PREMIARC™

TG-X308L	TG-X309L	TG-X316L	TG-X347	TG-X2209
100%Ar	100%Ar	100%Ar	100%Ar	100%Ar
AWS A5.22 R 308LT1-5	AWS A5.22 R 309LT1-5	AWS A5.22 R 316LT1-5	AWS A5.22 R 347T1-5	
EN 1.4316	EN 1.4332	EN 1.4430	EN 1.4551	EN 1.4462
EN ISO 9606-1: FM5	EN ISO 9606-1: FM5	EN ISO 9606-1: FM5	EN ISO 9606-1: FM5	EN ISO 9606-1: FM5
EN ISO 4063: 143	EN ISO 4063: 143	EN ISO 4063: 143	EN ISO 4063: 143	EN ISO 4063: 143

Description and Application

These are all rutile flux cored TIG filler rods for root pass welding of stainless steel pipe without the need for a reverse side back purge (internal shielding gas). As they produce a slag, they are not recommended for multi-pass welding.

TG-X308L is for welding 18%Cr-8%Ni type stainless steel.

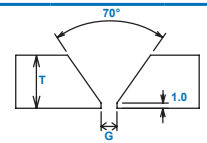
TG-X309L is for dissimilar joints between stainless and mild steel or medium carbon steels.

TG-X316L is for 18%Cr-12%Ni-2%Mo stainless steel.

TG-X347 is for 18%Cr-8%Ni+Ti or 18%Cr-8%Ni+Nb stabilized stainless steel.

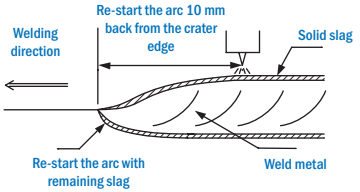
TG-X2209 for welding duplex 1.4462 stainless steel.

Proper root gap

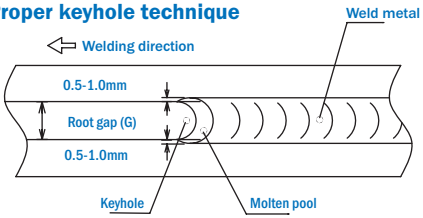


Groove Preparation			
Plate thickness (T)	4 mm	6 mm	10 mm min.
Root gap (G)	2.0 mm	2.5 mm	3.0 mm

Proper bead connection



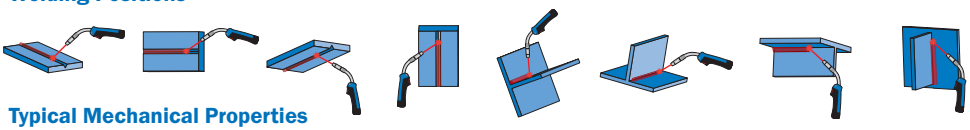
Proper keyhole technique



Typical Chemical Analysis (wt. %)

	C	Si	Mn	P	S	Ni	Cr	Mo	N	Nb+Ta	FS	FN	FNW
TG-X308L	0.02	0.80	1.70	0.023	0.005	10.3	19.6	-	-	-	9	13	-
TG-X309L	0.02	0.80	1.50	0.022	0.006	12.6	24.3	-	-	-	14	>18	-
TG-X316L	0.02	0.90	1.60	0.023	0.004	12.5	18.9	2.3	-	-	8	13	-
TG-X347	0.02	0.80	1.60	0.021	0.004	10.2	19.0	-	-	0.7	9	13	-
TG-X2209	0.02	0.64	1.84	0.015	0.003	9.5	23.1	3.34	0.15	-	-	-	47

Welding Positions



Typical Mechanical Properties

	R_e(MPa)	R_m(MPa)	A_5(%)	CV (J)	°C
TG-X308L	450	620	47	60	-196
TG-X309L	530	680	32	85	-20
TG-X316L	440	600	38	90	-20
TG-X347	460	630	48	110	-20
TG-X2209	603	811	32	138	-50