Etrichstraße 19-21 A-2542 KOTTINGBRUNN Austria.

MIG AND TIG STAINLESS STEEL WIRES.

Swiss Alloys® 316/316L

SPECIFICATIONS
AWS 5.9
ASME SFA 5.9
EN ISO 14343 EN steel no. 19 12 3 L

CLASSIFICATIONS
AWS ER316/316L
UNS S31683

DESCRIPTION / APPLICATION

Swiss Alloys ER316L is primarily used for welding lowcarbon molybdenum-bearing austenitic alloys. This filler metal has the same analysis as Oxford Alloy ER316, except that the carbon content is limited to a maximum of 0.03% in order to reduce the possibility of formation of intergranular carbide precipitation. This low carbon alloy is not as strong at elevated temperatures as ER316H.

Approvals CE, DB, TÜV

Typical Chemical Analysis						
C	**Mn**	**Si**	**Cr**	**Ni**	**Mo**	**S**
0.03 max	1.0-2.5	0.30-0.65	18.0-20.0	11.0-14.0	2.0-3.0	0.03 max
P	**Cu**					
0.30 max	0.75 max					

TYPICAL MECHANICAL PROPERTIES

Tensile strength:	86,000 psi	590 MPa
Yield strength:	58,000 psi	400 MPa
Elongation:	36%	

Typical Welding Parameters of Stainless steel wire			
Process	Diameter of Wire	Welding Voltage (V)	Welding Current (A)
TIG	0.80 mm	12 V - 15 V	60 A - 90A
	1.2 mm	13 V - 16 V	80 A - 110 A
	1.6 mm	14 V - 18 V	90 A - 130 A
	2.4 mm	15 V - 20 V	150 A - 220 A
	3.2 mm	15 V - 20 V	150 A - 220 A
MIG	1.0 mm	26 V - 29 V	150 A- 190 A
	1.2 mm	28 V - 32 V	180 A - 220 A
	1.6 mm	29 V - 33 V	200 A - 250 A