

## Classifications

**EN ISO 24598-A**
**AWS A5.23 / SFA-5.23**

S S CrMo1 FB

F8P2-EB2R-B2-H8

## Characteristics and typical fields of application

**Union S 2 CrMo - UV 419 TT-W** is a wire flux combination for submerged arc welding of creep resistant steel grades with 1-1,5% Cr - 0,5% Mo. Applications are in long-term condition up to +570°C service temperature. Smooth beads, good wetting, excellent slag detachability. The combination is ideally suited for multi-pass welding in applications with high thickness.

**UV 419 TT-W** is an agglomerated fluoride-basic welding flux with high basicity. For more information regarding this welding flux see our detailed data sheet.

## Base materials

Creep resistant steels and similar alloyed cast steels, case hardening and nitriding steels of similar chemical composition, similar alloyed heat treatable steels with tensile strength up to 780 MPa, steels resistant to caustic cracking.

1.7335 - 13CrMo4-5, 1.7262 - 15CrMo5, 1.7728 - 16CrMoV4, 1.7218 - 25CrMo4, 1.7258 - 24CrMo5, 1.7354 - G22CrMo5-4, 1.7357 - G17CrMo5-5

ASTM A193 Gr. B7, A335 Gr. P11 and P12, A217 Gr. WC6

## Typical analysis

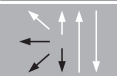
wt.-%	C	Si	Mn	Cr	Mo
wire	0.12	0.10	0.80	1.25	0.55
all-weld metal	0.08	0.25	0.90	1.15	0.48

## Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength	Tensile strength	Elongation A	Impact energy ISO-V KV J		
	$R_{p0.2}$	$R_m$	( $L_0=5d_0$ )	-40 °C	-30 °C	20 °C
	MPa	MPa	%			
a1, DC+	≥ 470	≥ 550	≥ 22		≥ 47	≥ 100
a2, DC+	≥ 400	≥ 520	≥ 20	≥ 47	≥ 80	≥ 100

a1 = 1 hour 690 °C ; a2 = 12 hours 690 °C

## Operating data

	Polarity	DC +, Tandem AC/DC +	Dimension mm	
				1.6
				2.0
				2.5
				3.0
				4.0

Preheating, interpass temperature and post weld heat treatment are determined by the base metal.

## Approvals

TÜV (18746), CE