

CHW-50C6

MAG Wire for High Tensile Strength Steel

AWS A5.18 ER70S-6

BS EN ISO 14341-A-G 42 3 C G3Si1

BS EN ISO 14341-B-G 49A 3 C G6

CSA W48-01 ER49S-6

JIS Z3312 YGW12

GB/T 8110 ER50-6

Welding Position: F, H, HF, OH, V

Type of Current: DCEP

Features & Applications

CHW-50C6 has very good welding performance and the weld metal shows lower temperature impact toughness. It is mainly for butt welding and fillet welding structures made by 500MPa grade tensile strength mild steels and low alloy steels, such as vehicles, bridges, skyscrapers, engineering & construction machineries and so on.

Chemical Composition of the Wire (%)

	C	Mn	Si	S	P	Ni	Cr	Mo	V
Standard	0.06-0.15	1.40-1.85	0.80-1.15	≤0.035	≤0.025	≤0.15	≤0.15	≤0.15	≤0.03
Typical	0.08	1.52	0.88	0.015	0.020	0.021	0.020	0.007	0.008

Mechanical properties of Deposited Metal (AW)

	Tensile Strength Rm (MPa)	Yield Strength ReL (MPa)	Elongation A4 (%)	Impact Value (J)		Shield Gas CO ₂ Purity ≥99.98%
				-30°C	-40°C	
Standard	≥480	≥400	≥22	≥27	—	
Typical	550	430	30	90	70	

Recommended Current (DC⁺)

Diameter (mm)	0.6	0.8	0.9	1.0	1.2	1.6
Current (A)	40-120	40-140	40-180	50-220	80-350	120-550

- Notice:**
- 1) To avoid rust the wire must be kept in dry condition and keep the package in good condition also before welding.
 - 2) To prevent welding defect the shield gas should be pure particularly no moisture in it.
 - 3) The surfaces to be welded must be cleaned away impurities of oil contamination, rust, moisture and so on.
 - 4) Mechanical properties, crack resistance and compactness of the weld metal are affected by heat input in welding so should pay more attention to it.
 - 5) The welding conditions mentioned above for reference only and it is better to do a welding procedure qualification according to project before put it into formal welding.