

AK H08Mn2MoA

AK AF205

Characteristics and applications: AK-H08Mn2MoA is a submerged arc welding wire for low alloy high strength steel, AK-AF205 is an alkali-fluoride type sintered flux with light gray spherical particle size of 10-60 mesh. The combination of AK-H08Mn2MoA and AK-AF205 has good welding performance, arc stability, good forming, easy slag removal, low diffused hydrogen content, good crack resistance and low temperature impact toughness of deposited metal. Suitable for the welding of 600MPa class low alloy steel structure such as ship, machinery manufacture, chemical industry, bridge, steel structure and so on.

Note:

1, before the use of flux must be 300 ~ 350 ° C baking 1 ~ 2 hours, welding wire before use should be dry, oil-free, rust-free state.

2, before welding should be strictly removed welding oil, rust, moisture and other impurities.

Flux Quality Requirements:

1, flux water content $\leq 0.10\%$

2, flux mechanical inclusions ≤ 0.30 .

3, flux sulfur content $\leq 0.050\%$

4, flux phosphorus content $\leq 0.060\%$

Requirements for radiographic testing of deposited metals: Grade I

Chemical composition of deposited metal (mass fraction) :

	C	Si	Mn	S	P	Ni	Cu	Mo	Cr	Ti
Requirement	0.06-0.11	0.25	1.60-1.90	0.030	0.030	0.30	0.35	0.50-0.70	0.20	0.05-0.15
Welding Wire Actual Result	0.07	0.18	1.70	0.008	0.010	0.04	0.10	0.55	0.02	0.08
Molten metal Actual Result	0.06	0.24	1.80	0.006	0.014	0.05	0.08	0.46	0.03	0.02

Mechanical properties of deposited metal:

	Tensile strength (MPa)	Yield strength (MPa)	Elongation (%)	Impact function (J)	
GB/T	620-820	≥ 500	≥ 15	$\geq 27J/-20^{\circ}C$	$\geq 27J/-40^{\circ}C$
AWS	620-760	≥ 540	≥ 17	$\geq 27J$	$\geq 27J$
Actual Result	678	585	24	110	95