ESAB Welding & Cutting Products

CERTIFICATE OF CONFORMANCE
TO SPECIFICATION REQUIREMENTS
FOR WELDING ELECTRODES AND FLUXES

SECTION NO.: 14

SUPPLIED TO:

QUANTITY:
DIAMETER:
HEAT:
FLUX LOT:

This is to certify that Spoolarc 75 electrode, Classification ENi1K, and ESAB OK Flux 429 submerged arc welding flux, AWS/ASME Classification F7A4, F8A4-ENi1K-Ni1-H8, as supplied on the above order, are of the same classification, manufacturing process and material requirements as the flux-electrode combination tested on January 12, 2011.

All tests required by Specification AWS/ASME SFA5.23 and ANSI/AWS A5.01 Schedule G were performed. The materials tested met all the requirements for Classification F7A4, F8A4-ENi1K-Ni1-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	Ni	Cu	Cr	Mo	Total Other Elements
.08	.89	.46	.008	.004	.89	.07	.02	.01	<.50

CHEMICAL COMPOSITION OF DEPOSITED WELD METAL

									Ti+V+Zr
.07	1.48	.65	.007	.021	.81	.08	.05	<.01	<.01

WELD TEST NO.: 110110-1AW AS-WELDED

Radiography Test: Met all requirements

Tensile Test:

Yield Strength, ksi (MPa)	70.0 (483)
Tensile Strength, ksi (MPa)	84.5 (583)
Elongation, 2-in. %	29.0

CHARPY V-NOTCH IMPACT

Ft-lbs @ -40°F	(Joules @ -40°C)
27	(37)
37	(50)
34	(46)
27	(37)
31	(42)
28 (avg. 3)	(38) (avg. 3)

Welding Conditions:

Arc Voltage:	28.5
Amperage:	535 DCEP
Travel Speed:	16 ipm
Diameter:	5/32 in.

Base Plate: A516 Gd 70, 1 in. thick
Set-up: 30° incl. angle, 1/2 in. root gap
No. of Layers: 9 layers of 2 passes,
Preheat & Interpass: 300 ± 25°F

WELD METAL DIFFUSIBLE HYDROGEN
ml/100g (Flux baked @ 800° F for 2 hours)
5.0, 5.0, 4.5 (4.8 avg.)

Rich McBride, QA Welding Manager

COMPANY
ESAB Welding & Cutting Products

ADDRESS
3325 Middle Road
Ashtabula, OH 44005-0710

PHONE
843-673-7736

FAX
843-673-7766