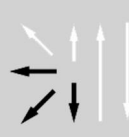


Classification							
EN ISO 17633-A		EN ISO 17633-B		AWS A5.22			
T 19 12 3 L R M/C3		-		E316LT0-4/-1			
Characteristics and typical fields of application							
<p>Avesta FCW-2D 316L/SKR is designed for welding 1.4436/ASTM 316 type stainless steels. It also suitable for welding steels that are stabilised with titanium or niobium, such as 1.4571/ASTM 316Ti for service temperatures not exceeding 400°C.</p> <p>Avesta FCW-2D 316L/SKR provides excellent weldability in flat as well as horizontal-vertical position. Welding in vertical-up and overhead positions is preferably done using FCW 316L/SKR-PW. FCW-2D 316L/SKR diam. 0.9 mm can be welded in all positions.</p> <p>Avesta FCW-2D 316L/SKR should be welded using direct current positive polarity (DC+) with a recommended wire stick-out of 15 – 20 mm.</p> <p>Corrosion resistance:</p> <p>Excellent resistance to general, pitting and intergranular corrosion in chloride containing environments. Intended for severe service conditions, e.g. in dilute hot acids.</p>							
Base Materials							
Outokumpu	EN	ASTM	BS	NF	SS		
4436	1.4436	316	316S33	Z7 CND 18-12-03	2343		
4432	1.4432	316L	316S13	Z3 CND 17-12-03	2353		
4429	1.4429	S31653	316S63	Z3 CND 17-12 Az	2375		
4571	1.4571	316Ti	320S31	Z6 CNDT 17-12	2350		
Typical analysis of all-weld metal (wt.-%)							
	C	Si	Mn	Cr	Ni	Mo	
wt-%	0.025	0.7	1.5	19.3	12.0	2.7	
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	-40 °C	-196°C	HB
u	400	560	33	55	50	28	210
u untreated, as-welded – shielding gas Argon + 18 % CO ₂							
Operating data							
	Polarity DC (+)	shielding gases: Ar + 15 – 25% CO ₂ 100 % CO ₂	re-drying if necessary: 150°C / 24 hrs	amps A	voltage V	ø (mm)	
				100 – 160	21 - 28	0.9	
				125 – 280	20 – 34	1.2	
				200 – 350	25 - 35	1.6	
Ar + 15 – 25% CO ₂ offers the best weldability, but 100% CO ₂ can be also used (voltage should be increased by 2V). Gas flow rate 20 – 25 l/min.							
Approvals							
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