

Classification					
AWS A5.9			EN ISO 14343-A		
ER309L			S 23 12 L		
Characteristics and typical fields of application					
<p>Avesta S 309L S is a high-alloy 23 Cr 12 Ni wire primarily intended for dissimilar welding between stainless and mild steel and for surfacing low-alloy steels, offering a ductile and crack resistant weldment.</p>					
Base Materials					
<p>Avesta S 309L-S is primarily used when joining non-molybdenum-alloyed stainless and carbon steels and for surfacing unalloyed or low-alloy steels.</p>					
Typical analysis of solid wire (wt.-%)					
	C	Si	Mn	Cr	Ni
Wire	0.02	0.40	1.75	23.4	12.4
Weld Metal	0.02	0.50	1.20	23.5	12.5
Typical mechanical properties of all-weld metal (As Welded)					
with flux combination	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	
	MPa	MPa	%	+20°C	-40°C
Avesta 805	440	580	32	70	60
Marathon 431	440	580	32	70	60
Avesta C 807	410	550	38	85	65
Welding Recommendation					
Intepass temperature : Max. 150°C Heat Input : Max. 2.0 KJ/mm					
Size and Packaging					
Size mm	Spooling		Weight (Kg)		
2.0	Basket (K415)		25		
2.4	Basket (K415)		25		
3.2	Basket (K415)		25		
4.0	Basket (K415)		25		