

Customer: ENERGY INDUSTRIES OF OHIO

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Part: SE141-114 / MODULAR COIL WINDING FORM TYPE

Drawing ID: SE141-114 Revision: 8
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 ISREJECTED PER ASTM A9903/A903M LEVEL1. 12 REJECTABLE DEFECTS WERE FOUND AT TIME OF INSPECTION. PHOTOS AND A MAP OF THE DEFECTS ARE RECORDED.

Proposed Disposition:

SUBMIT TO CUSTOMER FOR REVIEW AND APPROVAL.

Number of additional pages: 4 PAGE PT 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. Photo 1 is an indication near the poloidal break flange; this was accepted because it is in a thick section where stresses are low and even if crack growth occurred it would be unlikely to grow through within the machine's operating life.. Photo 2 shows a cluster of indications at the base of the winding surface pedestal. This is an as-cast surface and the indications are likely due to surface impurities. It was accepted as is because it is a thick section also. Photo 3 is an indication in the short leg beneath hole #78. This was accepted because it is in the thick base section. Photo 4 shows the same indication noted in the RT rejection for film 26-30 (NC20741). Williamson reviewed the stress in this area and found it to be low (~16 MPa) and compressive, which inhibits crack growth.. Therefore it was accepted as is. Photo 5 shows a 2" indication between holes 43 and 44. This is the same as the RT defects noted in Shot 41-45. Williamson noted that the stress in this area is 80-140 MPa, and thus this defect can be accepted as is. Photos 6, 8, & 9 show defects in the outer edges of the flanges; this is a low stress area and therefore these defects can be accepted as is. Photo 7 shows a defect in the thick base section below the VPI groove, and is accepted as is because it is in a thick section.

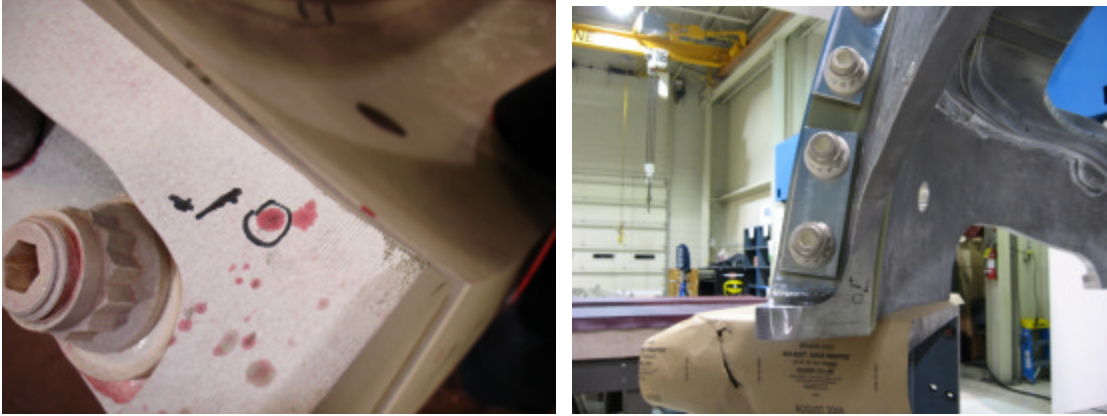
NCSX Tech. Rep. _____

NCSX RLM _____

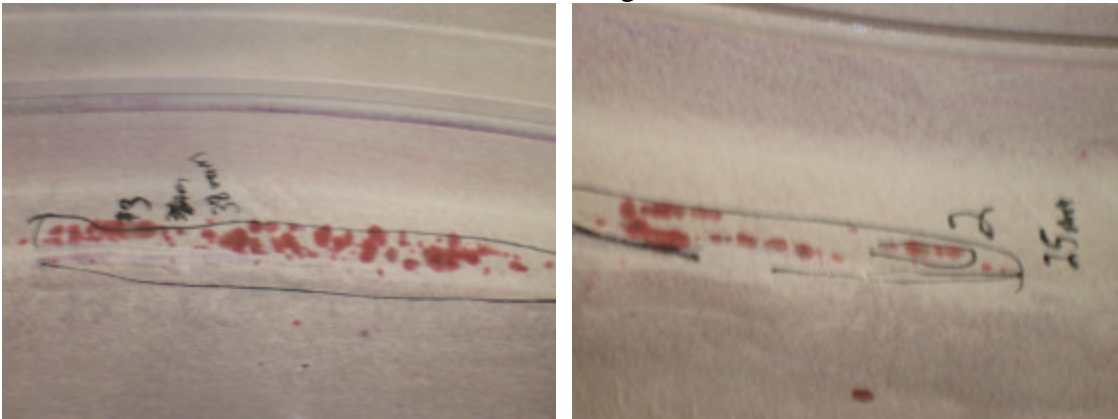
Major Tool Implemented By: _____ Title: _____ Date: _____

PT Inspection Results of A4 – NC20733

1. .120" linear indication located are large opening near datum D flange.



2. Cluster of linear indications in radius below VPI groove. Indications are between holes 13 and 18 on the datum D side of the T. Largest indication is a 1.5" linear.

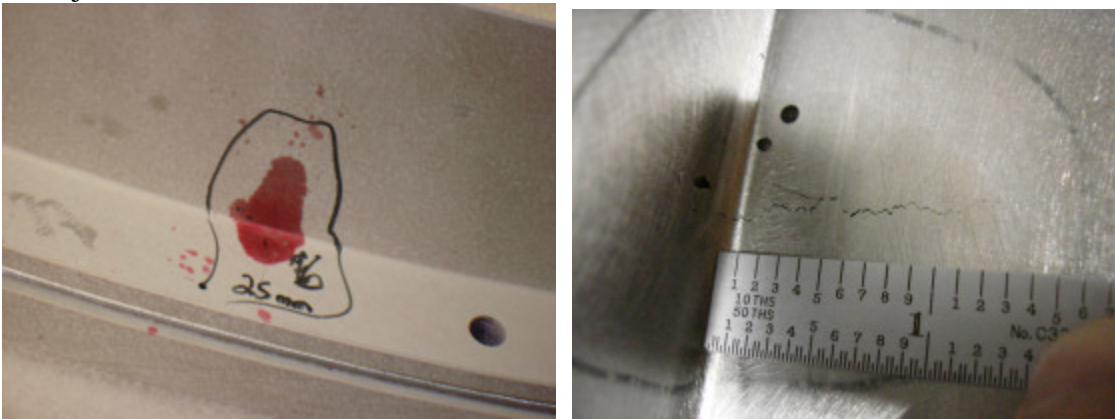


PT Inspection Results of A4 – NC20733

3. 1" linear indication in radius between long and short legs directly beneath hole 78.



4. 1.2" linear located on D side beneath hole 28. This is the same area noted on the RT rejection for film 26-30.



5. 2" linear indication on the long leg of T (D side) between holes 43 and 44. This indication is in the High Stress Region as identified in the CSPEC for the A castings. This is the same defect noted in RT shot 41 to 45.



PT Inspection Results of A4 – NC20733

6. .400" linear on outer edge of the datum E flange near flange hole 24.



7. .5" linear located in radius below VPI groove on E side of casting below hole 49.



8. .200" linear on outer edge of E flange near flange hole 19.

9. .120" linear on outer edge of E flange near flange hole 19.



PT Inspection Results of A4 – NC20733

10. .200" linear located on inside edge of E flange face between flange holes 18 and 19.



11. .200" linear on the poloidal break face on E side of flange near T section.



12. .600" linear on outer edge of datum D flange near poloidal break.

