				
SF-30 SW-308/308L	A5.9 ER308/308L	Z3324 S308/308L	--	4-5
SF-30 SW-309/309L	A5.9 ER309/309L	Z3324 S309/309L	--	4-6
SF-30 SW-316/316L	A5.9 ER316/316L	Z3324 S316/316L	--	4-7
SF-33 SW-2209	A5.9 ER2209	--	--	4-8