

# Techalloy® 330

AWS ER330

## CONFORMANCES

AWS A5.9 ER330

UNS N08331

ISO 14343: 2009 (18 69 H)<sup>e</sup>

**Techalloy® 330** electrodes are used to weld wrought and cast forms of stainless steels of similar chemical compositions, which offer good heat and scale resistance to 1800°F (980°C). However, high sulfur environments adversely affect the high temperature performance. The heat input must be kept to a minimum during welding to avoid the possibility of micro-fissuring.

Applications: Heat treatment, Furnace environments

## DIAMETERS / PACKAGING

Diameter in (mm)		MIG WIRE 33 lb (14.9 kg) Wire Basket	TIG 10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton
0.035	(0.9)	MG330035667	
0.045	(1.2)	MG330045667	
3/32	(2.4)		TG330093638
1/8	(3.2)		TG330125638

**DEPOSIT COMPOSITION**

	%C	%Cr	%Ni	%Mo	%Mn
<b>Requirements</b> AWS ER330	0.18 - 0.25	15.0 - 17.0	34.0 - 37.0	0.75 max.	1.0 - 2.5
<b>Typical Performance</b> Techalloy® 330	0.23	15.9	35.2		1.9
	%Si	%P	%S	%Cu	
<b>Requirements</b> AWS ER330	0.30 - 0.65	0.03	0.03	0.75 max.	
<b>Typical Performance</b> Techalloy® 330	0.42	0.01	0.005	0.10	

**TYPICAL OPERATING PROCEDURES**

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas Flow	Gas
MIG	0.035 (0.9) 0.045 (1.2)	26-29 28-32	160-210 180-250	30-50 CFH	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO <sub>2</sub>
TIG	3/32 (2.4) 1/8 (3.2)		120-175 150-220	20-40 CFH	100% Argon

Material Safety Data Sheets (MSDS) are available on our website at [www.techalloy.com](http://www.techalloy.com)

**TEST RESULTS**

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

**CUSTOMER ASSISTANCE POLICY**

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