

Classifications

EN ISO 3581-A	AWS A5.4	Mat. No.
E 22 9 3 N L B 2 2	E2209-15	≈1.4462

Characteristics and typical fields of application

Stainless; resistant to intercrystalline corrosion at max. application temperature 250 °C (482 °F). Good resistance to stress corrosion cracking in chlorine- and hydrogen sulphide bearing environments. High Cr and Mo contents provide resistance to pitting corrosion. For joining and surfacing work with matching and similar austenitic steels/cast steel grades. Attention must be paid to embrittlement susceptibility of the parent metal.

Base materials

TÜV certified parent metal
1.4462 – X2CrNiMoN22-5; UNS 31803, S32205

Typical analysis of all-weld metal (wt.-%)

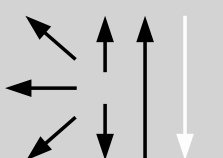
	C	Si	Mn	Cr	Mo	Ni	N
wt.-%	< 0.04	0.5	0.9	22.5	3.0	9.0	0.13

Structure: Austenite/ferrit

Mechanical properties of all-weld metal

Heat-treatment	Yield strength R _{p0.2}	Yield strength R _{p1.0}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO-V KV J
	MPa	MPa	MPa	%	+20 °C
aw	480	520	690	25	50

Operating data

	Polarity: DC (+)	ø (mm) 2.5 3.2 4.0	L mm 350 350 350	Amps A 50 – 80 80 – 110 110 – 145
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Welding instruction

Materials	Preheating	Postweld heat treatment
Matching/similar steels/cast steel grades	None	Mostly none; if necessary solution annealing at 1050 °C (1922 °F) / water or air

Approvals

TÜV (04300), CE