

# CSM-80T

For 550N/mm<sup>2</sup> class high tensile strength steel

AWS	A5.29	E80T1-GC
KS	D 7104	YFW-C55DM
JIS	Z3313	T553T15-0CA-N2-H10

## Applications

Butt, fillet welding of 550N/mm<sup>2</sup> high tensile strength steels of structure such as ships, bridges, buildings and storage tanks etc.

## Characteristics

- (1) CSM-80T is a metal type flux cored wire for flat & horizontal fillet welding with CO<sub>2</sub> 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 CO<sub>2</sub> 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%CO<sub>2</sub>)

C	Mn	Si	P	S	Ni	Mo
0.06	1.33	0.65	0.012	0.012	0.90	0.10

## Typical mechanical properties of weld metal

(Shielding gas : 100%CO<sub>2</sub>)

YP N/mm <sup>2</sup> (MPa)	TS N/mm <sup>2</sup> (MPa)	EL %	IV (J)	
			-20℃	-30℃
532	625	26.4	73	63

## Size & recommended current range (DC +)

Dia. mm (in)	1.2 (0.045)	1.4 (0.052)	1.6 (0.062)	
Amp.	F & H-F	180~340	200~360	200~400