

<i>NCSX RFD</i> <i>Part I</i>	<b>Number:</b> NCSX-RFD-14-003	<b>RFD Description:</b> Material Testing in Transverse and Longitudinal Directions
<b>Initiator:</b> C. Rudd		<b>Organization:</b> MetalTel
<b>List of Impacted Documents:</b> ( <i>Specification, MIT/QA Plan, SOW, drawing, etc.</i> ) NCSX-CSPEC-141-03-07 Section 4.2.2		
<b>Cost Impact:</b> ( <i>If none, so state</i> ) NONE		
<b>Schedule Impact:</b> ( <i>If none, so state</i> ) NONE		
<b>Quality Impact:</b> ( <i>If none, so state</i> ) NONE		
<b>State Requirement Deviation is Requested For:</b> ( <i>Specification, MIT/QA Plan, SOW, drawing, etc.</i> ): Relaxation of material testing requirement of CSPEC Section 4.2.2 which requires that the material be tested in the transverse and longitudinal directions.		
<p><b>Full Description of the Deviation Requested:</b> (<i>Use continuation pages, e-mails, letter, sketches, etc. as needed and include amplifying information as appropriate to support deviation request.</i>)</p> <p>This section requires that material be tested in the transverse and longitudinal directions. This is performed when testing wrought materials, but is typically not performed in cast materials as it offers no significant information. The primary reason is that in cast materials, the grain structure is equiaxed, uniform, and has no directionality.</p> <p>This deviation request will apply to all 18 coil castings.</p> <p>MetalTek Corrective Actions/NCRs #1301 and #1302 also dated May 29, 2005, address this issue.</p>		
<p><b>Attachments:</b></p> <ul style="list-style-type: none"> <li>• MetalTek Request for Deviation dated May 29, 2005</li> <li>• MetalTek Corrective Action/NCR #1301 dated May 29, 2005 (C-1 Coil Casting)</li> <li>• MetalTek Corrective Action/NCR #1302 dated May 29, 2005 (C-2 Coil Casting)</li> </ul>		
<p><b>Initiator Signature:</b> <u>On Record in the Attached Letter</u>      <b>Date:</b> <u>May 29, 2005</u></p>		

<i>NCSX RFD</i> <i>Part III</i>	<b>Number:</b> NCSX-RFD-14-003	<b>RFD Description:</b> Material Testing
<b>RLM:</b> Brad Nelson		<b>Organization:</b> Oak Ridge
<b>Impact on Interfaces with Other WBS Elements/Items:</b> <i>(If none, so state)</i> NONE		
<p><b>RLM Recommended Disposition:</b></p> <p><input checked="" type="checkbox"/> Approve   <input type="checkbox"/> Do Not Approve (If recommendation is to approve, ECP will be assigned)</p> <p><b>Additional remarks:</b></p> <p><b>Cognizant Engineer Comments:</b>  Our projected factors of safety on allowables (based on the spec properties required, not actuals, which are typically much higher at 77K and would make these factors even higher) are in the range of 2-3. Deviations in properties in transverse and longitudinal directions are estimated to be in the range of 20%. Therefore adopting this change will simplify testing requirements without putting our strength requirements at risk.</p> <p>Recommend acceptance of deviation and “Accept as Is” for the two NCRs. CSPEC will be revised to delete the requirement to test in two directions.</p> <p><b>RLM Comments:</b>  Approve – CSEPC to be revised by June 15, 2005 to delete the requirement to test in two directions. There is no reason to take the measurements in both directions in a casting.</p>		
<b>RLM Signature:</b> _____		
<b>Project Disposition: (Include ECP Number):</b> 033 (Revises CSPEC)		



Peter Djordjevich

5/29/05

EIO

RE: Deviation Request

This is to request a deviation from the requirements of NCSX-CSPEC-141-03-07 SECTION 4.2.2.

This section requires that material be tested in the transverse and longitudinal directions. This is performed when testing wrought materials. This typically not performed in cast materials, as it offers no significant information. The primary reason is that the grain structure is equiaxed, uniform and has no directionality.

This request applies to all eighteen coil castings.

If there is any additional information required, please contact me.

A handwritten signature in black ink, appearing to read "C. Ruud".

C. Ruud  
Quality Manager  
636-475-2199  
CC: Joe Edwards, Geoff Mergel, Rick Suria





Corrective Action 1301  
Carondelet Division - CA / PA / RGA Database  
Corrective Action Type NCR  
Date 5/29/2005  
CA Originator C. Ruud  
Pattern Number: C-1 Coil

**Description of Defect / Non-Conformance**

Failed to differentiate two directions of test material on pattern/casting per the requirement of NCSX-CSPEC-141-03-07, SECTION 4.2.2.

**Root Cause**

Failed to communicate specification to Pattern Shop to add cast on test material specimens in the transverse direction.

**Corrective Action**

Will request a deviation to eliminate requirement.

**Verification of Corrective Action**

N/A

**Preventive Action**

Create Inspection and Test Plan summarizing all requirements.

**Estimated Completion Date**

6/15/05

**Actual Completion Date**

A handwritten signature in black ink, appearing to read "C. Ruud".

Signed: C. Ruud

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



Corrective Action 1302  
Carondelet Division - CA / PA / RGA Database  
Corrective Action Type NCR  
Date 5/29/2005  
CA Originator C. Ruud  
Pattern Number: C-2 Coil

**Description of Defect / Non-Conformance**

Failed to differentiate two directions of test material on pattern/casting per the requirement of NCSX-CSPEC-141-03-07, SECTION 4.2.2.

**Root Cause**

Failed to communicate specification to Pattern Shop to add cast on test material specimens in the transverse direction.

**Corrective Action**

Will request a deviation to eliminate requirement.

**Verification of Corrective Action**

N/A

**Preventive Action**

Create Inspection and Test Plan summarizing all requirements.

**Estimated Completion Date**

6/15/05

**Actual Completion Date**

A handwritten signature in black ink, appearing to read "C. Ruud".

Signed: C. Ruud

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