



Stainless Steel BARE WIRE DATA SHEET

exocor 430

DESCRIPTION

Exocor 430 is a 16 Cr (wt.-%) alloy. The composition is balanced by providing sufficient chromium to give adequate corrosion resistance for the usual applications, and yet retain sufficient ductility in the heat-treated condition. (Excessive chromium will result in lower ductility.) Welding with filler metal of the ER430 classification usually requires preheating and postweld heat treatment.

Optimum mechanical properties and corrosion resistance are obtained only when the weldment is heat treated following the welding operation.

TYPICAL CHEMICAL VALUES

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
0.07	16.0	0.6	0.1	0.4	0.4	0.01	0.01	0.75

WELDING PARAMETERS

PROCESS	SIZE	VOLTS	AMPS	SPEED OF WELDING / GAS FLOW	SHIELDING GAS / FLUX
SAW	.093	29 - 32	300 - 350	20 - 30 IPM	Record IN Flux
	.125	29 - 32	400 - 550	20 - 30 IPM	Record IN Flux
GMAW	.035	29 - 33	160 - 180	30 - 50 CFH	98/99% Ar + 2/1% O ₂
	.045	29 - 33	180 - 220	30 - 50 CFH	or
	.062	29 - 33	210 - 250	30 - 50 CFH	97% Ar + 3% CO ₂
GTAW	.093	Direct Current; Electrode -		30 - 40 CFH	100% Ar

MECHANICAL PROPERTIES

Tensile Strength: 77,500 PSI 530 MPA
Yield Strength: 59,000 PSI 410 MPA
Elongation: 25%

CLASSIFICATION

Wire chemistry has been optimized for best performance and conforms to **AWS/SFA 5.9, Class ER430**. ISO 14343A, Class 17 and ISO 14343B, Class SS430.