

# HANKOOK WELDTEK CO.,LTD

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**WT-2594** AWS A5.22 E2594T1-1/4

FOR DUPLEX  
STAINLESS STEEL

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## Applications

WT-2594 is formulated for MAG welding of 25%Cr-9%Ni-4%Mo-0.2%N super duplex stainless steels.

( UNS S32750, S32760, JIS 329J4L etc.. )

## Characteristics on Usage

- 1) This is a rutile type flux cored wire for all-position welding.
- 2) It has a smooth stable arc producing a weld with easy slag removal and minimal spatter.
- 3) It is excellent in pitting corrosion resistance and stress corrosion cracking resistance.

## Notes on Usage

- 1) Use 100% CO<sub>2</sub> gas or Ar+20~25% CO<sub>2</sub> gas.
- 2) The optimum flow of CO<sub>2</sub> for shielding is 20~25ℓ/min.
- 3) Protect the weld with a screen to prevent blowholes caused by wind where the wind velocity is 2m/sec and more.
- 4) Keep the distance between tip & base metal at 15~25mm.

**Typical chemical composition of all-weld-metal (%) (Shielding gas : CO<sub>2</sub>)**

	chemical composition(%)								
	C	Si	Mn	P	S	Cr	Ni	Mo	N
AWS	≤0.04	≤1.0	0.5~2.5	≤0.04	≤0.03	24~27	8.5~10.5	2.5~4.5	0.2~0.3
WT-2594	0.03	0.54	1.1	0.021	0.003	26	9.3	3.5	0.24

**Typical mechanical properties of all-weld-metal (Shielding gas : CO<sub>2</sub>)**

	Tensile strength (N/mm <sup>2</sup> )	Elongation %	Impact value (J)	
			0°C	-30°C
AWS	≥760	≥15	-	-
WT-2594	887	23	-	-

**Size available and recommend welding parameters (DC+)**

Position		Dia	1.2(.045)	1.6(1/16)
			Current(A)	Current(A)
Flat	Current(A)		150~250	200~300
Horizontal Fillet			150~250	200~300
Vertical up			120~200	150~250

**Welding positions**



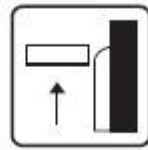
1G



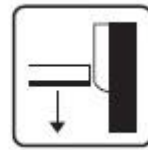
2F



2G



V-UP



V-DOWN



4G