

DAIKOFCW 347



AUSTENITIC STAINLESS STEELS

347

DESCRIPTION

Rutile flux cored wire for flat and horizontal position

The easy handling and the high deposition rate result in high productivity, excellent welding performance and very low spatter formation. The self-releasing slag makes cleaning and pickling easier providing together with increased travel speeds noticeable savings in time and costs. The wire shows good wetting behaviour and a finely rippled surface pattern. These Cr-Ni consumables are usually used for welding chromium-nickel stainless steel base metals of similar composition stabilized with either Nb or Ti.

SPECIFICATIONS

ISO 17633-A	T 19 9 Nb P	AWS A5.22	E347T0-1/4
DIN	-	Werkstoff Number	-
Certifications	-	Shielding	M21
Positions	PA, PB, PC	Current	DC+

ASME QUALIFICATIONS	FERRITE	PREN	HARDNESS
F-No (QW432) 6	3-12 FN	18.8	84HRB
A-No (QW442) 8			

CHEM. COMP. %	DEFAULT	MECHANICAL PROPERTIES	MIN	VARIANT
C	0.03	Tensile strength R _m MPa	550	610
Mn	1.2	Yield strength R _{p0.2} MPa	350	440
Ni	10.3	Elongation A (L ₀ =5d ₀) %	25	37
Cr	18.8	Impact Charpy ISO-V	-	80J
P	0.025	Impact Charpy ISO-V	-	-
S	0.005			
Si	0.45			

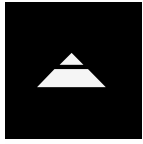
WELDING PARAMETERS	1.2 mm	1.6 mm
Ampere	120A - 280A	200A - 350A
Voltage	22V - 30V	26V - 30V
Packaging	Ø 1,2÷1,6mm	Ø 1,2÷1,6mm
Packaging Type	BS300 spool	BS300 spool



The information in this datasheet is the result of detailed research and is considered accurate as of the publication date. However, we cannot guarantee its complete accuracy, and it is subject to change without notice. Actual results may vary due to many factors like welding procedures, material composition, temperature conditions, bevel configuration, and specific manufacturing techniques. We accept no liability for any errors or omissions in this datasheet. For the most current information, please visit www.daikowelding.com.



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DESCRIPTION

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APPLICATION

Developed for welding Ti and Nb-stabilized 18Cr/8Ni stainless steel types 321 and 347, they are also suitable for unstabilized grades like 304/304L. Service temperatures typically range from -100°C to about 400°C. The applications parallel those of 308L, covering diverse sectors such as food, brewery, pharmaceutical equipment, architectural and general fabrication, and nuclear engineering. However, the 347 consumables mentioned here are generally unfit for elevated temperature structural applications where 0.04-0.08% carbon is specified for creep resistance; for such cases, consult data sheets 347H. For cryogenic uses requiring >0.38mm (15mils) Charpy lateral expansion at -196°C, select unstabilized weld metal with low carbon and controlled ferrite. No preheating requirement, a recommended maximum interpass temperature of 250°C, and no post-weld heat treatment (PWHT) necessity.

ALLOY TYPE

347 austenitic stainless steel for joining 321 and 347 base materials.

MICROSTRUCTURE

Austenite with a controlled level of ferrite, normally in the range 3-12FN.

MATERIALS

EN W.Nr.: 1.4541, 1.4543, 1.4561, 1.4550, 1.4552 (cast).

ASTM: 321, 347, CF8C (cast).

UNS: S32100, S34700.

