

CA-602P x UC-12K(UC-A2)

For single and Multi-layer welding of high tensile Strength steel

AWS A5.17 F7A4-EM12K
AWS A5.23 F8A2-EA2-G

Applications

Single and multi-layer butt welding of spiral pipe, steel pipe for gas transport and general structures.

Characteristics

- (1) It provides good bead appearance, better slag removal.
- (2) It provides good notch toughness of the weld metal.
- (3) Applicable to AC, DC(+) and two-run technique.

Notes on usage

- (1) Store the flux at the place of moisture free and dry the flux at 300~350°C for 60 minutes 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 cause deterioration of its usability. Therefore, unused flux should be mixed properly with such used flux.

Typical chemical composition of weld metal (%)

Wire	C	Mn	Si	P	S	Mo	Remarks	
							Base Metal	PT(mm)
UC-12K	0.04	1.44	0.28	0.019	0.009	-	SM490	25
UC-A2	0.06	1.25	0.31	0.017	0.011	0.42	SM570	25

Typical mechanical properties of weld metal

Wire	YP N/mm ² (MPa)	TS N/mm ² (MPa)	EL %	IV (J)		Remarks		
				-20°C	-40°C	Base Metal	PT (mm)	PWHT
UC-12K	463	560	32.4	162	103	SM490	25	AW
UC-A2	546	622	30.8	93	49	SM570	25	AW

• Fracture at the base metal