



Carondelet Division

8600 Commercial Blvd. • Pevely, MO 63070 USA

Phone: 636-479-4499 • Fax: 636-479-3399

E-Mail: Charles.Ruud@MetalTekInt.com

Corrective Action 1538
Carondelet Division
Corrective Action Type NCR
Date 1-13-06 Revised 2-28-06
CA Originator C. Ruud
Applies to: B-1 Coil

Description of Defect / Non-Conformance

Scan performed by 3D Scanco indicated that the coil deviates from the model in some areas.

Root Cause

Detailed analysis has been performed. See report below.

Corrective Action

Addressed in each area below.

Verification of Corrective Action

A scan was performed with our equipment to verify dimensions. Areas that show excess material on this report were riser pads. We washed these areas down using the information from the scan to get closer to the intended as-cast profile. One area on page 7 of the report ("Annotation View 1") shows an area that was scant stock. It was built up with weld material utilizing information from the scan. Hand measurements verified the dimensions.

Preventive Action

Pending.

Verification Of Preventative Action

Pending

Estimated Completion Date

Prior to shipment of B-1.

Actual Completion Date

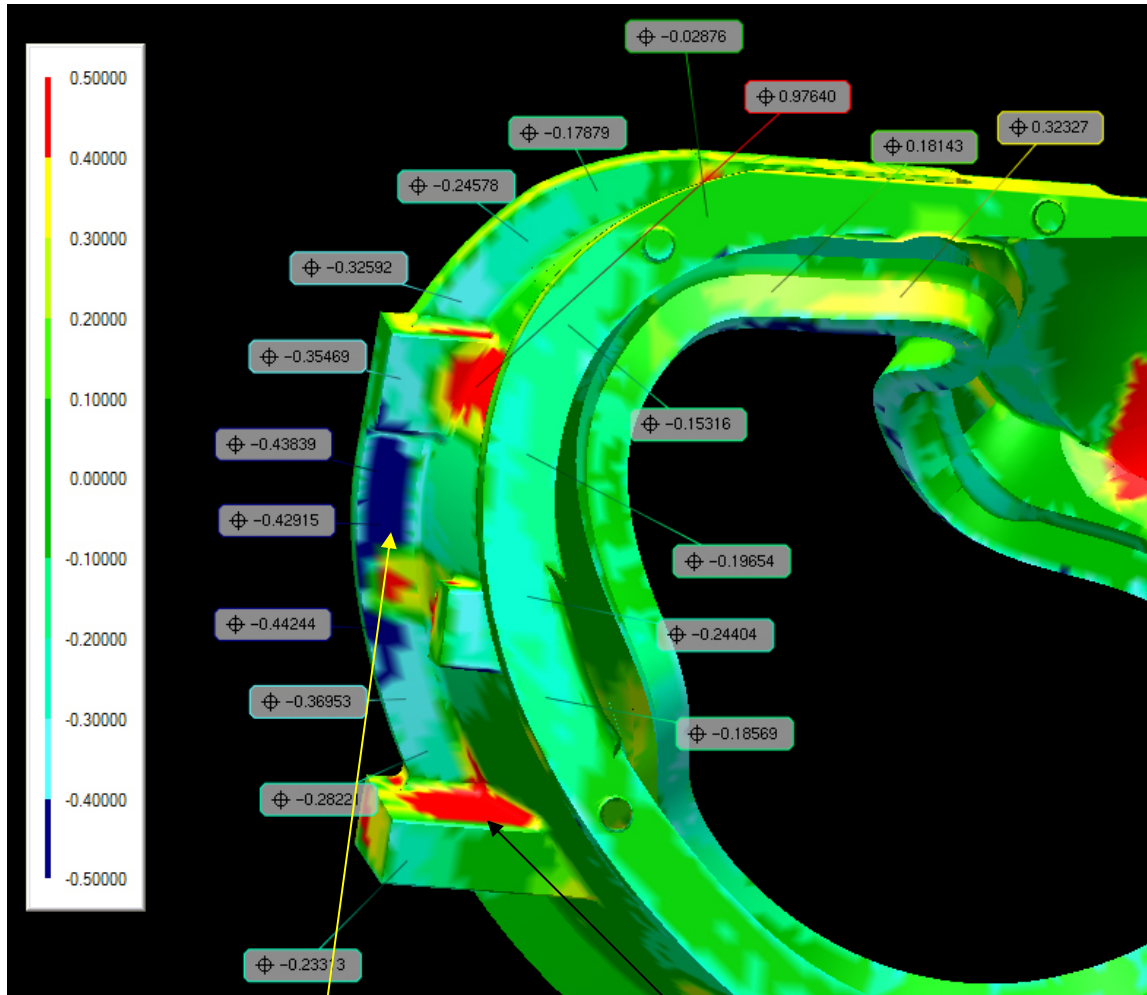
2-28-06

Signed: C. Ruud

1-21-06 Roger Broman / MetalTekInt - Carondelet Div.

Areas of Note

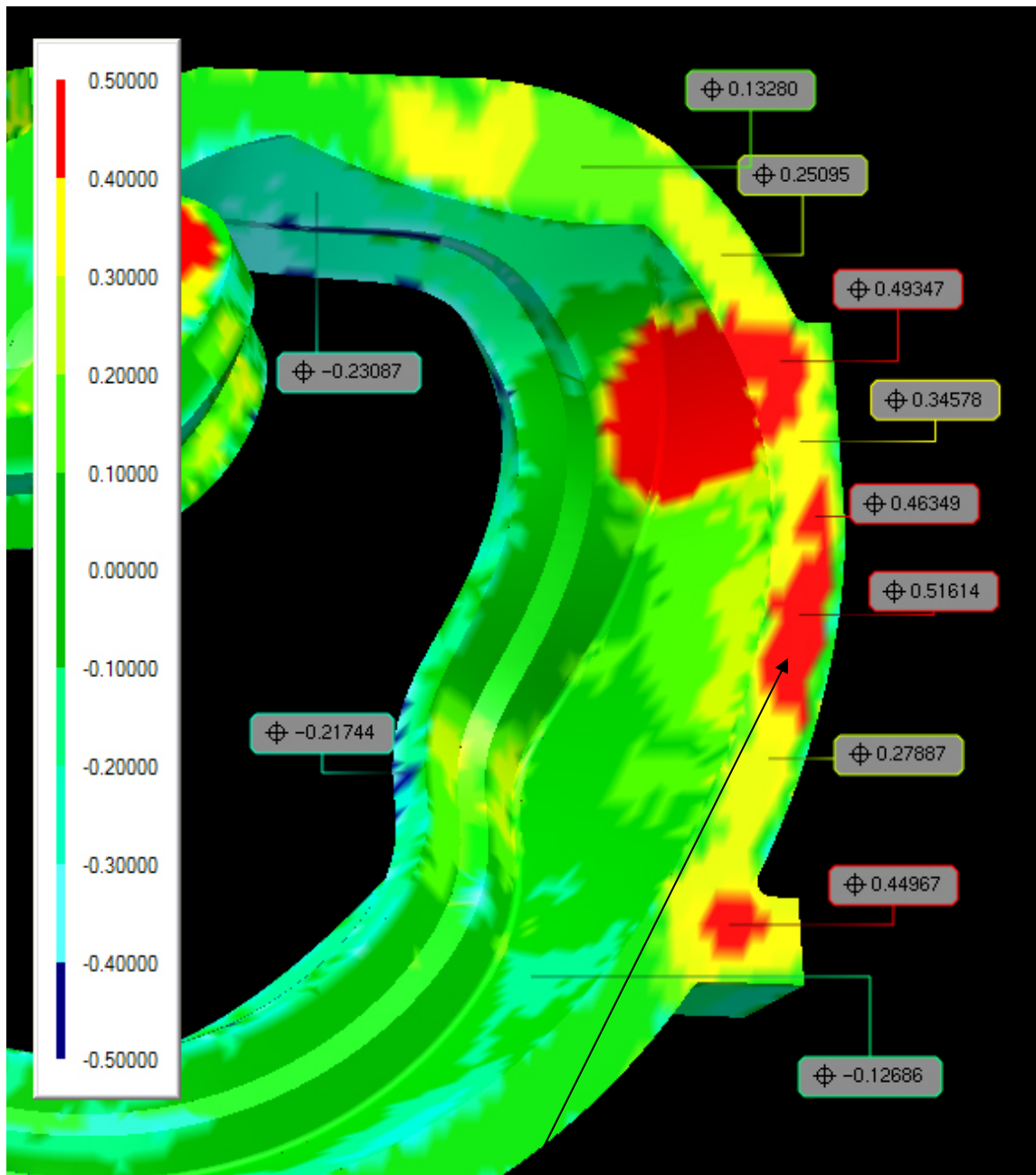
Area 1:



An area on the back-side of the cope flange is showing a surface profile approximately 7/16" below expected. This area will be addressed for Coil B-2 by adding approximately 7/16" stock into this area in corebox #9. On B-1 we will build up this area by welding. The opposite side will require additional machining to remove the excess.

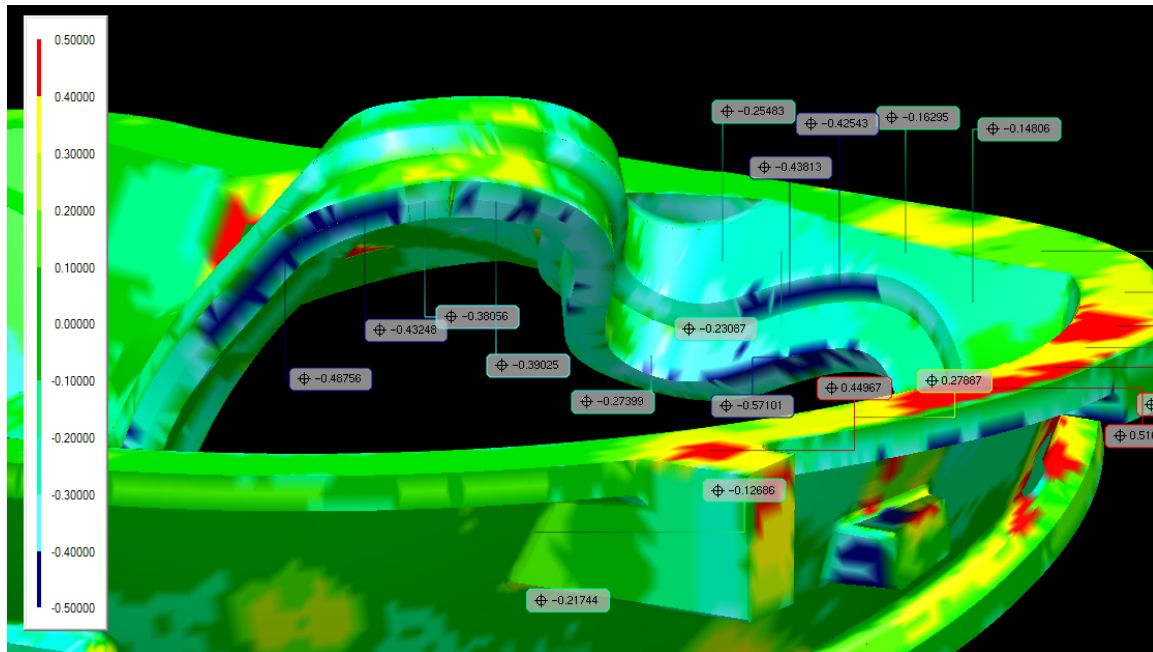
The red area on the side of the ear is not a riser pad or any other expected condition. This will need to be further analyzed with our scan

Area 2:



This area is on the opposite side of the flange of Area 1, but cannot be immediately related to Area 1. A riser sits directly over this spot and the excess stock could be a result of the riser contact not being cut down flush to the flange. At this point, as planned, all of the riser contact areas show the same excess stock condition. They will be worked down closer to the intended flange surface later in the process.

Area 3:

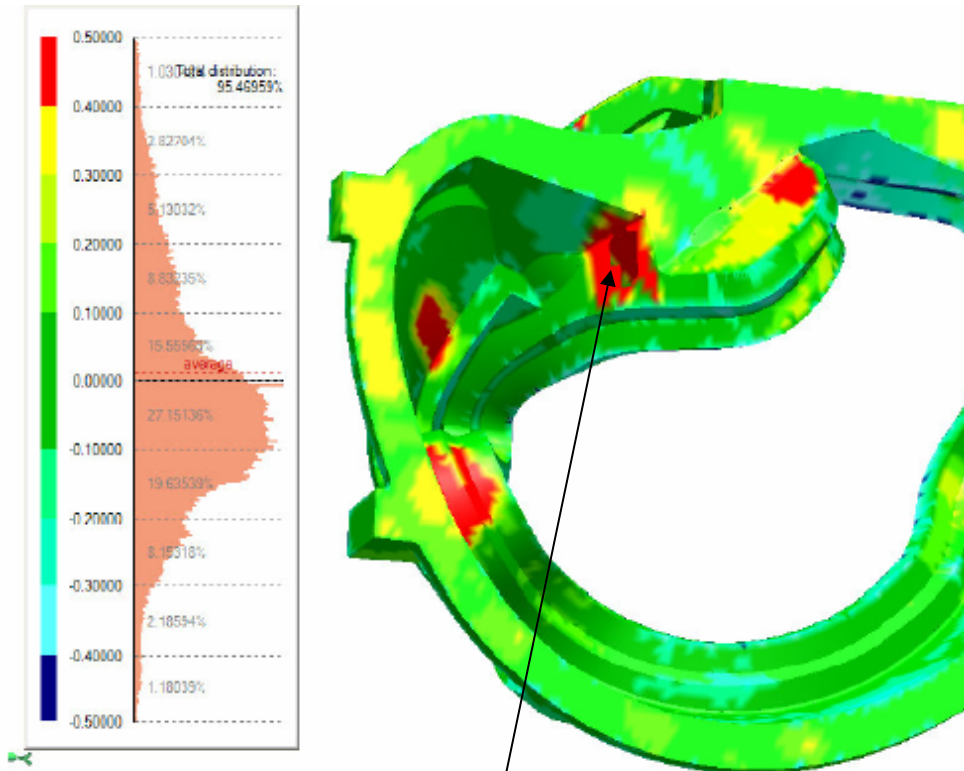


There are a few areas around the race track that display a loss of machine stock anywhere from 3/8" to 9/16". There was 1" machine stock planned in this area, so stock still remains, but the tooling will be inspected for flaws and repaired as needed.

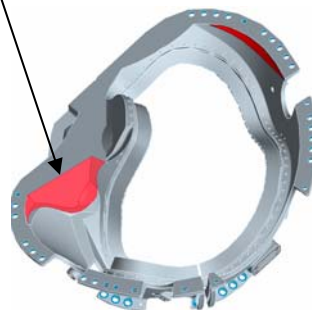
Area 4: (see page 8 of the Scanco report)

Overall wall thickness shows a condition very similar to the A coils we have processed. Scanco's analysis shows wall thicknesses in the range of 1.21" to 1.54" which is what we would have expected based on Coil A results. No action is planned for this condition. We recommend use as is.

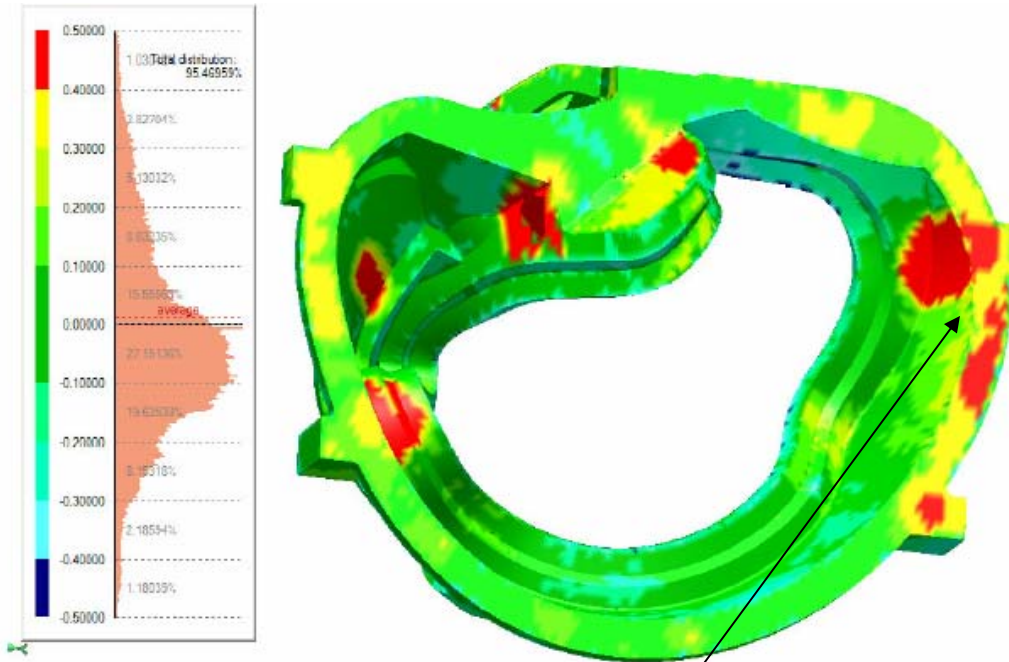
Area 5:



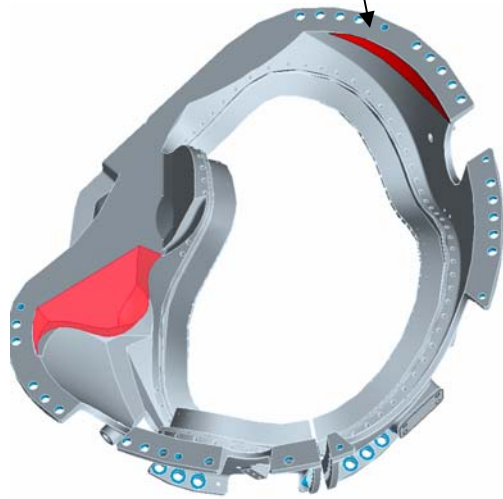
This wing area interface contains a riser pad that will require removal. The rest of the interface seems to be within a +/- 0.2" profile, but due to the color scheme used I cannot tell if it tends toward the plus or minus side of that tolerance. Our layout scan will be clearer in this regard.



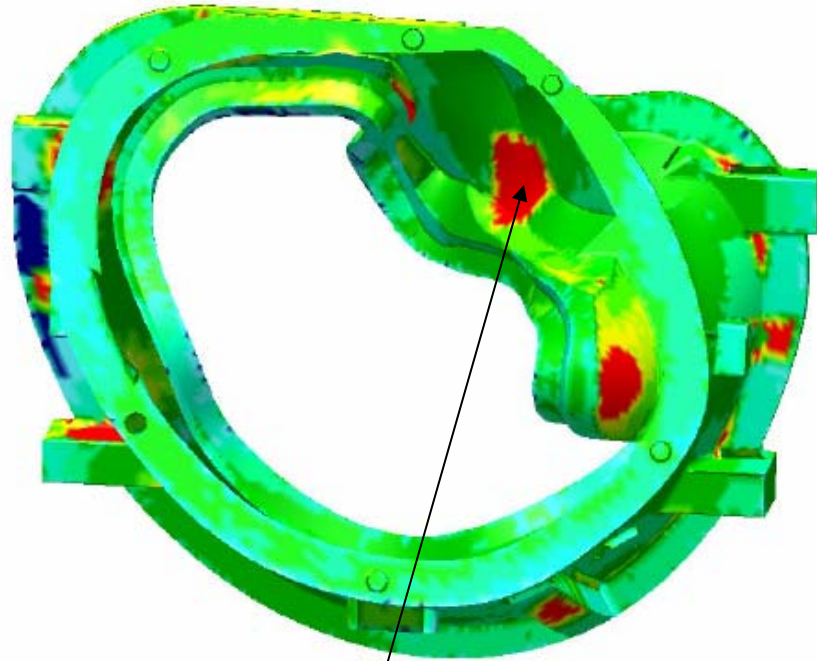
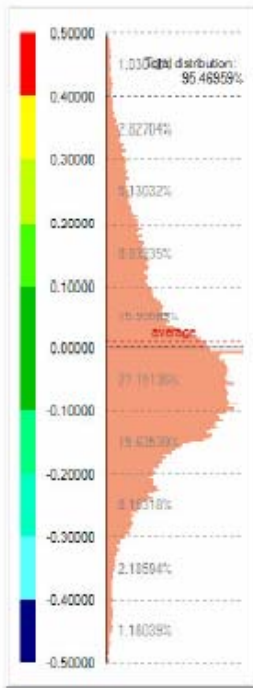
Area 6:



The narrow wing interface here is partially covered by a riser contact that will require removal. The balance of the area is 0.2-0.4" above the intended profile and will require material to be removed.



Area 7:



This wing area interface contains a riser pad that will require removal. The balance of the area is contained within the +/- 0.2" tolerance band, but once again due to the color scheme, I am not able to discern which side of the tolerance the part tends toward. Our scan will show this clearly.

