



**ESAB Welding & Cutting Products**

**CERTIFICATE OF CONFORMANCE  
TO SPECIFICATION REQUIREMENTS  
FOR WELDING ELECTRODES AND FLUXES**

SUPPLIED TO:

QUANTITY:  
DIAMETER:  
HEAT:  
FLUX LOT:

This is to certify that Spoolarc 95 electrode, Classification EM2, and ESAB OK Flux 429 submerged arc welding flux, AWS/ASME Classification F10A4-EM2-G-H8, as supplied on the above order, are of the same classification, manufacturing process and material requirements as the flux-electrode combination tested on April 13, 2011.

All tests required by Specification AWS/ASME SFA5.23 (F-No. 6) and ANSI/AWS A5.01 Schedule G were performed. The materials tested met all the requirements for Classification F10A4-EM2-G-H8. The chemical composition of the electrode and mechanical properties of the deposited weld metal were as follows:

**CHEMICAL COMPOSITION OF ELECTRODE**

C	Mn	Si	S	P	Cr	Ni	Mo	Cu	V	Ti	Zr	Total Other Elements
.06	1.69	.33	.001	.007	.09	1.87	.38	.06	.002	.02	.004	<.50

**CHEMICAL COMPOSITION OF DEPOSITED WELD METAL (A-No. 12)**

.06	1.87	.65	.008	.019	.10	1.80	.36	.05	<.01	.01	-
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WELD TEST NO.: R1-6794-11-2952 AS-WELDED

Radiography Test: Met all requirements

Tensile Test:

Yield Strength, ksi (MPa)	96.6	(666)
Tensile Strength, ksi (MPa)	103.2	(711)
Elongation, 2-in. %	25.0	

CHARPY V-NOTCH IMPACT 060403-1AW

Ft-Lbs @ -40° F (Joules @ -40 ° C)

31	(42)
31	(42)
34	(46)
32	(43)
<u>32</u>	(43)
32 (avg.3)	(43) (avg.3)

Welding Conditions:

Arc Voltage: 29  
Amperage: 550 DCEP  
Travel Speed: 16 ipm  
Diameter: 5/32-in.

Base Plate: A36, 1 in. thick Cladded  
Set-up: 30° incl. angle, 1/2 in. root gap  
No. of Layers: 6 layers of 2 passes, 1 of 3 passes  
Preheat & Interpass: 300 ± 25°F

WELD METAL DIFFUSIBLE HYDROGEN

ml/100g (Flux baked @ 800° F for 2 hours)  
3.8, 4.5, 5, 4.9 (4.6 avg.)

Rich McBride, Tested Products Supervisor

COMPANY  
ESAB Welding & Cutting Products

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