

## Carondelet Division

8600 Commercial Blvd. • Pevely, MO 63070 USA Phone: 636-475-2199 • Fax: 636-479-3399 E-Mail: Charles.Ruud@MetalTek.com

1625

**Corrective Action** Carondelet Division Corrective Action Type NCR Date 3-1-06 CA Originator C. Ruud Applies to: A-1 Coil

## **Description of Defect / Non-Conformance**

Crack like defect found during machining of A-1 coil.

### Root Cause

The defects may be lack of fusion and sand inclusion. The area was repaired by welding prior to shipment. RT and LP were acceptable. This area is covered by views 62-63 and 113-114. During the processing of C-3 and A-1 coils problems surfaced with repeated lack of fusion defects. Corrective action reports 1371 and 1403 were issued. The action items were completed are the problem decreased significantly. Both CA are part of this CA report.

## **Corrective Action**

Completed.

## **Verification of Corrective Action**

Subsequent coils have not had the issue.

#### **Preventive Action**

Monitoring of gas lines and flow rates continues.

## Verification Of Preventative Action

Subsequent coils have not had the issue.

#### **Actual Completion Date**

October 4, 2005 for the last item on CA 1403.

Signed: C. Ruud

Chlund

CC: B. Craig, J. Edwards, E.J. Kubick, J. Markham, J. Galaske







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1371

Corrective Action Carondelet Division - CA / PA / RGA Database Corrective Action Type NCR Date 8/23/2005 CA Originator R. Suria Applies to: A-1Coil

## **Description of Defect / Non-Conformance**

Lack of fusion and porosity in weld repairs were observed during radiography of the R-2 through R-6 x-ray confirmation shots.

#### Root Cause

Porosity was caused by the use of fans in the welding booth. Lack of fusion was the result of poor operator technique and or fatigue. Some repair loops resulted from the original defects not fully being removed during excavation.

#### **Corrective Action**

Unplug fans during GMAW welding. Reviewed proper GMAW gun angles and excavation techniques with the welders.

#### **Verification of Corrective Action**

Re x-ray the defective welds.

**Estimated Completion Date** 8/31/05

**Actual Completion Date** 8/31/05

Signed: R. Suria

CC: Barry Craig, Joe Edwards, E.J. Kubick



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1403

Corrective Action Carondelet Division - CA / PA / RGA Database Corrective Action Type NCR Date 9-30-05 CA Originator C. Ruud Applies to: C-3 Coil

### **Description of Defect / Non-Conformance**

Lack of fusion and porosity in weld repairs were observed during radiography of the R-2 through R-7 x-ray confirmation shots.

#### **Root Cause**

Porosity and lack of fusion was caused by leaks in the lines feeding gas to the welding booths and leaks from the leads on one welding machine. Some repair loops resulted from the original defects not fully being removed during excavation.

#### **Corrective Action**

Took all welders off the main lines and supplied with bottled gas. Inspect all lines from the bulk tanks to the weld booth. Replaced defective lead. Reviewed proper excavation techniques with the welders. The start up procedure for welders has been revised to include a flow check. If flow is not adequate, welding will not be performed until repairs are complete and re test indicate proper flow.

#### **Verification of Corrective Action**

Re x-ray the defective welds.

Estimated Completion Date

9/16/05 for repairs, other actions 10/21/05.

#### **Actual Completion Date**

9/16/05 for bottle gas, repairs and RT. 10/4/05 for leads.

Signed: C. Ruud

CC: R Suria, B. Craig, J. Edwards, E.J. Kubick