MTM N/C: 18715

Customer:	ENERGY INDUSTRIE	CS OF OHIO			
	NANCY HORTON		Telephone: 216-496-2314		
E-Mail:	NKHFlowen@aol.com		Fax: 216-328-2001		
Part:	SE141-116 / MODULA	R COIL WINDING FORM TYPE	Customer P.O.: S005242-F/Ln:2		
Drawing ID:	SE141-116	Revision: 6	Serial No./Qty: C2		
Reported By:	MIKE GRIFFITH		Telephone: 317-636-6433		
	mGriffith@MajorTool.co	om	Fax: 317-634-9420		
Problem:	NON-CONFORMANCE 1 PART IS REJECTED PER ASTM A903/A903M Level I. INDICATION IS V-SHAPED AND IS APPROXIMATELY .450" IN LENGTH ON THE LONGEST LEG (SEE PICTURES). INDICATION IS ON THE THIN SECTION OF THE T, LOCATED BETWEEN HOLES 84 AND 85. SEE ACCOMPANYING PHOTOS.				
	NON-CONFORMANCE 2				
	PART IS ALSO REJECTED PER ASTM A903/A903M LEVEL II. INDICATIONS ARE JUST OVER THE				
	ACCEPTABLE SIZE RANGE. SEE ACCOMPANYING PHOTOS.				
Proposed Dispo					
Number	CUSTOMER TO ADVIS				
Customer Dispo	osition: [X] Use As Is	5 []Rework []Repair	[]Scrap []Replace		
	This NCR refers to MC	CWF C2. Please see Attachment I for I	backup data for this disposition.		
Tec	h. Rep. Approval:				

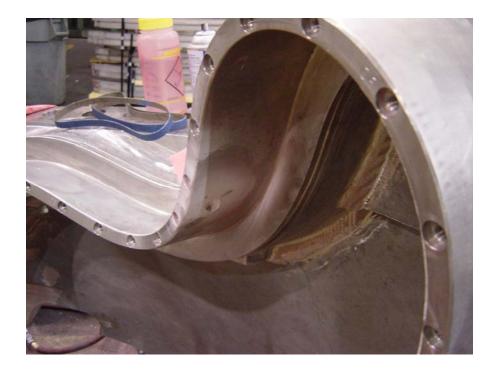
RLM Approval:

Non-conformance 1

Major Tool Implemented By:	Title:	Date:

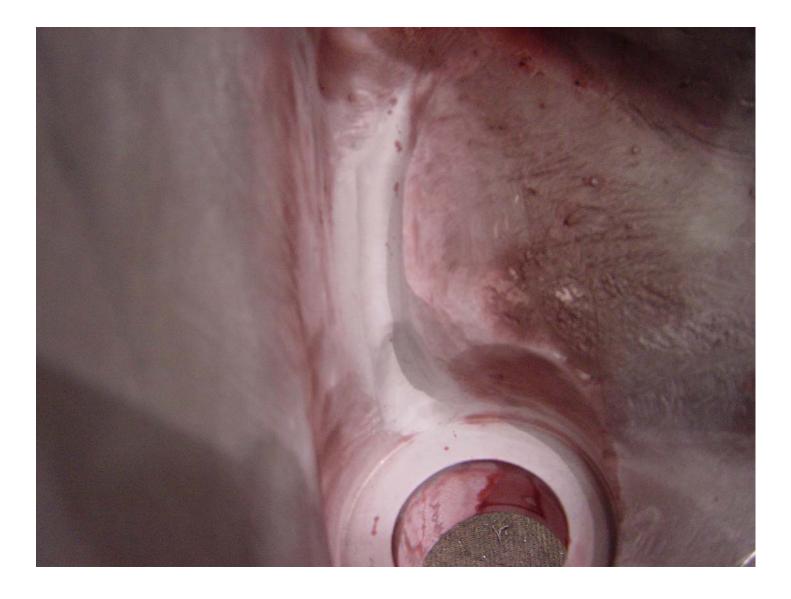
 $n:\mbox{\sc mtmapps\Mtnonc14.qrp}$

Major Tool and Machine, Inc. 1458 East 19th Street, Indianapolis, IN 46218-4289 Tel: 317-636-6433 Fax: 317-634-9420





Non-conformance 2



Attachment I: Disposition of NCR # 18715 for MCWF C-2

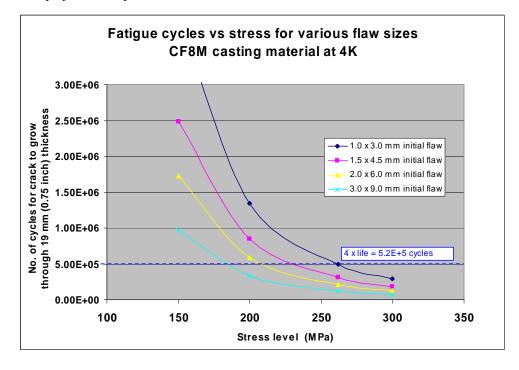
NCR #1: Disposition: Accept AS IS.

As can be seen in the photos below, the non-conforming linear indication

(in the ground depression) is ~ 11 mm long. It is located between bolt holes 84 and 85. The stress in this region is ~ 60 MPa, but it is adjacent to an area where the stress is ~ 120 MPa.



The recommendation to accept "AS IS" is based on the adequacy of the fracture lifetime with an 11 mm initial flaw in the T with a stress of 60 MPa. The plot below is from an internal NCSX Project Power Point slide set entitled "fracture story-3". The plot shows that an initial flaw size 3 x 9 mm would meet 4 x life to crack through the T for a stress level of ~180 MPa. The 60 MPa – the stress in the area of this flaw- is well off to the left of the vertical axis of the graph. Based on this, we feel it is reasonable and in the best interest of the project to accept this flaw "as is".



NCR#2: Disposition: Accept AS IS. This indication is in a region where the stress is low – in the range of 60 MPa (see the figure below – virtually all of the leg region is ~60 MPa). The fatigue curve shown for NCR 1 is for a pre-existing crack to grow through a 3/4" thickness and, as in NCR1, the 60 MPa stress is far to the left of the vertical axis. It is in a heavy overcast area near the region where the leg, shell, and flange all come together; consequently, this indication can be accepted as is. The thickness that the flaw would have to "grow" through is significantly bigger for this flaw: the leg is ~1 3/8" thick; the shell is ~1 3/8" thick; the flange is 1 1/4"

