

For Hardsurfacing FCW

Brand Name	Size (mm)	Welding position	Shield Gas	Typical chemical compositions of weld metal (%)						Hv	Applicatons
				C	Mn	Si	Cr	Mo	W		
CSF -250H	1.2 (0.045) 1.6 (0.062)	F,H	CO ₂	0.08	1.20	0.62	1.37	-	-	260	For hardsurfacing of various wheels and gears. The hardness of weld metal is about Hv 250
CSF -350H	1.2 (0.045) 1.6 (0.062)	F,H	CO ₂	0.15	1.21	0.44	1.71	0.21	-	360	For hardsurfacing of roller, sprockets, idler for tractors and power shovel, The hardness of weld metal is about Hv 350
CSF -450H	1.2 (0.045) 1.6 (0.062)	F,H	CO ₂	0.23	1.66	0.67	2.87	0.54	-	460	For hardsurfacing of roller, idler for tractors and power shovel, The hardness of weld metal is about Hv 450
CSF -600H	1.2 (0.045) 1.6 (0.062)	F,H	CO ₂	0.50	0.53	2.82	7.14	0.47	-	610	For hardsurfacing of sprockets, tractor-link, idlers, crusher case etc. The hardness of weld metal is about Hv 600
CSF -700H	1.2 (0.045) 1.6 (0.062)	F,H	CO ₂	0.50	0.53	2.81	7.14	0.47	0.55	705	For hardsurfacing of cutter knif, impellers, shovel-teeth and casings. The hardness of weld metal is about Hv 700
CSF -800H	1.2 (0.045) 1.6 (0.062)	F,H	Ar + CO ₂	0.75	1.05	1.47	7.55	-	B: 0.25	780	For hardsurfacing of dredger, cutter knife, pump casing and dipper teeth., The hardness of weld metal is about Hv 780

CSF-5HB

For inter-metallic abrasion and light soil abrasion

Applications

For intermetallic abrasion, hard-surfacing of roller die, screw conveyor, hot press mold, punch, etc, welding between wearing metals.

Characteristics

- (1) CSF-5HB is a Metal cored wire and designed for flat & horizontal position welding with Ar+ 2~5%O₂ gas Shielding.
- (2) It is highly recommendable to use on wear plate and weld metal's hardness should be over Hv 500.

Notes on usage

- (1) The optimum flow of Ar+2~5%O₂ for shielding is 15~25ℓ/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) Preheat at 200°C

Typical chemical composition of weld metal (%)

(Shielding Gas : 98%Ar+2%O₂)

C	Mn	Si	Ni	Cr	others
0.08	1.40	1.23	5.9	26.5	≤5.0

Typical mechanical properties of weld metal

(Shielding Gas : 98%Ar+2%O₂)

Wire Dia.(mm)	Hardness	
	Hv	H _{RC}
1.6	545	48

Size & recommended current range (DC +)

Dia. mm (in)		1.6 (0.062)
Amp.	F & H-F	150~400