

CA-522 × UC-12K

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

AWS F7A2-EM12K
F7P2-EM12K

Applications

CA-522×UC-12K are well suited for fillet and butt welding of LPG tank, spiral pipe, ships, machine, boilers, bridges and steel structures.

Characteristics

- (1) CA-522×UC-12K are well suited for high speed welding in thin plate.
- (2) It is comparatively insensitive to rust, scales, oil and dirt and primers on the surface to be welded.
- (3) Slag detachability and bead appearance are very good.
- (4) Suitable for welding of thin and medium plate in high speed welding.
- (5) As the consumption of flux is small, it is very economical.
- (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) When the flux height is excessive, poor bead appearance may occur.
- (4) The use of the flux which has been re-used for welding in many times may causes 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)
0.08	1.67	0.50	0.020	0.016	SM490A	25
0.07	1.52	0.44	0.019	0.013	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
468	560	28	70	40	SM490A	25	As weld
-	576	-	50	-	SM490A	20	As weld

• Approval : ABS