INOX 308L

Electrodes MMA [SMAW]

Stainless and high alloyed steels

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 3581-A : E 19 9 LR 12 DIN 8556 : E 199L R 12 AWS A-5.4 : E 308L-16 W.Nr. : 1.4316	UDT	Power generation industry Constructions & Engineering Metallurgy (Steelworks) Petrochemical and chemical industry Shipbuilding&Offshore Agriculture Light construction and hobby

- Rutile electrode, designed for welding stainless, austenitic, austenitic Nb or Ti stabilized steels,
- ferritic stainless steels from the 13% Cr group.
- Very good primary and secondary ignition (also cold), focused arc.
- Easy formation of the correct, smooth weld, self-moving slag.
- Intergranular corrosion-resistant filler metal up to 350°C, resistant to hot cracking.

Application

Food processing equipment, beer brewing (yeast vats, fermentation vats), milk processing, pharmaceutical equipment, winemaking, manufacturing of fasteners, flanges, architectural applications (roofing, urban accessories, cladding, doors, windows), automotive and aerospace components , heat exchangers, pipes, sanitary ware, tanks and containers, milk trucks, citrus and other fruit industry, balustrades, trim, dyeing industry, construction materials.

Base material

AISI/ASTM	EN 10088-1/2	EN 10213-4	W.Nr	PN
304L	X2 CrNi 18 11		1.4306	00H18N10
304LN	X2 CrNiN 18 10		1.4311	
	X4 CrNi 18 10	GX5 CrNi 19 10		
	X6 Cr 13		1.4308	
304	X5 CrNi 18 10		1.4301	0H18N9
321	X6 CrNiTi 18 10		1.4541	1H18N9T
347	X6 CrNiNb 18 10		1.4550	H18N12Nb
		GX5 CrNiNb 19 10	1.4552	
302	X12 CrNi18 8		1,4300	
305		GX10 CrNi 18 8	1.4312	
304H	X6 CrNi18 11		1.4948	
308	X5 CrNi18 11		1.4303	
347	X5 CrNiNb18 9		1.4543	
301			1.4310	1H18N9
	X10 CrNiNb18 10		1.6905	
405	X7 CrAl13		1.4002	
410	X10 Cr13		1.4006	
430	X8 Cr17		1.4016	
410/420	X15 Cr13		1.4024	
420	X20 Cr13		1.4021	
305	G-X10 CrNi18 8		1.4312	

Typical chemical composition %

C	Si	Mn	Cr	Ni
<0,03	0,80	0,70	19,00	10,00

Typical mechanical properties	
Yield strength Re [N/mm2]	>320
Tensile strength Rm [N/mm2]	>510
Elongation A5 [%]	>30
Impact energy Kv [J]	>55J (20°C) / >30 J (-190°C) /
Coating type	rutile
Ferrite content	FN = app. 5
Weld metal recovery	110%
Welding current	
Welding positions	
Redrying	300 - 350°C / 2 h
Additional description	Austenitic microstructure with ferrite content at the level of 4-10 FN. Inter-pass temperature about 150°C

Welding parameters and packing

ø	Length [mm]	Welding current [A]	Weight of packet [kg]	Weight of carton [kg]	Pcs/1 kg
2,0	300 /	30-60	1,3	7,8	85
2,5	300 /	40-85	1,4	8,4	54
3,2	350 /	60-120	1,7	10,2	27
4,0	350 /	110-165	1,7	10,2	18
5,0	350 /	165-230	1,7	10,2	12

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