



**DATA SHEET**  
**DS 353**  
**Rev. 6 dd 23/07/2014**  
**INEFIL INOX 308 LSI**

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**CLASSIFICATION**

AWS SPECIFICATIONS	EN SPECIFICATIONS
AWS A 5.9: ER308LSi	EN ISO 14343-A: G 19 9 L Si
AWS A 5.9M: ER308LSi	
ASME SFA 5.9: ER308LSi	
ASME SFA 5.9M: ER308LSi	

**APPROVALS**

TÜV	DB	

**ALLOY TYPE**

308L for welding stainless steel.

**APPLICATIONS**

Solid wire with low carbon concentration designed for welding stainless steel with 18% Cr and 8% Ni content with service temperature in the range of -100°C and 400°C. Thanks to the higher silicon content its arc stability gets improved, it gives good-looking weld bead and very limited spattering. It finds application in general and architectural fabrication, pharmaceutical equipment, food industry and nuclear engineering. High corrosion resistance in an oxidizing environment. To be used under the shield of Ar 98% + O<sub>2</sub> 2%.

**MATERIALS TO BE WELDED**

ASTM		EN	Others
304	A 157 Gr C9	10088-1/-2 X2CrNi 19-11	
304 L	A 320 Gr B8C	10088-1/-2 X2CrNiN 18-10	
304 LN	A 320 Gr D	10088-1/-2 X4CrNi 18-10	
CF3		10213-4 GX5CrNi 19-10	
CF8		10088-1/-2 X6CrNiTi 18-10	
		10088-1/-2 X6CrNiNb 18-10	
		10213-4 GX5CrNiNb 19-10	

**WELDING GUIDELINES**

Preheat and PWHT are not required. Maximum interpass temperature 200°C.

**TECHNICAL INFORMATION**

Gas: Mix Ar- O<sub>2</sub> (EN ISO 14175)  
 Welding positions: all positions



**WELDING PARAMETERS**

Current	DC + Reverse polarity					
Diameter (mm)	0.8	1.0	1.2			
Volts (V)	16 ÷ 28	17 ÷ 32	18 ÷ 34			
Intensity (A)	60 ÷ 200	80 ÷ 260	100 ÷ 360			



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**TYPICAL CHEMICAL COMPOSITION OF WIRE**

C %	Mn %	Si %	Cr %	Ni %	Mo %	Cu %			
0.025	1.80	0.85	20.00	10.00	0.10	0.10			

**TYPICAL MECHANICAL PROPERTIES**

GAS		Yield strength	Tensile strength	Elongation on % 5d	Impact energy (Charpy V)				
		Rs	Rm	A 5d	+ 20°C	0°C	-20°C	-40°C	-50°C
		(MPa)	(MPa)	%	(Joule)	(Joule)	(Joule)	(Joule)	(Joule)
M13	as welded	440	580	42	> 47	-	-	-	-

**PRODUCTS AVAILABLE**

Process	Product	Classification AWS	Classification EN
MIG/MAG Solid wire			
TIG Rods	INETIG INOX 308 LSI	AWS A 5.9: ER308LSi	EN 14343-A: W 19 9 L Si
SAW Submerged arc			
FCAW Cored wire			
SMAW Electrodes	INOX 308 RLC	AWS A 5.4: E308L-17	EN ISO 3581-A: E 19 9 L R