

Customer: ENERGY INDUSTRIES OF OHIO

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Part: SE141-114 / MODULAR COIL WINDING FORM TYPE

Drawing ID: MCWF TYPE-A XRAY MA Revision: 1
 W/O Links: 1-Type:W: 65709/4.0 Sub: 1

Customer P.O.: S005242-F/Ln:4
 Serial No./Qty: A4

Reported By: MIKE GRIFFITH
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Problem: Part rejected per the requirements of ASTM A703/A703M, no indication to be greater than .08".
 Shot 26-30 reveled area of shrink extending from the base of the T upward approx. 2 - 2.5".
 Shot 41-45 has three .25" long voids between holes 43 and 44.

Proposed Disposition:

SUBMIT TO CUSTOMER FOR REVIEW.

Number of additional pages: 4 page attachment

Customer Disposition: Use As Is Rework Repair Scrap Replace

Each of these defects were discussed during a conference call on 11/14/06 attended by D. Williamson, L. Sutton, F. Malinowski, J. Chrzanowski, L. Dudek, P. Heitzenroeder, P. Djordjevich, N. Horton, M. Griffith, and R. Sheppard. Refer to the attached photos. The first photo shows three 0.25" (~6 mm) indications between holes 43 and 44. This defect is shown in Shot 41-45. Williamson noted that the stress in this area is 80-140 MPa, which, as shown in the figure below, would result in a low crack growth rate; therefore this defect can be accepted as is.

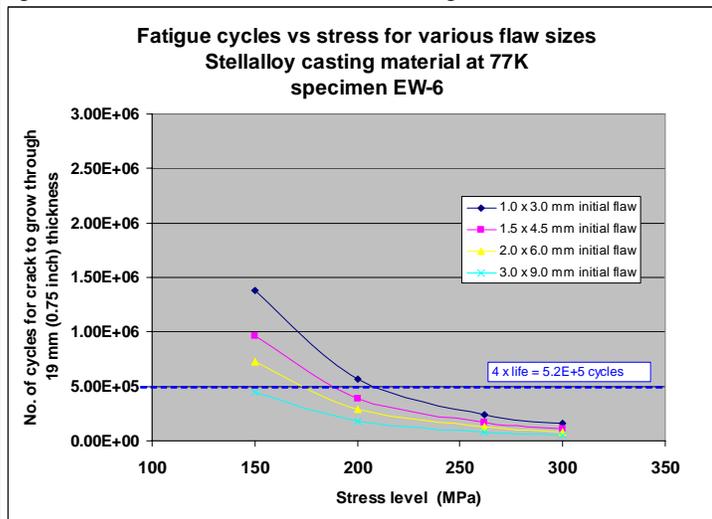


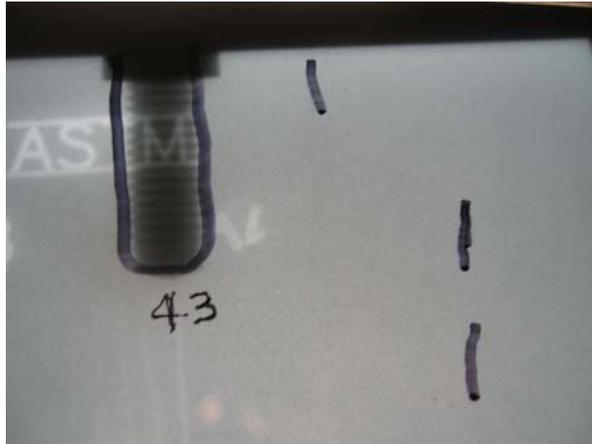
Photo 5 shows a 2" to 2.5" indication below hole #28. This defect is shown in Shot 26-30; EIO believes it is a hot tear. The depth of the defect (which we consider a crack) is unknown. However, Williamson reviewed the stress in this area and found it to be very low (~16 MPa) and compressive, which inhibits crack growth; therefore it is accepted as is.

NCSX Tech. Rep.:

NCSX RLM:

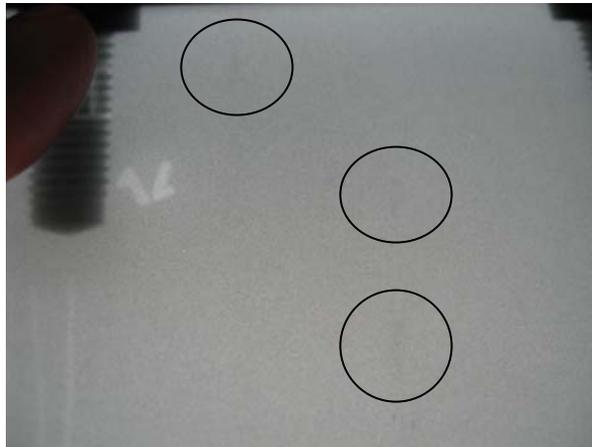
Major Tool Implemented By: _____ Title: _____ Date: _____

NC20741 Attachment – A4 RT Failures



The picture to the left is of an overlay that shows the three .25" long rejections between holes 43 and 44.

The picture below is the actual film. The defects are circled but difficult to see with a picture.

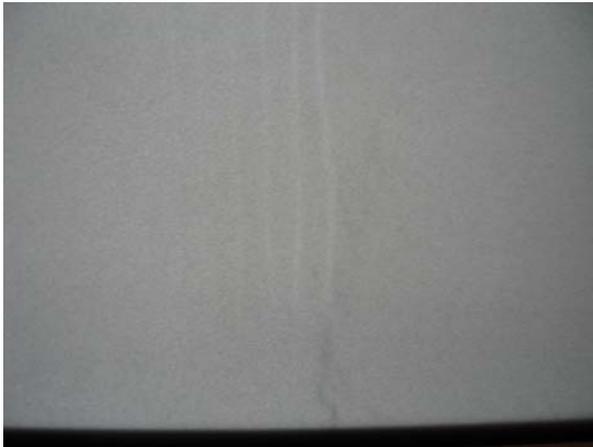


NC20741 Attachment – A4 RT Failures



The picture to the left is of an overlay that shows the reject directly below hole 28. This indication did show up during the PT inspection on the D side of the T but it has a “Y” shape to it that we did not see during PT.

The length of this defect is 2” – 2.5” from the base upward.





Industrial Services, Inc.

TCM Division

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RADIOGRAPHY READER SHEET

Form # 20-3A Rev. 3

Client Major Tool Machine		Interpreter/Level Robert Weaver II		Radiographer Robert Weaver		Job No. 15860001		P.O. No. NA		Date 11/17/06	
Isotope/X-Ray IR192		Dia. X Len/KV 106"x.106"		Curies/MA 21		SOD 14.25"		Time 3:00		Film Processing Arto	
Weld Process / Heat Number NA		Material Diameter NA		Material Thickness .75"		Penetrator ASTM B		Shim NA		Acceptance Standard NO Indication > .080"	
Description 65709/40/1134/88 SE141-114 rev.8 /A4		Density Readings through IQ(s) & Area of Interest 2.0-3.5		Remarks: Refer to Film Identification for Special Requirement for ASME Sec XI NA		Film Type / 1 or 2 0.10"		PB Screens 0.10"		Film Technique Double	
Densitometer S/N: 12105		Cal Date: 11/2/06		MFG/Speed Kodak AA		MIS-MATCH		FILM ARTIFACT		VISUAL CONCERNS	
Fitting		SEAM OR FITTING		FILM INTERVAL		FILM NUMBER		WELDER IDENTIFICATION		PENETRATOR	
T		26-30		NA		1B		.016"		QUALITY LEVEL	
areas		41-45		↓		↓		↓		SIZE	
↓		61-65		↓		↓		↓		SLAG	
↓		↓		↓		↓		↓		POROSITY WITH TAIL	
↓		↓		↓		↓		↓		CRACK	
↓		↓		↓		↓		↓		LACK OF PEN	
↓		↓		↓		↓		↓		LACK FUSION	
↓		↓		↓		↓		↓		INTERNAL CONVEXITY	
↓		↓		↓		↓		↓		INTERNAL CONCAVITY	
↓		↓		↓		↓		↓		TUNGSTEN	
↓		↓		↓		↓		↓		MELT-THROUGH	
↓		↓		↓		↓		↓		BURN-THROUGH	
↓		↓		↓		↓		↓		CRATER-PIT	
↓		↓		↓		↓		↓		OXIDATION	
↓		↓		↓		↓		↓		INTERNAL UNDERCUT	
↓		↓		↓		↓		↓		EXTERNAL UNDERCUT	
↓		↓		↓		↓		↓		ALIGNED INDICATIONS	
↓		↓		↓		↓		↓		WELD CONTOUR	
↓		↓		↓		↓		↓		MIS-MATCH	
↓		↓		↓		↓		↓		FILM ARTIFACT	
↓		↓		↓		↓		↓		VISUAL CONCERNS	
↓		↓		↓		↓		↓		FILM DENSITY	
↓		↓		↓		↓		↓		SEE REMARKS	
↓		↓		↓		↓		↓		ACCEPT	
↓		↓		↓		↓		↓		REJECT	

11/17/06
Date

Customer Representative Signature

Robert Weaver II
TEAM Technician Signature

RT Map of High Stress Region

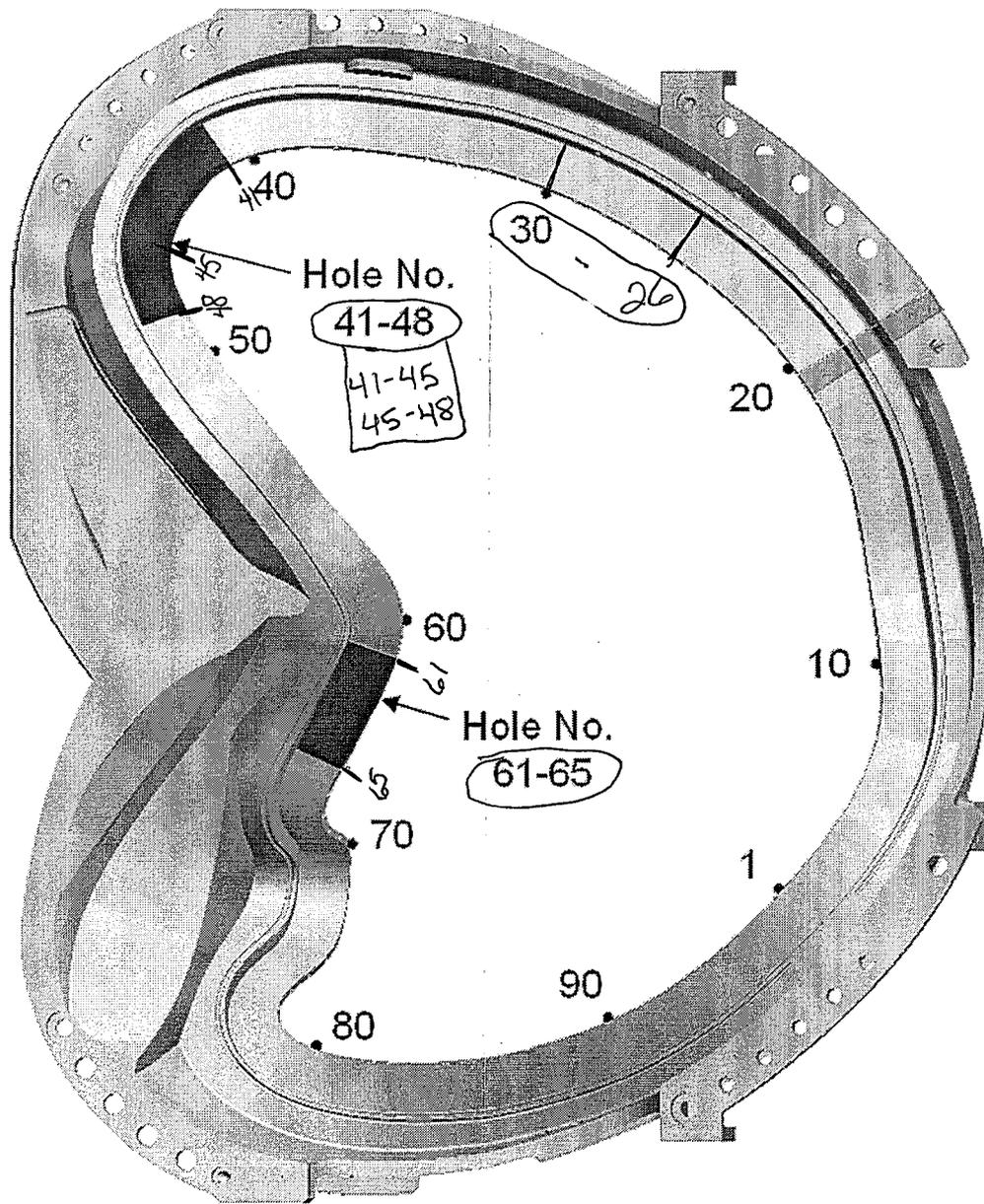


Figure 1 High Stress Region Identification for Type-A MCWF

65709/4.0/1/134/818
SE141-114 rev. 8 /A4
11/7/06
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