

A Quick Guide to Suitable Welding Consumables

■ For Oil Refinery Reactor

SMAW

Grade (Type of steel)	DCEP		AC	
	AWS Class.	Product name	AWS Class.	Product name
Gr.11 (1.25Cr-0.5Mo)	E8016-B2	CM-A96 CM-A96MBD	E8016-B2	CM-A96MB
Gr.22 (2.25Cr-0.1Mo)	E9015-B3	CM-A105D	-	-
	E9016-B3	CM-A106ND	E9016-B3	CM-A106N
Gr.22V (2.25Cr-1Mo-V)	E9016-G	CM-A106HD	E9016-G	CM-A106H
Gr.5 (5Cr)	E8016-B6	CM-5	E8016-B6	CM-5
Gr.9 (9Cr)	E8016-B8	CM-9	E8016-B8	CM-9

SAW

Grade (Type of steel)	DCEP		AC	
	AWS Class.	Product name	AWS Class.	Product name
Gr.11 (1.25Cr-0.5Mo)	F8P2-EG-B2	PF-200D /US-511ND	F8P2-EG-B2	PF-200 /US-511N
	F8P2-EB2R-B2R	PF-200D /US-B2R	-	-
Gr.22 (2.25Cr-0.1Mo)	F9P2-EG-B3	PF-200D /US-521S	F9P2-EG-B3	PF-200 /US-521S
Gr.22V (2.25Cr-1Mo-V)	F9P2-EG-G	PF-500D /US-521HD	F9P2-EG-G	PF-500 /US-521H
Gr.5 (5Cr)	-	-	F7P2-EG-B6	PF-200S /US-502

GMAW and GTAW

Grade (Type of steel)	AWS Class.	Product name	
		GMAW	GTAW
Gr.11 (1.25Cr-0.5Mo)	ER80S-G	MG-S1CM	TG-S1CM
Gr.22 (2.25Cr-0.1Mo)	ER90S-G	MG-S2CM MG-S2CMS	TG-S2CM
Gr.22V (2.25Cr-1Mo-V)	ER90S-G	-	TG-S2CMH
Gr.5 (5Cr)	ER80S-B6	MG-S5CM	TG-S5CM
Gr.9 (9Cr)	ER80S-B8	MG-S9CM	TG-S9CM

■ For EO Reactor

SMAW

Type of steel	DCEP		AC	
	AWS Class.	Product name	AWS Class.	Product name
Mn-Mo Mn-Mo-Ni	E7016	BL-76	E7016	BL-76
	E9016-G	BL-96	E9016-G	BL-96
	E10016-G	BL-106	E10016-G	BL-106

SAW

Type of steel	DCEP		AC	
	AWS Class.	Product name	AWS Class.	Product name
Mn-Mo Mn-Mo-Ni	F9P4-EG-G	PF-200 /US-56B	F9P4-EG-G	MF-27/US-56B PF-200/US-56B
	F9P8-EF3-F3	PF-200 /US-F3	F10P2-EG-G	PF-200/US-63S

GMAW and GTAW

Type of steel	AWS Class.	Product name	
		GMAW	GTAW
Mn-Mo Mn-Mo-Ni	ER80S-G	MG-S56	TG-S56
	ER90S-G	MG-S63S	TG-S63S

