LINCOLNWELD® 842-H™

Submerged Arc (SAW) Flux

Excels in Typical Offshore Welding Joints

Increased Strength and Productivity

- Combine 842-H with the PowerWave® AC/DC 1000® SD for higher weld deposition rates at the same average heat input *(see chart #1)*
- 842-H particle strength prevents break down in central recovery systems allowing consistent deposit composition
- Consistent crack tip opening displacement (CTOD) toughness with each alloy system

Ultra-Low Diffusible Hydrogen

- Ability to deposit low-hydrogen weld metal, both directly out of the bag and after exposure to humid environments
- Produces less than 4ml/100g of diffusible hydrogen in deposited weld metal when welded on both AC and DC polarities *(see chart #2)*
- The hydrogen potential for as-received flux as well as for flux exposed to high humidity should be minimal to reduce the risk of hyrogen-related cracking *(see chart #3)*

Operator Appeal

- Excellent slag detachment and washout
- Smooth bead profile with low-entry angles
- Especially desirable for cap pass welding in fatigue-sensitive applications

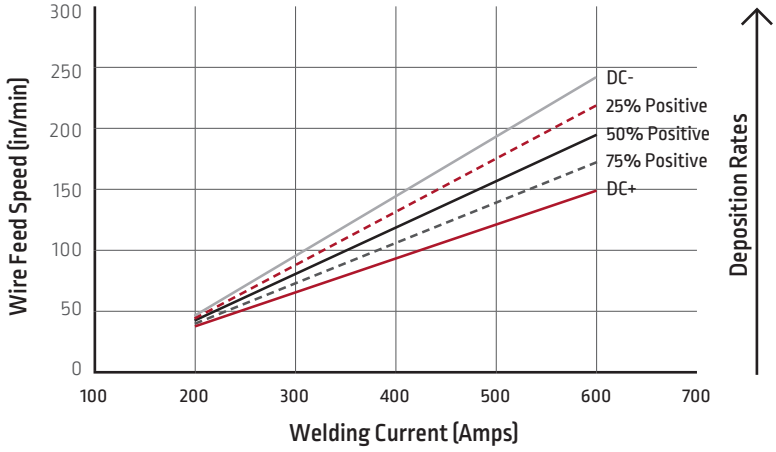
Dual Power Source

- Ability to operate in AC or DC
- High current capacity for single and multiple arc configurations

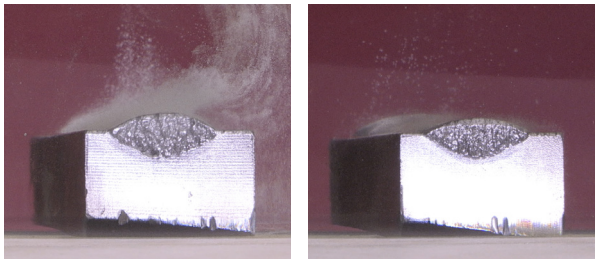
Classifications and Conformances

- Certificates of Conformance available for multiple alloys in the as welded (AW) and post weld heat treat (PWHT) conditions *(see chart on page 2)*
- Established Agency classifications with multiple alloys *(see chart on page 2)*

1. Increased deposition rates achieved through AC waveform control.



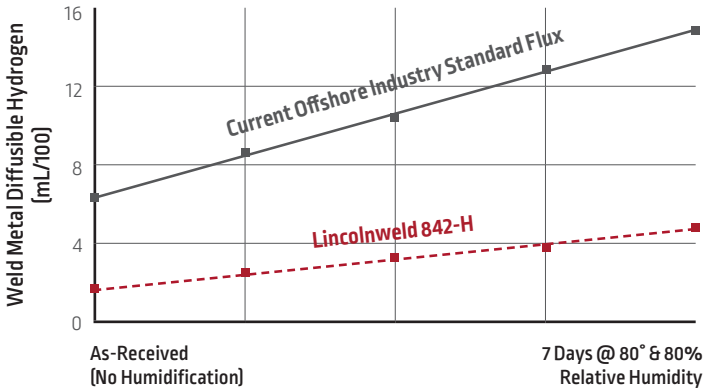
2. These pictures show the diffusion of hydrogen from weld samples when welded with industry standard flux and Lincolnweld 842-H.



Industry Standard
~6 mL per 100g weld metal

Lincolnweld 842-H
~2 mL per 100g weld metal

3. Diffusible hydrogen of fluxes upon humidificaion.



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LINCOLN ELECTRIC

PACKAGING

	50 lb (22.7 kg) Hermetically Sealed Pail
Lincolnweld® 842-H™	ED034371

FLUX COMPOSITION[1]

	%SiO_2	%MnO	%MgO	%CaF_2	%Na_2O	%Al_2O_3	%CaO	% Metal Alloys
Lincolnweld® 842-H™	15	2	32	21	2	21	4	1 max

AWS TEST RESULTS[1]

Flux/Wire Combination	Weld Condition	Yield Strength[2] MPa (ksi)	Tensile Strength MPa (ksi)	Elongation (%)	Charpy V-Notch J (ft·lbf)	Charpy V-Notch @ °C (°F)	AWS Classification (A5.17/A5.23)
L-61	As-Welded	440 (64)	520 (76)	33	318 (234)	-51 (-60)	F7A6-EM12K-H4
	Stress Relieved[3]	370 (53)	480 (70)	38	335 (247)	-62 (-80)	F6P8-EM12K-H4
L-S3	As-Welded	490 (72)	580 (84)	30	187 (138)	-62 (-80)	F7A8-EH12K-H4
	Stress Relieved[3]	420 (61)	550 (79)	32	161 (119)	-62 (-80)	F7P8-EH12K-H4
LA-85	As-Welded	540 (78)	610 (89)	28	171 (126)	-62 (-80)	F8A8-ENi5-Ni5-H4
	Stress Relieved[3]	510 (74)	600 (87)	30	149 (110)	-62 (-80)	F8P8-ENi5-Ni5-H4
LA-84	As-Welded	640 (93)	720 (104)	25	140 (103)	-62 (-80)	F9A8-EF3-F3-H4
	Stress Relieved[3]	610 (89)	700 (101)	28	83 (61)	-62 (-80)	F9P8-EF3-F3-H4

AGENCY CLASSIFICATIONS

Flux/Wire Combination	ABS[4]	DNV[5]	LR[6]	GL[7]
L-S3	5YQM420 AC H5	V Y42M AC H5	5Y42M H5	6Y42M AC H5
LA-85	5YQM500 AC H5	V Y50M AC H5	5Y50M H5	6Y50M AC H5
LA-84	5YQM550 AC H5	V Y55M AC H5	5Y55M H5	6Y55M AC H5

[1] See test results disclaimer, [2] Measured with 0.2% offset, [3] Stress-relieved for 1 hour at 621°C [1150°F]
[4] American Bureau of Shipping, [5] Lloyd's Register, [6] Det Norske Veritas, [6] Germanischer Lloyd

NOTE: For the most up-to-date AWS certificates of conformance please visit www.lincolnelectric.com

Safety data sheets (SDS) and certificates of conformance available from our website ***www.lincolnelectric.com***