

Classifications

EN ISO 3581-A	AWS A5.4
E 22 9 3 N L R	E2209-17

Characteristics and typical fields of application

Primarily designed for welding 22Cr duplex stainless steels used in offshore, shipyards, chemical tankers, chemical/petrochemical, pulp & paper, etc.

Avesta 2205-PW is an all-position E2209-17 type electrode with special advantages in the vertical-up and overhead positions. Thanks to the sharp and concentrated arc, PW electrodes are extremely suitable for maintenance and repair welding, especially when joint surfaces are not particularly clean. The weld metal has very good resistance to pitting and stress corrosion cracking in chloride containing environments. PREN >35.

Base materials

1.4462 X2CrNiMoN22-5-3, 1.4362 X2CrNiN23-4, 1.4462 X2CrNiMoN22-5-3 together with 1.4583 X10CrNiMoNb18-12, 1.4462 X2CrNiMoN22-5-3 with P235GH/ P265GH, S255N, P295GH, S355N, 16Mo3

UNS S31803, S32205

Typical analysis of all-weld metal

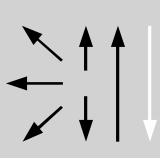
	C	Si	Mn	Cr	Ni	Mo	N
wt.-%	0.02	0.8	0.8	23.0	9.5	3.1	0.18

Mechanical properties of all-weld metal – typical values (minimum values)

Condition	Yield strength R _{p0.2}	Tensile strength R _m	Elongation(L ₀ =5d ₀)	Impact work ISO-V KV J		Hardness
	MPa	MPa	%	20°C	-40°C	
u	635 (≥ 450)	830 (≥ 690)	25 (≥ 20)	55	40	240

u untreated, as-welded

Operating data

	Polarity	Electrode ID	Ø mm	L mm	Amps A
	DC+ or AC	2209-17/2205	2.0	250	35 – 60
			3.2	350	70 – 110
			4.0	350	100 – 160
			5.0	350	160 – 220

Interpass temperature max. 150°C

Heat input 0.5–2.5 kJ/mm

Metal recovery approx. 110 %.

Scaling temperature approx. 850°C

Approvals

TÜV (04486.), DNV GL, Certified by CWB to CSA W48, CE