

Supercored 308L

FLUX CORED ARC WELDING CONSUMABLE FOR WELDING OF 18% Cr-8% Ni STAINLESS STEEL

2019.09

HYUNDAI WELDING CO., LTD.

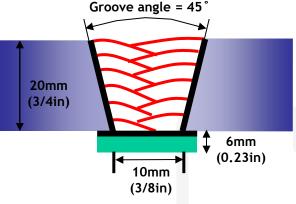
Specification	AWS A5.22	E308LT0-1	/-4			
	JIS Z3323	TS308L-FE	30			
	EN ISO 17633-A	T199 L R	M21/C1 3			
Applications	Supercored 308L is de (Petrochemical proces	-	-		ainless steels.	
Characteristics	Supercored 308L for stainless steels has a rapid solidifying slag					
on Usage	which enables Flat and Horizontal position welding. It gives a stable arc and low spatter.					
Note on Usage	Use 100% CO ₂ gas of	- Ar+20~25%	CO2 gas			
Packing	Dia.(mm)	0.9mm (0.035in)	1.2mm (0.045in)	1.4mm (0.052in)	1.6mm (1/16in)	
	Spool (kg)	5Kg	12.5Kg	15Kg	20Kg	
	*including ball pac	(11lbs)	(28(lbs)	(33lbs)	(44lbs)	

Supercored 308L

Method by AWS Spec.

Mechanical Properties & Chemical Composition of All Weld Metal

Welding Conditions



[Joint Preparation & Layer Details]

Diameter(mm) Shielding Gas	: 1.2mm(0.045in) : 100% CO ₂
Flow Rate(ℓ /min.)	: 20~22
Amp./ Volt.	: 210 / 29
Stick-Out(mm)	: 20(3/4 in)
Pre-Heat(℃)	: R.T.℃(°F)
Interpass Temp.(℃)	: ≤150℃(302°F)
Polarity	: DC(+)

Mechanical Properties of All weld metal

Consumable	Tensile Test			act Test Ibs)	
Consumable	TS (Mpa/ksi)	El (%)	−60 ℃ (−76°F)	−120 ℃ (−184°F)	
Supercored 308L	563(82)	41.6	39(28.3)	30(22.1)	
AWS A5.22 E308LTX-X	≥ 520(75)	≥ 35	Not Specified		

Chemical Analysis of All weld metal(wt%)

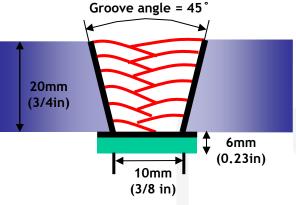
Consumable	Shielding	Chemical Composition (%))			
Consumable	Gas	С	Si	Mn	Р	S	Ni	Cr	Мо	Cu
Supercored 308L	100%CO2	0.026	0.40	1.28	0.021	0.006	9.71	19.58	0.10	0.11
AWS A E308L		≤0.04	≤1.2	≤2.0	≤0.03	≤0.02 5	9.0 ~11.0	18.0 ~21.0	≤ 0.3	≤ 0.3

This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.

Supercored 308L

Mechanical Properties & Chemical Composition of All Weld Metal

Welding Conditions



[Joint Preparation & Layer Details]

Diameter(mm)	: 1.2mm(0.045in))
Shielding Gas	: Ar+ 20% CO2	
Flow Rate(ℓ /min.)	: 20~22	
Amp./ Volt.	: 210 / 29	
Stick-Out(mm)	: 20(3/4 in)	
Pre-Heat(℃)	: R.T.℃(°F)	
Interpass Temp.(℃)	: ≤150℃(302°F)	
Polarity	: DC(+)	

Mechanical Properties of All weld metal

Consumable	Tensile	Test	CVN Imp J(ft ·		
Consumable	TS (Mpa/ksi)	EI (%)	−60℃ (−76°F)	<mark>−120</mark> ℃ (−184°F)	
Supercored 308L	569(83)	41.4	39(28.8)	30(22.1)	
AWS A5.22 E308LTX-X	≥ 520(75)	≥ 35	Not Specified		

Chemical Analysis of All weld metal(wt%)

Consumable	Shielding	Chemical Composition (%)								
Consumable	Gas	С	Si	Mn	Р	S	Ni	Cr	Мо	Cu
Supercored 308L	Ar+ 20% CO2	0.028	0.44	1.44	0.021	0.006	9.64	20.04	0.10	0.11
AWS A E308L		≤0.04	≤1.2	≤2.0	≤0.03	≤0.02 5	9.0 ~11.0	18.0 ~21.0	≤ 0.3	≤ 0.3

This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.

Method by AWS Spec.

Supercored 308L

Mechanical Properties & Chemical Composition of All Weld Metal

Sead Appearance



δ – Ferrite No.

Concurrente Chielding Coo			Diagram	FERITSCOPE MP-30 *	
Consumable	Shielding Gas	Schaeffler	Delong	WRC(1992)	(FISCHER)
Supercored	100% CO2	9.4	13.1	11.7	7.0~8.0
308L	Ar+20% CO2	10.6	15.0	14.1	7.5~8.5

This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.

Approvals

✤ AUTHORIZED APPROVAL DETAILS

Consumable	Shielding Gas	TUV	CE	DB
Supercored	C1	EN 12073 T 199LRC3	EN 12073 T 199 L R C3	T 199LRC3(1.4316) DIN EN ISO 17633-A
308L	21	0.9~1.6	0.9~1.6	0.9~1.6

Consumable	Shielding Gas	τυν	CE	DB
Supercored	C1	EN 12073 T 199 L R M3	EN 12073 T 199LRM3	T 199LRM3(1.4316) DIN EN ISO 17633-A
308L		0.9~1.6	0.9~1.6	0.9~1.6



This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.