

CSF-71SRM

**FLUX CORED ARC WELDING CONSUMABLE
FOR WELDING OF LOW-TEMPERATURE
SERVICE STEEL**



Applications

Oil and gas construction, pipe, and offshore stations

Specification

AWS A5.20 E71T-12MJ

EN ISO 17632-A T42 4 P M21 1
B T49 4 T1-1 M21 AP-N1

**Characteristics
on usages**

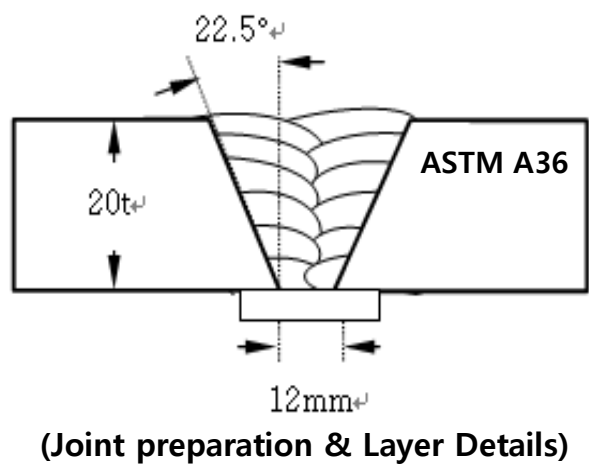
CSF-71SRM is a titania-type flux cored wire to be used
With 80%Ar + 20%CO₂ gas shielding. It provide excellent
notch toughness at low temperature, not only as-welded
but also stress relieved state

Notes on usages

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



Mechanical properties & Chemical compositions of all weld metal test



Wire Dia.	1.6 mm
Current/Polarity	DCEP
Ampere / Voltage	280 A / 26~28 V
Shield gas	80%Ar-20% CO2 , 20 l/min.
CTWD	20~25 mm
Inter-pass temp.	150 ± 15 °C
Welding position	1 G
Welding speed	250 ~ 300 mm/min.

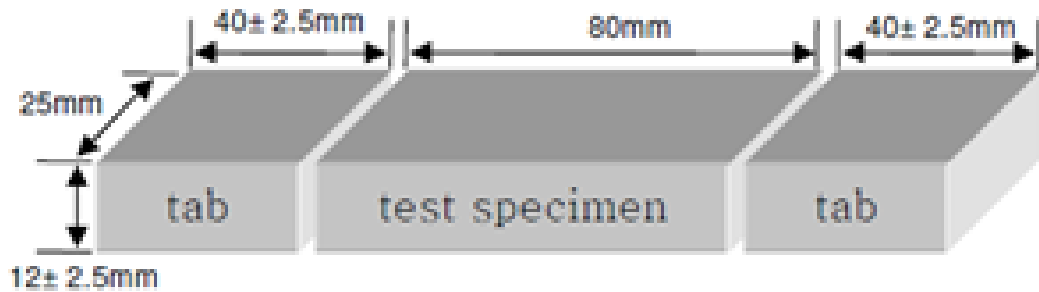
Chemical compositions									(wt.%)
	C	Mn	Si	S	P	Ni	Cr	Mo	V
AWS A5.20	≤0.12	≤1.75	≤0.90	≤0.03	≤0.03	≤0.50	≤0.20	≤0.30	≤0.08
80%Ar-20% CO ₂	0.03	1.10	0.26	0.009	0.014	0.48	0.04	0.01	0.008

	Tensile properties			CVN-IE (J)
	YP(MPa)	TS(MPa)	El.(%)	@-40°C
AWS A5.20	≥ 400	490-660	≥ 22	≥ 27J
80%Ar-20% CO ₂	496	554	30	85.7

Diffusible hydrogen Content

Welding condition

Specification	AWS A4.3 / GC method
Wire Dia.	1.4 mm
Current/Polarity	DCEP
Ampere	280 A
Voltage	28 V
Shield gas	80%Ar-20% CO2, 20 l/min.
CTWD	20 mm
Welding speed	280~320 mm/min.



Result

	X1	X2	X3	X4
100% CO ₂	3.8	3.7	3.6	3.9

Average Hydrogen Content **3.7 ml/100g**

Size available / Recommend current(DCEP) / Packaging

Size available/Recommend current (DCEP)

		1.2mm	1.4mm	1.6mm
Flat Horizontal fillet	A	180~270	200~290	200~320
Vertical up	A	140~200	160~240	160~260
Overhead	A	140~220	160~260	160~280

Packaging

Wire Dia. (mm)	Type	Unit. (kg)
1.2 / 1.4/ 1.6	Spool	5, 12.5, 15
	Pack	100, 200, 300

