

CSM-550

For 550N/mm² class high tensile strength steel

AWS	A5.29	E80T1-GC
KS	D 7104	YFW-C55DM
JIS	Z3313	T552T15-0CA-N1-H10

Applications

Butt, fillet welding of 550N/mm² high tensile strength steels of structure such as ships, bridges, buildings and storage tanks etc.

Characteristics

- (1) CSM-550 is a metal type flux cored wire for flat & horizontal fillet welding with CO₂ gas shielding.
- (2) Its deposition rate is 10~30% higher compared with a solid wire, so total cost is saved.
- (3) It provides excellent usability with stable arc, less spattering better bead appearance and less quantity of welding fume comparable to solid wire.

Notes on usage

- (1) The optimum flow of CO₂ for shielding is 20~25ℓ/min.
- (2) The distance between tip & base metal is to be 15~25mm.
- (3) Protect the weld with a screen to prevent blowholes caused by wind where the wind velocity is 2m/sec and more.
- (4) Thick heavy plate should be welded under proper preheating & interpass temperature.

Typical chemical composition of weld metal (%)

(Shielding gas : 100%CO₂)

C	Mn	Si	P	S	Ni
0.06	1.39	0.71	0.014	0.012	0.39

Typical mechanical properties of weld metal

(Shielding gas : 100%CO₂)

YP N/mm ² (MPa)	TS N/mm ² (MPa)	EL %	IV (J)	
			0°C	-20°C
540	610	28.0	85	65

Size & recommended current range (DC +)

Amp.	Dia. mm (in)	1.2 (0.045)	1.4 (0.052)	1.6 (0.062)
	F		160~300	160~360
H-F		160~320	180~340	200~360