Avesta 2205

Basic stick electrode high-alloyed, chemical resistant

Classifications

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

Characteristics and typical fields of application

Avesta 2205 is primarily designed for welding duplex stainless steels such as 2205.

The weldability of duplex steels is excellent but the welding should be adapted to the base material, considering fluidity, joint design, heat input etc. For detailed welding recommendations, please see “How to weld duplex stainless steels” or contact voestalpine Böhler Welding.

Corrosion resistance:

Very good resistance to pitting and stress corrosion cracking in chloride containing environments. PREN >35.

Base materials

Outokumpu	EN	ASTM	BS	NF	SS
2205	1.4462	S32205	318S13	Z3 CND 22-05 Az	2377

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

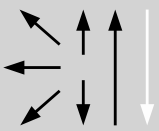
	C	Si	Mn	Cr	Ni	Mo	N
wt-%	0.02	0.8	0.7	22.6	9.4	3.0	0.16

Mechanical properties of all-weld metal

Heat-treat-ment	Yield strength R_e N/mm^2	Tensile strength R_m N/mm^2	Elongation (L_0=5d_0)	Impact work ISO-V KV J		Hardness
	MPa	MPa	%	+20 °C	-46°C	HB
u	635	810	25	50	35	240

u untreated, as-welded

Operating data



Polarity:	Electrode identification:	ø (mm)	L mm	Amps A
DC (+)		2.0		30 – 60
		2.5		45 – 80
		3.25		70 – 120
		4.0		90 – 160
		5.0		150 – 220

Approvals

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