CA-506S × UC-36

For single and multi-layer welding of medium or thick mild steel and 490N/mm² class high tensile strength steel

AWS F7A6-EH14
F7P6-EH14

Applications

Butt and flat fillet welding of ships, vessels, bridges, machines, buildings, heavy duty steel structure and general fabrications. Butt welding of aluminum-killed steel for low temperature service used in LPG storage tanks, LPG tankers, low temperature service equipment, and other structures for cold regions.

Characteristics

(1) Excellent notch toughness at low temperature down to -50℃.
(2) It deposits weld metal of good appearance even in low speed welding with metal with high currents.
(3) Good mechanical properties can be obtained with single-layer welding using high heat input.
(4) Applicable to both AC and DC(+).

Notes on usage

(1) Store the flux at the place of moisture free and dry the flux at 250~350℃ for about one hour before use.
(2) When the flux height is excessive, poor bead appearance may occur.
(3) The use of the flux which has been re-used for welding in many times may cause deterioration of its usability. Therefore, the unused flux should be mixed properly with such used flux.

Typical chemical composition of weld metal (%)

C	Mn	Si	P	S	Remarks	
					Base metal	PT(mm)
0.07	1.35	0.37	0.021	0.014	SM490A	25
0.06	1.28	0.31	0.016	0.010	EH36	20

Typical mechanical properties of weld metal

YP N/mm² (MPa)	TS N/mm² (MPa)	EL (%)	IV (J)		Remarks		
			-20℃	-50℃	Base metal	PT (mm)	PWHT
470	578	30	90	70	SM490A	25	As weld
-	565	-	60	-	EH36	20	As weld

• Approval : ABS, BV, DNV, GL, LR