

Classification

EN ISO 14174

SA FB 1 65 DC / SA FB 1 65 DC H5

Characteristics and typical fields of application

UV 420 TT / UV 420 TT-LH is an agglomerated flux of fluoride basic type characterised by the neutral metallurgical behaviour. In combination with suitable wire electrodes, the weld metal exhibits good toughness properties at low temperatures. For joining and surfacing applications with general purpose structural steels, fine grained structural steels and creep resistant steels. It is suited for single wire and tandem welding.

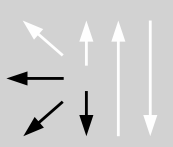
Base Materials

Unalloyed steels, creep resistant steels, low-temperature steels ad fine grained structural steels.

Composition of sub-arc welding flux (wt. %)

	SiO ₂ +TiO ₂	CaO+MgO	Al ₂ O ₃ +MnO	CaF ₂
wt-%	15	35	21	26

Operating data

	Polarity DC (+) / AC	Basicity acc. to Boniszewski:	3.4 Mol. %	2.5 weight %
		Grain size acc. to EN ISO 14174:	3 – 25 (0,3 – 2,5 mm)	
		Flux consumption:	1.0 kg flux per kg wire	
		Redrying:	300 – 350 °C, 2 hrs min.	

Typical Composition of all-weld Metal with different Wires

SAW wires	C	Si	Mn	Cr	Mo	Ni	V	W
Union S 2	0.07	0.25	1.05					
Union S 2 Mo	0.07	0.25	1.05		0.45			
Union S 3	0.08	0.25	1.50					
Union S 3 Mo	0.08	0.25	0.45		0.45			
Union S 4 Mo	0.08	0.25	1.80		0.45			
Union MTS 4	0.15	0.40	1.05	10.5	0.95	0.40	0.25	0.45
Union S 1 CrMo 2	0.07	0.25	0.75	2.25	0.95			
Union S 1 CrMo 5	0.07	0.30	0.60	5.50	0.55			
Union S 2 CrMo	0.08	0.25	0.95	1.10	0.45			
Union S 2 Ni 2,5	0.07	0.25	1.05			2.40		
Union S 2 Ni 370	0.06	0.25	1.00			1.25		
Union S 3 NiMo	0.06	0.25	1.50		0.40	1.40		
Union S 3 NiMo 1	0.08	0.25	1.55		0.55	0.90		
Union S 3 NiMoCr	0.08	0.25	1.55	0.32	0.58	2.00		

	Wire classification	
	EN ISO	AWS
Union S 2	S2	EM12K
Union S 2 Mo	S2Mo	EA2
Union S 3	S3	EH10K
Union S 3 Mo	S3Mo	EA4
Union S 4 Mo	S4Mo	EA3
Union MTS 4	S S CrMoWV12	ER90S-G
Union S 1 CrMo 2	S S CrMo2	EB3R
Union S 1 CrMo 5	S S CrMo5	EB6
Union S 2 CrMo	S S CrMo1	EB2R
Union S 2 Ni 2,5	S2Ni2	ENi2
Union S 2 Ni 370	S2Ni1,5	EG [ENi (mod.)]
Union S 3 NiMo	S3Ni1,5Mo	EG [EF1 (mod.)]
Union S 3 NiMo 1	S3Ni1Mo	EF3
Union S 3 NiMoCr	SZ3Ni2,5CrMo	EG [EF6 (mod.)]