

CARBO 4316 AC

International standards	Material No.	1.4316
	EN 1600	E 19 9 L R 12
	AWS A 5.4	E308L-17

Approvals TÜV, DB, Ü, UDT

Characteristics and typical applications CARBO 4316 AC is an AC-weldable, rutile coated electrode with an alloyed core, suitable for joining corrosion-proof CrNi steels with low carbon content as well as stabilised and non-stabilised steels of identical or similar characteristics which are resistant to chemical agents. Used on a base metal of identical characteristics the weld metal is resistant to wet corrosion up to 350° C. CARBO 4316 AC is scale resistant up to 875°C in an air and oxidising gases atmosphere. No intercrystalline corrosion due to low carbon content. The weld metal is capable of taking high polish.

Operating temperature -120° C up to +350° C

Base materials	1.4301 X5CrNi18-10	1.4311 X2CrNi18-10
	1.4303 X4CrNi18-12	1.4312 GX10CrNi18-10
	1.4306 X2CrNi19-11	1.4541 X6CrNiTi18-10
	1.4308 GX5CrNi19-10	1.4550 X6CrNiNb18-10
	1.4309 GX2CrNi19-11	1.4552 GX5CrNiNb19-11

Mechanical properties of all-weld metal	Tensile strength R_m N/mm ²	Yield strength $R_{p0,2}$ N/mm ²	Elongation A_5 %	Impact strength ISO-V J at - 120° C
	(typical values) 560	380	> 35	> 32

Weld metal analysis (typical, wt %)	C	Si	Mn	Cr	Ni
	< 0,03	0,8	0,7	19	10

Current = + / ~ , 42 V

Welding positions PA, PB, PC, PD, PE, PF

Rebaking 1 h, 350° C + / - 10° C (if necessary)

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000 pcs.	kg/packet	kg/carton
1.6 x 250	30 - 40	530	2121	6,6	3,5	14,0
2.0 x 300	40 - 55	345	1379	11,6	4,0	16,0
2.5 x 300	50 - 75	221	884	18,1	4,0	16,
3.2 x 350	65 - 110	140	559	35,8	5,0	20,
4.0 x 350	90 - 140	92	369	54,2	5,0	20,
4.0 x 450	90 - 140	86	345	69,6	6,0	24,
5.0 x 450	120 - 170	55	221	108,8	6,0	24,