

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 hydrogen-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

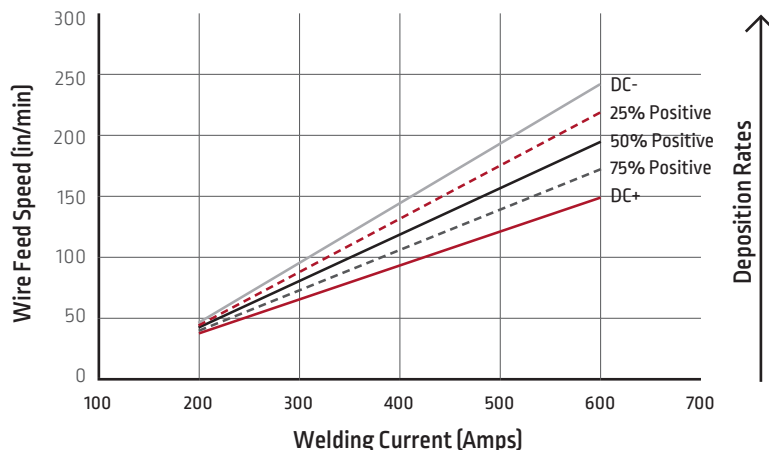
Dual Power Source

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

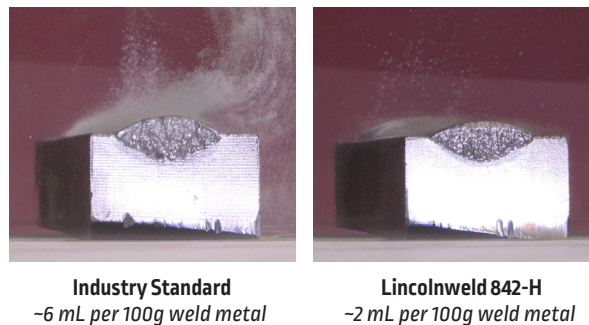
Classifications and Conformances

- 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]

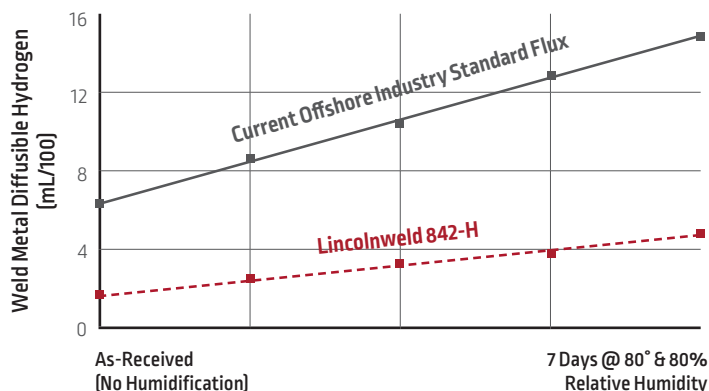
1. Increased deposition rates achieved through AC waveform control.



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



3. Diffusible hydrogen of fluxes upon humidification.



PACKAGING

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

FLUX COMPOSITION^[1]

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

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, [7] 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

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.