



NORME DI RIFERIMENTO / REFERENCED STANDARDS

EN ISO	AWS
EN ISO 14174: SA FB 1 55 AC H5*	

APPLICAZIONI / APPLICATION

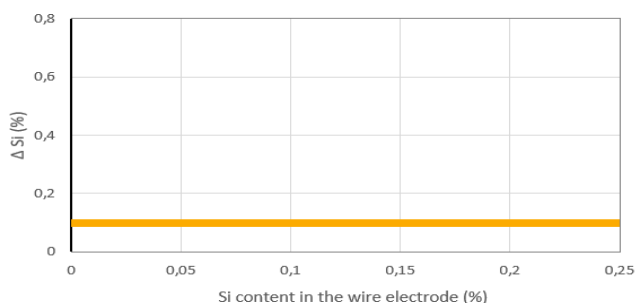
Flusso agglomerato altamente basico per la saldatura di acciaio al carbonio, acciai ad alta resistenza, acciai al cromo-molibdeno e per acciai al nichel per bassa temperatura. Comportamento neutro in termini di trasferimento di silicio e manganese. Adatto per essere utilizzato sia con fili singoli che multipli in D.C e A.C. Scoria a rapida solidificazione e di facile rimozione, deposito ben raccordato ed esente da incollature. Adatto per la saldatura di strutture fortemente sollecitate di forte spessore come offshore, cantieristica navale, caldareria e recipienti a pressione. Utilizzabile in corrente continua o corrente alternata fino a 800 A.*(X e J Factor controllati "su richiesta")

*Agglomerated fully basic flux for welding carbon steel, high strength steels, chromium-molybdenum steels, and for low temperature Ni alloyed steels. Neutral behavior in terms of silicon and manganese transfer. Suitable to be used in single and multi-wires. D.C.; A.C. Fast freezing slag, regularly shapes welds are deposited without undercut. Suitable for welding of thick walled component in heavy structural constructions as offshore, vessel, boiler and fabrication too. Use current DC or AC up to 800 A. *(X and J Factor controlled on request, as a result of low impurity levels such as P and S).*

COMPORTAMENTO METALLURGICO / METALLURGICAL BEHAVIOUR

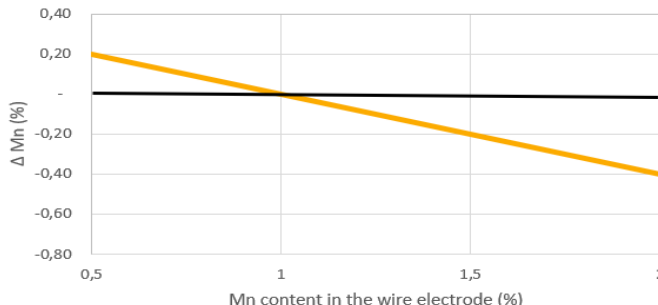
Neutro in termini di apporto o riduzione di Carbonio, lievi variazioni in Silicio, Manganese in accordo alla EN ISO 14174.

Pick-up Silicon



Neutral activity in Carbon, slight variations in Silicon, Manganese transfer according to EN ISO 14174.

Pick-up / Burn-out Manganese



COMPONENTI PRINCIPALI, INDICE DI BASICITÀ, GRANULOMETRIA / MAIN COSTITUENT, BASICITY INDEX, GRAIN SIZE

SiO ₂ + TiO ₂	Al ₂ O ₃ + MnO	CaO + MgO	CaF ₂ [%]
15%	20%	35%	30%

Basicità secondo Boniszewsky : 3.2.
Granulometria : EN ISO 14174 : 2 ÷ 2.0 mm.

Basicity to Boniszewsky : 3.2.
Grain size according to EN ISO 14174 : 2 ÷ 2.0 mm.



COMPOSIZIONE CHIMICA DEL METALLO DEPOSITATO /
ALL WELD METAL CHEMICAL COMPOSITION

FILII PIENI PER SAW SOLID WIRES FOR SAW		ANALISI CHIMICA DEL METALLO DEPOSITATO ALL WELD METAL CHEMICAL ANALYSIS								
INESUB Range	AWS	C [%]	Mn [%]	Si [%]	S [%]	P [%]	Cu [%]	Ni [%]	Cr [%]	Mo [%]
S2Si	AWS A5.17: EM12K	0.05 ÷ 0.15	0.80 ÷ 1.25	≤ 0.80	≤ 0.03	≤ 0.03	≤ 0.35	–	–	–
S3Si	AWS A5.17: EH12K	0.05÷0.15	1.50 ÷ 2.00	≤ 0.80	≤ 0.03	≤ 0.03	≤ 0.35	–	–	–
S2Mo	AWS A5.23: EA2	≤ 0.12	≤ 1.40	≤ 0.80	≤ 0.03	≤ 0.03	≤ 0.35	–	–	0.40 ÷ 0.65
EB2R**	AWS A5.23: EB2/R	0.05 ÷ 0.15	≤ 1.20	≤ 0.80	≤ 0.03	≤ 0.03	≤ 0.35	–	1.00 ÷ 1.50	0.40 ÷ 0.65
EB3R**	AWS A5.23: EB3/R	0.05 ÷ 0.15	≤ 1.20	≤ 0.80	≤ 0.03	≤ 0.03	≤ 0.35	–	2.00 ÷ 2.50	0.90 ÷ 1.20
S3NiMo	AWS A5.23: EF3	≤ 0.15	≤ 1.80	≤ 0.80	≤ 0.03	≤ 0.02	≤ 0.35	0.80÷ 1.10	–	0.45 ÷ 0.65
S2Ni1	AWS A5.23: ENi1	≤ 0.12	≤ 1.60	≤ 0.80	≤ 0.025	≤ 0.030	≤ 0.35	0.75 ÷ 1.10	≤ 0.15	≤ 0.35
S2Ni2	AWS A5.23: ENi2	≤ 0.12	≤ 1.60	≤ 0.80	≤ 0.025	≤ 0.030	≤ 0.35	2.00 ÷ 2.90	–	–
S2Ni3	AWS A5.23: ENi3	≤ 0.12	≤ 1.60	≤ 0.80	≤ 0.03	≤ 0.025	≤ 0.35	2.80 ÷ 3.80	≤ 0.15	–

CLASSIFICAZIONI METALLO DEPOSITATO /
ALL WELD METAL CLASSIFICATION

CLASSIFICAZIONI FILO FLUSSO SU METALLO DEPOSITATO IN TECNICA PASSATE MULTIPLE
ALL WELD METAL MULTIPLE PASS CLASSIFICATIONS FOR WIRE AND FLUX COMBINATIONS

Wire electrode		Test assembly ISO 15792-1: type 1.3		AWS A5.17M/5.23M	AWS A5.17/5.23
INESUB Range	AWS A5.17/5.23				
INESUB S2 Si	EM 12 K	ISO 14171-A	S 38 6 FB 2	F48 A6/P6-EM12K	F7A8-EM12K
INESUB S3 Si	EH 12 K	ISO 14171-A	S 46 6 FP S3Si	F55 A6/F49 P6 EH12K	F8A8/P7P8- EH12K
INESUB S2 Mo	EA 2	ISO 14171-A	S 46 4 FB S2Mo	F55A4/F49P4-EA2-A2	F8A4/F7P4-EA2-A2
INESUB EB2/R**	EB 2R**	ISO 24598-A	S S CrMo1 FB	F55P2-EB2R-B2R	F8P0-EB2R-B2R
INESUB EB3/R**	EB 3R**	ISO 24598-A	S S CrMo2 FB	F55P2-EB3R-B3R	F8P0-EB3R-B3R
INESUB S3 NiMo	EF3	ISO 26304-A:	S 55 6 FB S3Ni1Mo	F62A6/P6-EF3-F3	F9A8/P8-EF3-F3
INESUB S2 Ni1	ENi1	ISO 14171-A	S 42 6 FB S2Ni1	F49 A7/P7-ENi1-Ni1	F7A10/P10 E Ni1-Ni1
INESUB S2 Ni2	ENi2	ISO 14171-A	S 46 8 FB S2Ni2	F55 A7/P49P7-ENi2-Ni2	F8A10/F7P10 E Ni2-Ni2
INESUB S2 Ni3	ENi3	ISO 14171-A	S 50 8 FB S2Ni3	F55 A7/P7-ENi3-Ni3	F8A10/F7P10 E Ni3-Ni3

** X Factor< 150 ppm

PROPRIETÀ MECCANICHE DEL METALLO DEPOSITATO /
ALL WELD METAL MECHANICAL PROPERTIES

FILII PIENI PER SAW SOLID WIRES FOR SAW		PROPRIETÀ MECCANICHE DEL METALLO DEPOSITATO ALL WELD METAL MECHANICAL PROPERTIES									
INESUB Range	AWS	PWHT	Y.S. [MPa]	T.S. [MPa]	A [%]	KV 0°C [J]	KV -20°C [J]	KV -40°C [J]	KV -60°C [J]	KV -80°C [J]	KV -100°C [J]
S2Si	AWS A5.17: EM12K	–	≥ 390	≥ 480	≥ 26	≥ 160	≥ 100	≥ 40	–	–	–
S3Si	AWS A5.17: EH12K	–	≥ 470	≥ 550	≥ 25	≥ 120	≥ 100	≥ 80	≥ 47	–	–
S2Mo	AWS A5.23: EA2	620°C x 2 h	≥ 450	≥ 560	≥ 20	≥ 120	≥ 100	≥ 47	–	–	–
EB2/R**	AWS A5.23: EB2/R	700°C x 2 h	≥ 470	≥ 560	≥ 22	≥ 120	≥ 80	≥ 40	–	–	–
EB3/R**	AWS A5.23: EB3/R	700°C x 2 h	≥ 470	≥ 560	≥ 22	≥ 120	–	≥ 40	–	–	–
S3NiMo	AWS A5.23: EF3	–	≥ 570	≥ 670	≥ 22	≥ 120	≥ 80	≥ 70	≥ 47	–	–
S2Ni1	AWS A5.23: ENi1	–	≥ 440	≥ 540	≥ 22	≥ 150	≥ 140	≥ 100	≥ 80	–	–
S2Ni2	AWS A5.23: ENi2	–	≥ 470	≥ 550	≥ 22	≥ 150	≥ 140	≥ 120	≥ 80	≥ 47	–
S2Ni3	AWS A5.23: ENi3	–	≥ 500	≥ 590	≥ 22	–	≥ 160	≥ 140	≥ 100	≥100	–

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IDROGENO DIFFUSIBILE E RICONDIZIONAMENTO / DIFFUSIBLE HYDROGEN AND RECONDITIONING

Idrogeno diffusibile ≤ 5 ml/100g determinato su depositi saldato in Corrente Continua DC secondo ISO 3690 con flusso Ricondizionato a 300-350°C per 2 ore minimo

Diffusible hydrogen ≤ 5 ml/100g: determined in deposited metal acc. to the method described in ISO 3690 Type of current DC; redrying conditions 300 – 350 °C

IMBALLO ED ETICHETTATURA / PACKAGING AND LABELLING

Sacchi Ermetici da 25 kg in Alluminato multistrato

25 kg Hermetic bags in multilayer Aluminated foils.

CERTIFICAZIONI / CERTIFICATES

Disponibile su richiesta

Available on request