



OK Flux 429 is a neutral, bonded flux intended for butt and fillet welding of carbon and low alloy steel plate. It combines good as welded and stress relieved mechanical properties with excellent performance. Its slag is generally self peeling, even in tight, narrow groove butt welds. It provides moderate tolerance of rust and mill scale. OK Flux 429 is used in offshore oil rig, bridge, ship, pressure vessel and structural fabrication. It will operate with DC and AC, single and multiwire systems at currents up to 1000 amps.

Flux Consumption
(lb. Flux / lb. Wire)

Voltage	DC+
26	0.73
30	1.02
34	1.33
38	1.46

Code and Specification Data:

F7A2-EM12K
AWS A5.17 / ASME SFA 5.17
F9A4-ENi4-Ni4
F6P4-EM12K
F8A2-EA2-A3
F8A4-ENi1K-Ni1
AWS A5.23 / ASME SFA 5.23
F8P0-EA2-A3
F7A4-EH12K

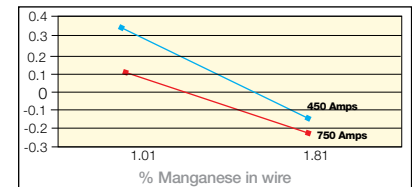
CERTIFIED BY C.W.B.- CSA W48
F7P0-EM14K
F7A2-EM13K
F8P4-ENi4-Ni4

Basicity Index: 1.1

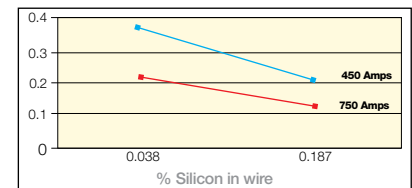
Chemical Composition:

SiO ₂ + TiO ₂	20	CaO + MgO	25
Al ₂ + MnO	40	Fluorides	10

% Mn pick-up from flux



% Si pick-up from flux



Typical Mechanical Properties

Wire	Weld Condition	Yield Strength		Tensile Strength		% Elong in 2"	CVN		Temp.		AWS Class
		ksi	(MPa)	ksi	(MPa)		ft.-lbs.	(J)	@ °F	(°C)	
Spoolarc 81	As Welded	66	455	79	545	28	48	65	-20	-29	F7A2-EM12K
Spoolarc 81	Stress Relieved 1 hr. @ 1,150°F	60	415	75	515	30	50	68	-40	-40	F6P4-EM12K
Spoolarc 29S	As Welded	67	460	83	570	27	38	42	-20	-29	F7A2-EM13K
Spoolarc 53	As Welded	71	490	85	585	28	30	52	-40	-40	F7A4-EH12K
Spoolarc 71	Stress Relieved 1 hr. @ 1,150°F	63	430	80	550	32	20	28	-20	-29	F7P0-EM14K
Spoolarc 40B	As Welded	77	530	88	605	25	21	28	-20	-29	F8A2-EA2-A3
Spoolarc 40B	Stress Relieved 1 hr. @ 1,150°F	75	515	88	605	26	26	35	0	-18	F8P0-EA2-A3
Spoolarc 75	As Welded	73	505	86	595	28	40	54	-40	-40	F8A4-ENiK-NiL
Spoolarc ENi4	As Welded	82	565	93	640	25	44	60	-40	-40	F9A4-ENi4-Ni4
Spoolarc ENi4	Stress Relieved 1 hr. @ 1,150°F	77	530	89	615	26	24	33	-40	-40	F8P4-ENi4-Ni4

Typical Undiluted Weld Metal Analysis (%)

Wire	C	Mn	Si	P	S	Cr	Ni	Mo	Cu
Spoolarc 81	0.06	1.40	0.45	0.020	0.015	-	-	-	-
Spoolarc 29S	0.07	1.70	0.70	0.020	0.012	-	-	-	-
Spoolarc 53	0.06	1.80	0.50	0.026	0.010	-	-	-	-
Spoolarc 71	0.06	1.58	0.58	0.018	0.009	-	-	-	-
Spoolarc 40B	0.06	1.40	0.40	0.023	0.012	-	-	0.48	0.48
Spoolarc 75	0.05	1.50	0.60	0.018	0.012	-	0.80	-	-
Spoolarc ENi4	0.06	1.30	0.40	0.021	0.009	1.7	1.79	0.15	0.15