

TASETO Welding Materials

Stainless Steel Electrodes

For Flux Cored Arc Welding

GF2594

Applicable Specification

JIS Z 3323 TS329J4L-FC0
AWS A5.22 E2594T0-1

● Applications and Characteristics

TASETO GF2594 is used for welding of super duplex stainless steel such as UNS S32750, S32760. As weld metal has higher pitting resistance equivalent (PRE^{*}) value than that of GF329J4L, GF2594 is suitable for more corrosive environment.

※ PRE = Cr% + 3.3xMo% + 16xN%

● Notes on Usage

* Preheating is not necessary and interpass temperature should be kept under 150°C.

* Post weld heat treatment causes severe embrittlement of weld metal.

* Use 100%CO₂ as shielding gas.

● Chemical Composition of All Weld Metal (%)

	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	W	N	PRE
Typical	0.030	0.51	0.86	0.015	0.004	9.56	26.12	3.51	0.87	0.75	0.23	41.4

● Ferrite Content of All Weld Metal

WRC-1992 Diagram	
Typical	65 FN

● Tensile Properties of All Weld Metal

	0.2% Proof Stress (MPa)	Tensile Strength (MPa)	4D Elongation (%)
Typical	687	891	28.0

● Corrosion Resistance of All Weld Metal

Typical	CPT in 6% Ferric Chloride Test (JIS G 0578)	35°C
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● Sizes Available and Shielding Gas

Size (mm)	Shielding Gas
1.2	CO ₂ , 20L/min