



For heat-resisting steel.

Type of covering	Brand name	Size (mm)	Equivalent specification	Welding position	Type of current	Typical chemical composition of all-weld-metal(%)					Typical mechanical properties of all-weld-metal				Main use
						C	Si	Mn	Ni	Mo	Y.P N/ mm <sup>2</sup> {kgf/ mm <sup>2</sup> }	P.S N/ mm <sup>2</sup> {kgf/ mm <sup>2</sup> }	EI. (%)	Stress relief (°C x hr.)	
High cellulose type	LA-710A1	2.6-5.0	AWS E7010-A1	F,V,OH,H	DC(+)	0.09	0.14	0.43	—	0.49	440 {45}	550 {56}	29	620 x 1	Welding of 0.5%Mo steels. Welding of carbon steels for high temperature and high pressure boilers and furnaces.
	LA-711A1	2.6-5.0	AWS E7010-A1	F,V,OH,H	DC(+)	0.09	0.18	0.54	—	0.52	482 {49}	566 {58}	28.6	620 x 1	The welding can be done in all positions with good crack resistibility, deep penetration, stable arc, stable solidification, and good performance.
Low hydrogen type	LA-76A1	2.6-6.0	AWS E7016-A1 JIS DT1216	F,V,OH,H	AC or DC(+)	0.07	0.54	0.83	—	0.52	560 {57}	650 {66}	31	620 x 1	Welding of equipments used at high temperature such as C-Mo steel pipes, other high strength low alloy steels.
	LA-86B1	2.6-6.0	AWS E8016-B1	F,V,OH,H	AC or DC(+)	0.07	0.51	0.81	0.51	0.49	590 {60}	670 {68}	26	620 x 1	Welding of 0.5%Cr-0.5%Mo steels used for high temperature and high pressure boilers,chemical plants and oil refining plants.
	LA-86B2	2.6-6.0	AWS E8016-B2 JIS DT2316	F,V,OH,H	AC or DC(+)	0.06	0.47	0.65	1.31	0.52	570 {58}	650 {66}	26	690 x 1	Welding of 1.25%Cr-1%Mo steels used for thermoelectric power plant and equipments of oil refining industries.
	LA-96B3	2.6-6.0	AWS E9016-B3 JIS DT2416	F,V,OH,H	AC or DC(+)	0.08	0.45	0.78	2.37	1.03	620 {53}	710 {72}	24	690 x 1	Welding of 2.25%Cr-1%Mo steels used for electric power plant, equipments for oil refining industries and chemical industries.
	LA-502	2.6-6.0	AWS E502-16 JIS DT2516	F,V,OH,H	AC or DC(+)	0.06	0.43	0.57	4.98	0.51	420 {43}	540 {55}	33	850 x 1	Welding of 5%Cr-0.5%Mo steels to be used in oil refining industries and chemical industries.
	LA-505	2.6-6.0	AWS E505-16	F,V,OH,H	AC or DC(+)	0.06	0.29	0.48	9.43	1.05	480 {49}	570 {58}	30	850 x 1	Welding of 9%Cr-1%Mo steels, heater tubes of high temperature and high pressure boilers.
Iron powder, low hydrogen type	LA-78A1	2.6-6.0	AWS E7018-A1	F,V,OH,H	AC or DC(+)	0.06	0.49	0.72	—	0.53	590 {60}	680 {69}	28	620 x 1	Welding of equipments used at high temperature such as C-Mo steel pipes, other high strength low alloy steels.
	LA-88B2	2.6-6.0	AWS E8018-B2 JIS DT2318	F,V,OH,H	AC or DC(+)	0.06	0.61	0.70	1.32	0.55	590 {60}	670 {68}	25	690 x 1	Welding of 1.25%Cr-0.5%Mo steels used for steam pipes of boilers for electric power plant, equipments for oil refining industries.
	LA-98B3	2.6-6.0	AWS E9018-B3 JIS DT2418	F,V,OH,H	AC or DC(+)	0.08	0.50	0.77	2.25	1.02	680 {69}	750 {77}	21	690 x 1	Welding of 2.25%Cr-1%Mo steels used for electric power plant, equipments for oil refining industries and chemical industries.