

STAINLESS STEEL FILLER METAL

special type

ER 309LSi SGB

DESCRIPTION and APPLICATIONS



Austenitic stainless steel filler metal suitable for welding different parent metals like AISI 304 to carbon steels or similar steels in wrought and cast form. It can be used to weld AISI 304 and similar parent metals where severe corrosion conditions exist requiring higher alloy weld metal.

Equivalent to ER 309L SGB except for higher Si content. This improves the arc stability, the weld metal fluidity and the melt run appearance. If the dilution by the parent metal produces a low ferrite or fully austenitic weld, the hot cracking sensitivity of the weld is higher than that of a lower Si content weld metal



Chemical composition product analysis % by mass (single value means maximum value if not different stated)													
C	Si	Mn	P	S	Cr	Ni	Mo	N	Cu	Nb	W	other	
0,03	0,65 1,0	1,4 2,2	0,03	0,02	23,0 25,0	12,0 14,0	0,3	-	0,3	-	-	0,5	

Specifications	Designations
EN ISO 14343-A	23 12 L Si
AWS A5.9	ER309LSi

Expected Minimum mechanical properties of all weld metal *	Typical Results
Proof strength Rp0,2 [Mpa]	320
Tensile strength Rm [Mpa]	510
Elongation [%]	25
Impact strength KV at -196°C [J]	100
(*) : Room temperature if not different stated	

Approvals		
MIG	X	X

WELDING FILLER METAL SPECIFIC TO	AVAILABLE DIAMETERS [mm]							
	0,8	1,0	1,2	1,6	2,0	2,4	3,2	4,0
MIG, PLASMA, PLASMA MIG, LASER								
TIG								

PACKAGING TYPE	WIRE RANGE DIAMETERS [mm]	INNER PACKAGING DIAMETER [mm]	OUTER PACKAGING DIAMETER [mm]	NUMBER OF PIECES PER PACKAGING	WEIGHT [kg]	WINDING TYPE
 K300	0,8÷1,6	52	300	60 spools every pallet	15	Precision layer
 RODS	1,0÷4,0 (lenght 1 m)	-	-	-	5	-