

CA-512 × UC-43

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

AWS F7A2-EL8
F7P2-EL8

Applications

CA-512×UC-43 are well suited for fillet and butt welding of ships, machine, H-beams, boilers, bridges, agricultural, steel structure and general steel fabrications.

Characteristics

- (1) It is comparatively insensitive to rust, scales, oil and dirt and primers on the surface to be welded.
- (2) Slag detachability and bead appearance is very good.
- (3) Suitable for welding of thin and medium plate in high speed welding.
- (4) As the consumption of flux is small, it is very economical.
- (5) Applicable to horizontal and flat fillet welding.
- (6) 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°C for about one hour before use.
- (2) Remove rust, scales, oil, paint, water, dirt and slag of tack welds from the groove in order to get sound welds.
- (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)
0.06	1.48	0.41	0.021	0.014	SM490A	25
0.07	1.39	0.38	0.018	0.011	SM490A	20

Typical mechanical properties of weld metal

YP N/mm ² (MPa)	TS N/mm ² (MPa)	EL (%)	IV (J)		Remarks		
			0°C	-29°C	Base metal	PT (mm)	PWHT
460	566	31	90	70	SM490A	25	As weld
-	578	-	60	-	SM490A	20	As weld