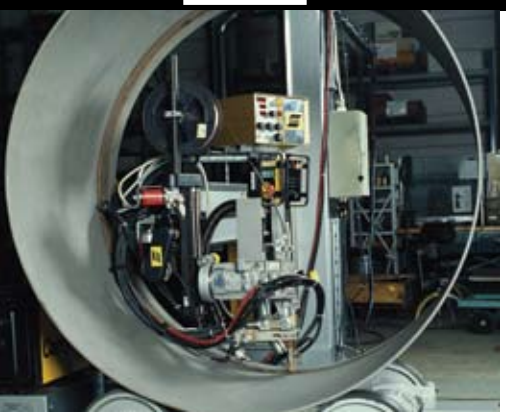
OK Flux 10.71
Bonded Flux

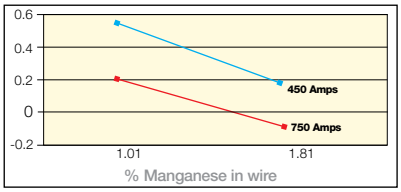


OK Flux 10.71 is a neutral, bonded flux intended primarily for multipass butt and fillet welding of carbon and low alloy steels. It combines outstanding welding performance with excellent weld properties. OK Flux 10.71 is suitable for use with AC and DC, single and multiwire systems at currents up to 1000 amps. It should not be used in applications where there is heavy rust or mill scale on the base plate. Among the many areas where OK 10.71 is used are general structural welding, bridge fabrication, heavy equipment fabrication and line pipe welding.

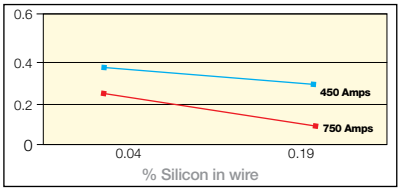
Flux Consumption
(lb. Flux / lb. Wire)

Voltage	DC+
26	0.73
30	0.94
34	1.25
38	1.51

% Mn pick-up from flux



% Si pick-up from flux



Code and Specification Data:
AWS A5.17;F7P5-EH12K
AWS A5.17; F7A5-EH12K
AWS A5.23; F8A4-ENi1K-Ni1
AWS A5.17; F7A2-EM14K
AWS A5.17; F7A4-EM13K
AWS A5.17; F7P4-EM14K
AWS A5.17; F7A4-EM12K

Basicity Index: 1.6

Chemical Composition:

$SiO_2 + TiO_2$	20	CaO + MgO	25
$Al_2 + MnO$	35	Fluorides	15

Typical Mechanical Properties

Wire	Weld Condition	Yield Strength		Tensile Strength		% Elong in 2"	CVN		Temp.		AWS Class
		ksi	(MPa)	ksi	(MPa)	(51 mm)	ft.-lbs.	(J)	@ °F	(°C)	
Spoolarc 81	As Welded	68	470	81	560	30	44	60	-40	-40	F7A4-EM12K
Spoolarc 29S	As Welded	73	505	87	600	30	30	41	-40	-40	F7A4-EM13K
Spoolarc 53	As Welded	77	530	91	625	28	45	61	-50	-46	F7A5-EH12K
Spoolarc 53	Stress Relieved 1 hr. @ 1,150°F	65	448	79	545	32	80	108	-50	-46	F7P5-EH12K
Spoolarc 71	As Welded	76	525	87	600	27	48	65	-20	-29	F7A2-EM14K
Spoolarc 71	Stress Relieved 1 hr. @ 1,150°F	74	510	92	635	30	38	51	-40	-40	F7P4-EM14K
Spoolarc 71	Stress Relieved 8 hrs. @ 1,150°F	74	510	91	625	30	35	47	-40	-40	F7P4-EM14K
Spoolarc 75	As Welded	78	540	91	625	28	43	58	-40	-40	F8A4-ENi1K-Ni1

Typical Undiluted Weld Metal Analysis (%)

Wire	C	Mn	Si	P	S	Cr	Ni	Mo	Cu
Spoolarc 81	0.07	1.50	0.50	0.020	0.011	–	–	–	–
Spoolarc 29S	0.06	1.80	0.80	0.014	0.007	–	–	–	–
Spoolarc 53	0.07	1.80	0.50	0.022	0.010	–	–	–	–
Spoolarc 71	0.06	1.70	0.60	0.018	0.009	–	–	–	–
Spoolarc 75	0.07	1.70	0.70	0.016	0.012	–	0.90	–	–