Major Tool & Machine, Inc.
1458 East 19th Street
Indianapolis, IN 46218-4289

MTM N/C: 21265

Date: 02/28/07
User ID: GRIFFITH

Customer: ENERGY INDUSTRIES OF OHIO
Contact: NANCY HORTON — Telephone: 216-496-2314
E-Mail: NKHFlowen@aol.com — Fax: 216-328-2001

Part: SE141-114 / MODULAR COIL WINDING FORM TYPE — Customer P.O.: S005242-F/Ln:5
Drawing ID: SE141-101 — Revision: 3 — Serial No./Qty: A5
W/O Links: 1-Type:W: 65709/5.0 Sub: 0

Reported By: MIKE GRIFFITH — Telephone: 317-636-6433
E-Mail: mGriffith@MajorTool.com — Fax: 317-634-9420

Problem: Visual review of A5 identified several tool marks on T section and other miscellaneous items. See attachment for details.

Proposed Disposition:
MTM Proposes to accept deviations as-is.

Number of additional pages: 9 page attachment

Customer Disposition: **[X] Use As Is** **[ ] Rework** **[ ] Repair** **[ ] Scrap** **[ ] Replace**

The attached list was reviewed during a conference call attended by J. Chrzanowski, L. Sutton, F. Malinowski, L. Dudek, D. Williamson, T. Brown, and P. Heitzenroeder on 2/28/07. The surface defects are shallow (<0.010”) and therefore are not an issue. During the call it was noted that the lead pad offset caused by a less than optimal choice of initial casting best fit location brought the pad uncomfortably close to the lead slots; MTM resolved this by grinding a 0.5” chamfer immediately (see attachment). The break-out of some of the bolt threads were also discussed, but there is adequate thread engagement beyond this so it is accepted as is.

Approved by:

Phil Heitzenroeder
Digitally signed by Phil Heitzenroeder
DN: cn=Phil Heitzenroeder, c=US, o=PPPL, ou=Mech. Eng. Division
Reason: I agree to specified portions of this document
Date: 2007.03.02 11:23:59 -05'00'

Tech. Rep.

Brad Nelson
Digitally signed by Brad Nelson
DN: cn=Brad Nelson, c=US, o=ORNL, ou=FED, email=nelsonbe@ornl.gov
Date: 2007.03.02 11:42:26 -05'00'

RLM

Major Tool Implemented By: Mike Griffith
Digitally signed by Mike Griffith
DN: cn=Mike Griffith, c=US, o=Major Tool and Machine, ou=CFT - White, email=mgriffith@majortool.com
Reason: I agree to the terms defined by the placement of my signature on this document
Date: 2007.03.03 13:54:55 -05'00'

Date:

n:\mtmapps\Mtnonc14.qrp

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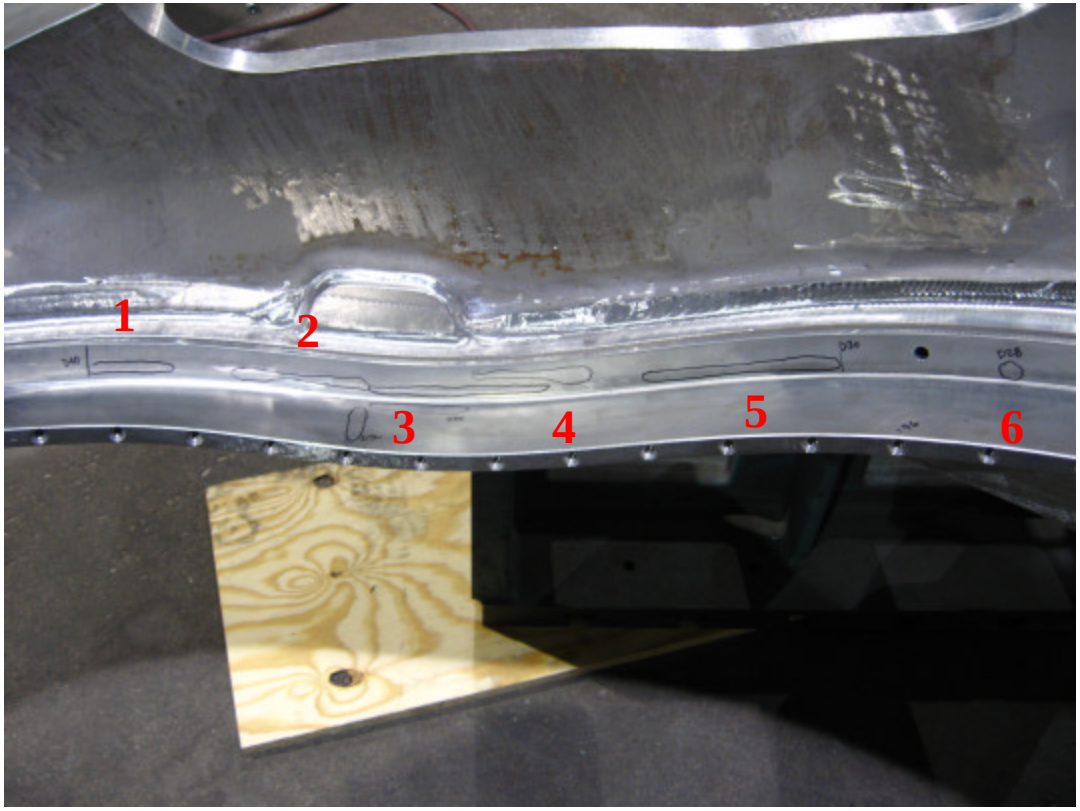
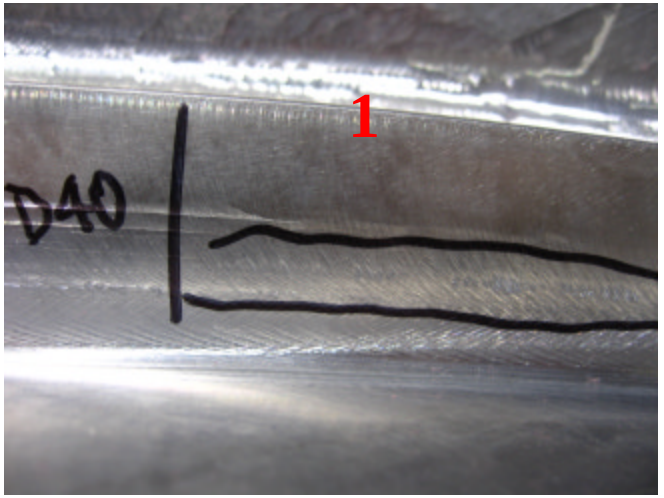
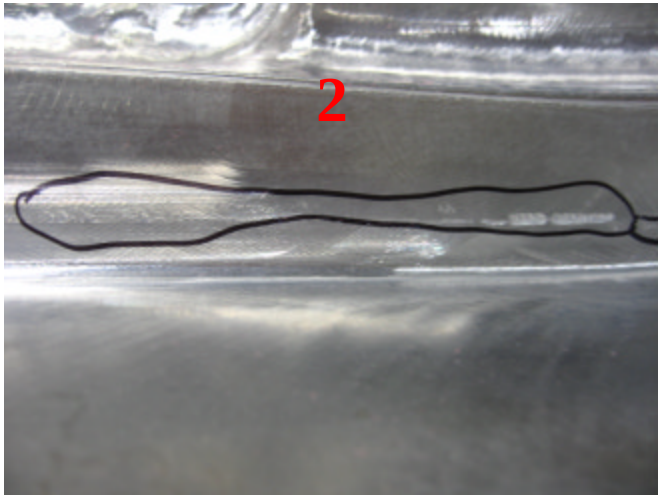
NC21265 – A5 Visual Review

There are several shallow tool marks (<.010”) on the datum D side between T holes 28 and 40. These are shown on slides 1 and 2.







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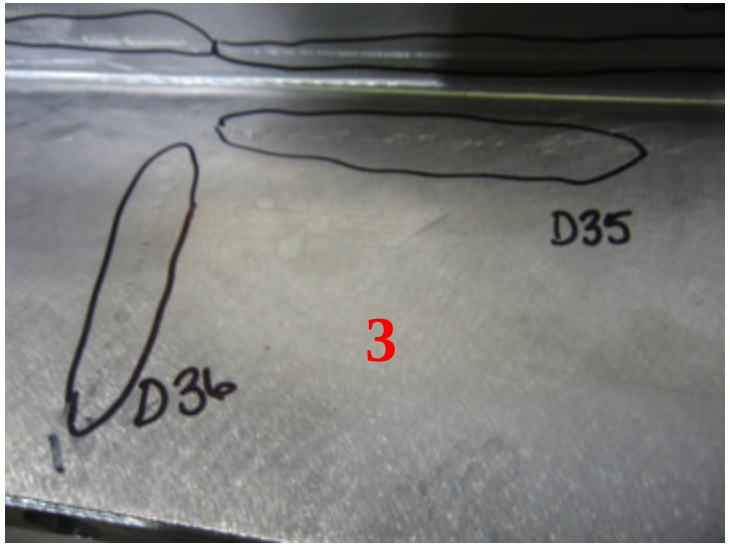
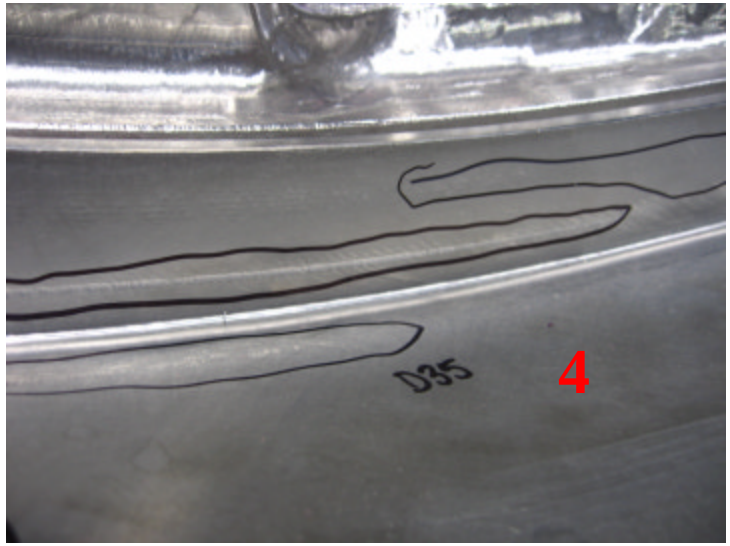
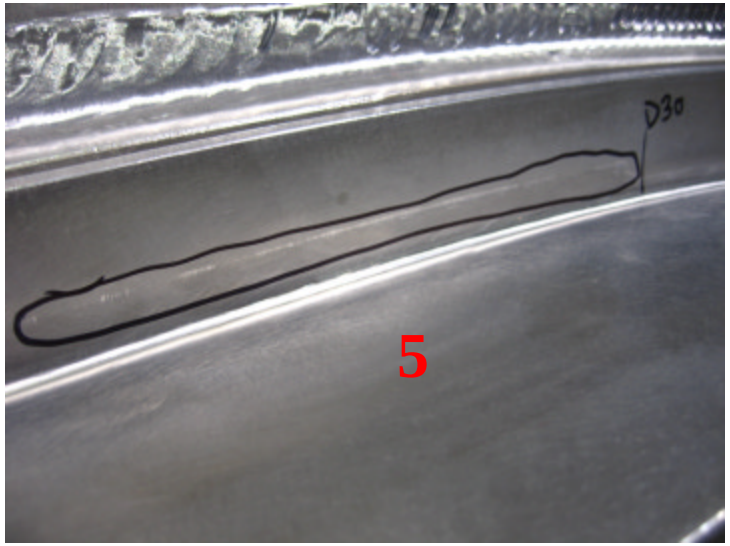
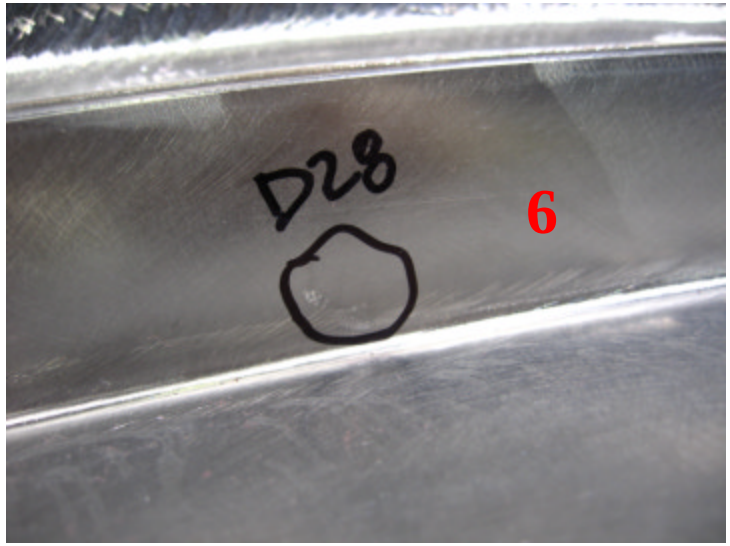
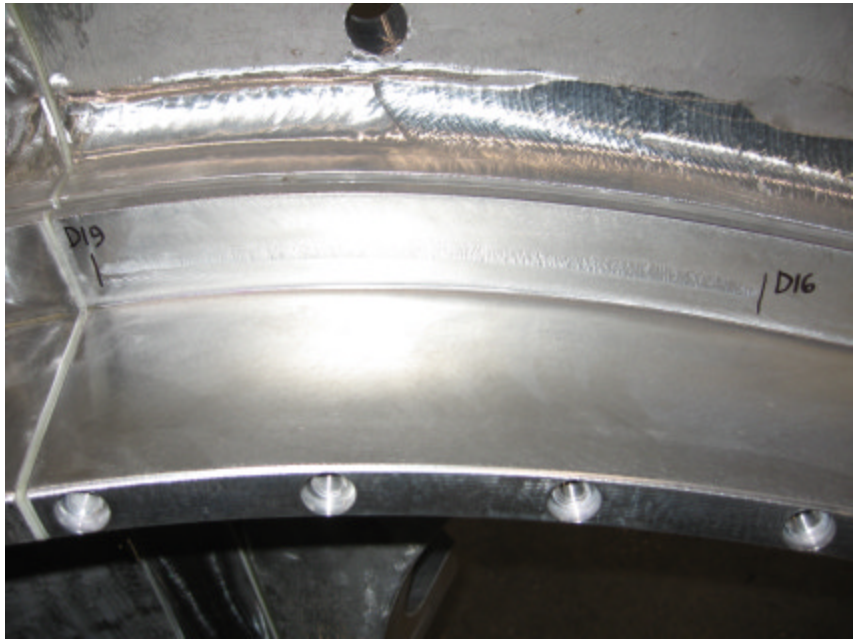




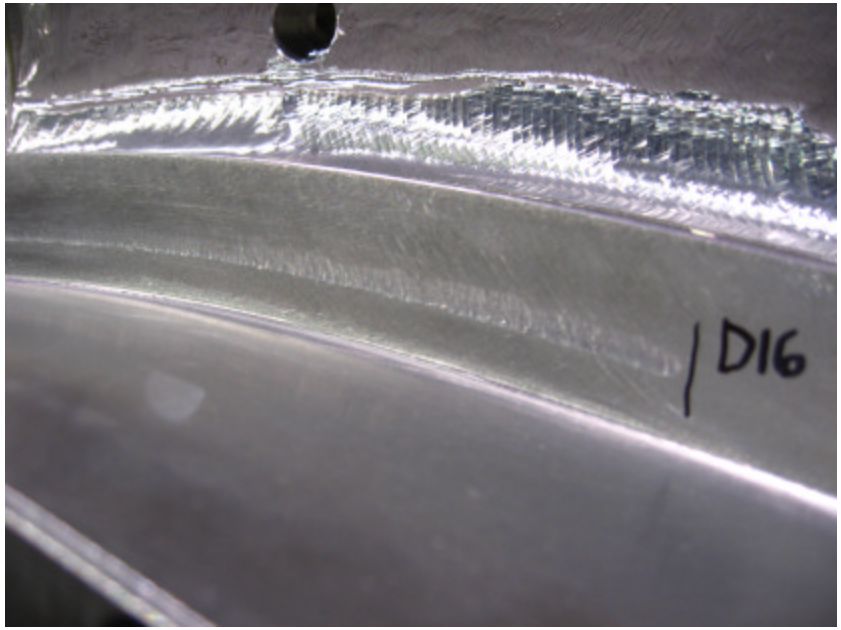




NC21265 – A5 Visual Review

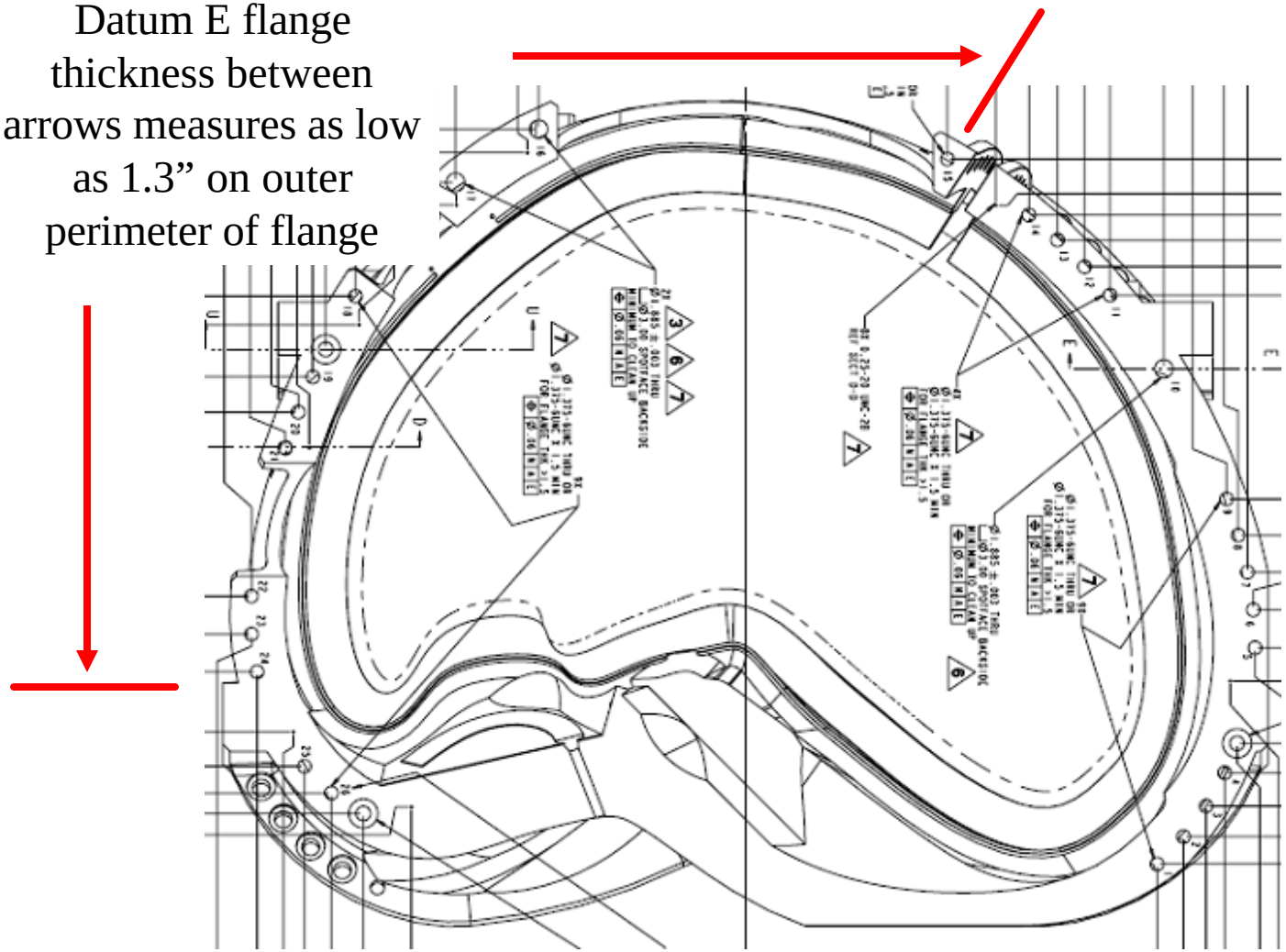


Shallow tool mark on D side short leg, between T holes D16 and D19. Tool mark is <.005” deep.



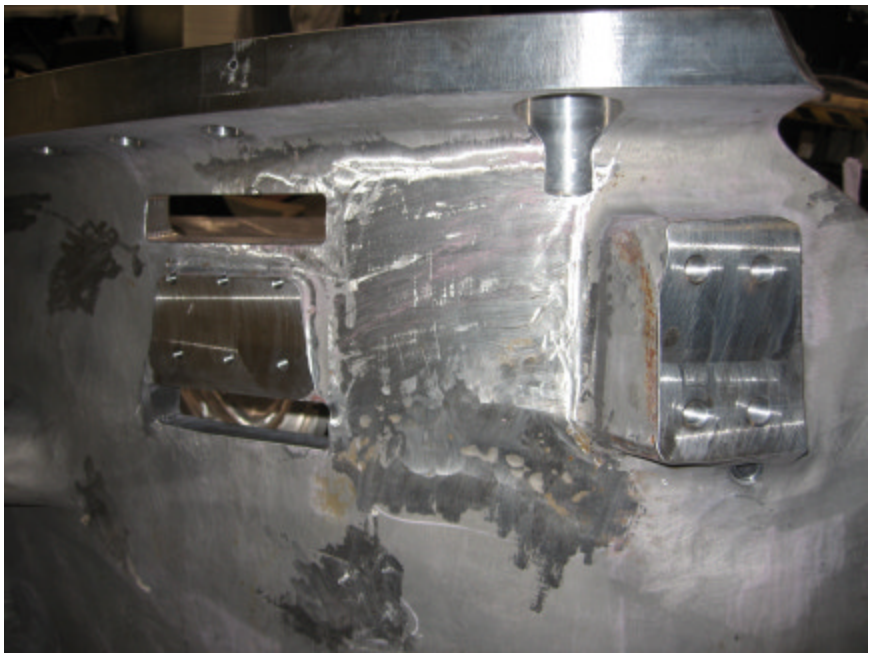
NC21265 – A5 Visual Review

Datum E flange thickness between arrows measures as low as 1.3” on outer perimeter of flange



NC21265 – A5 Visual Review

It appears that the casting stock was not balanced as well as it could have been when the casting was qualified on the 1st roughing operation at MTM. A rotation of approximately .400" near the lead block area would have improved this condition. This resulted in a thicker flange on datum D and a thinner condition on datum E (as reported in previous slide). This also affected the lead pad and the cast stock around the 2.5" holes (see next slide).



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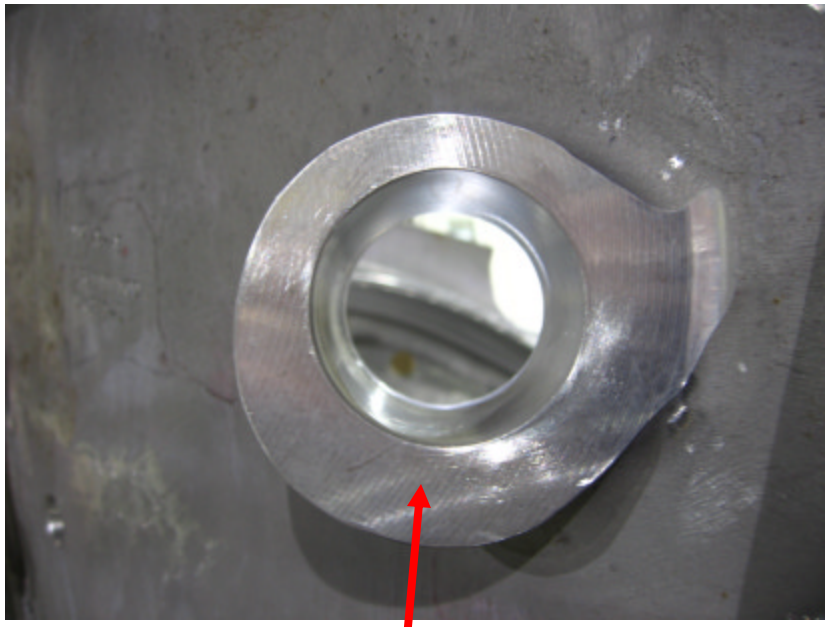
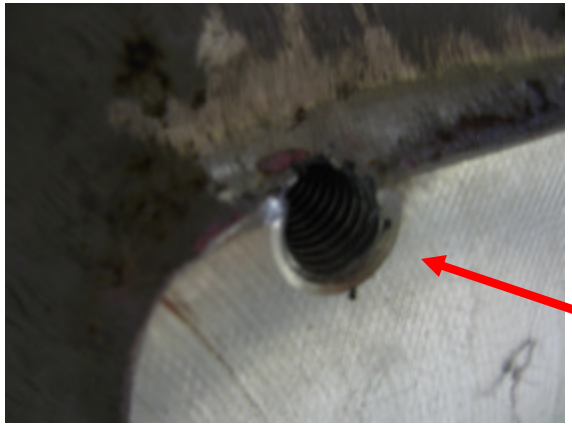
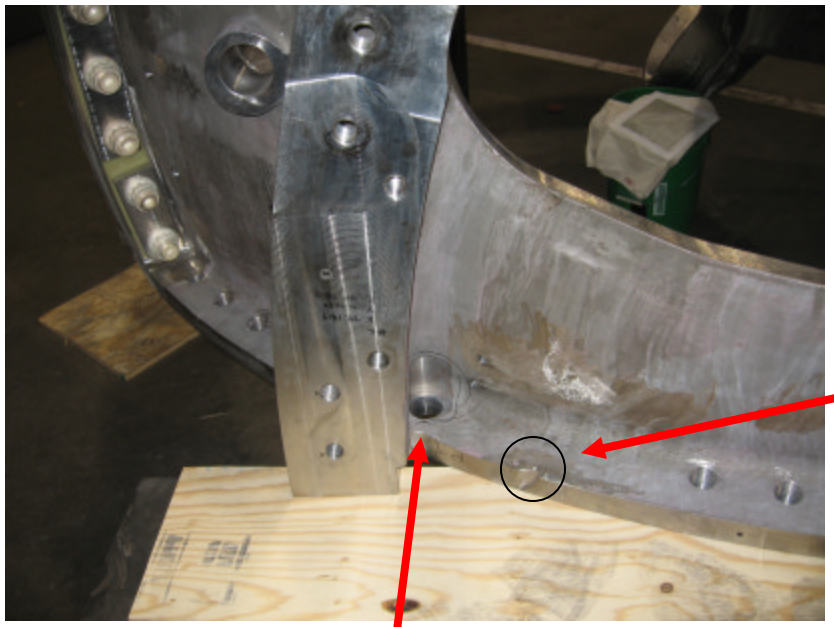


The picture above and the one in the previous slide show how the hole is shifted relative to the cast stock.



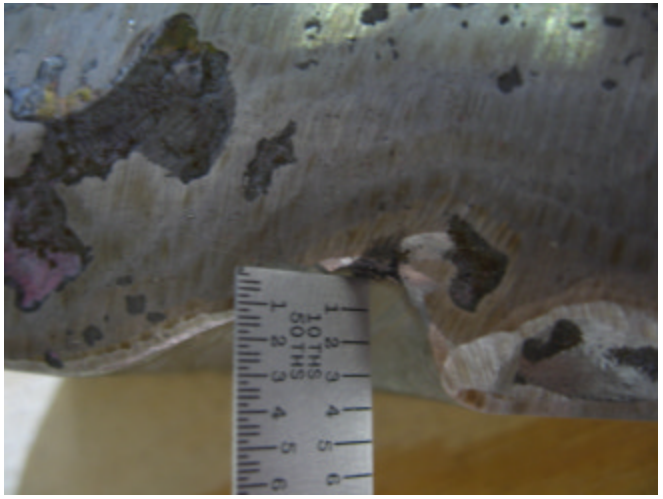
The 1st 2 ½ threads break out the edge of the hole. This hole (and the other five) checks good with a thread gage.

NC21265 – A5 Visual Review



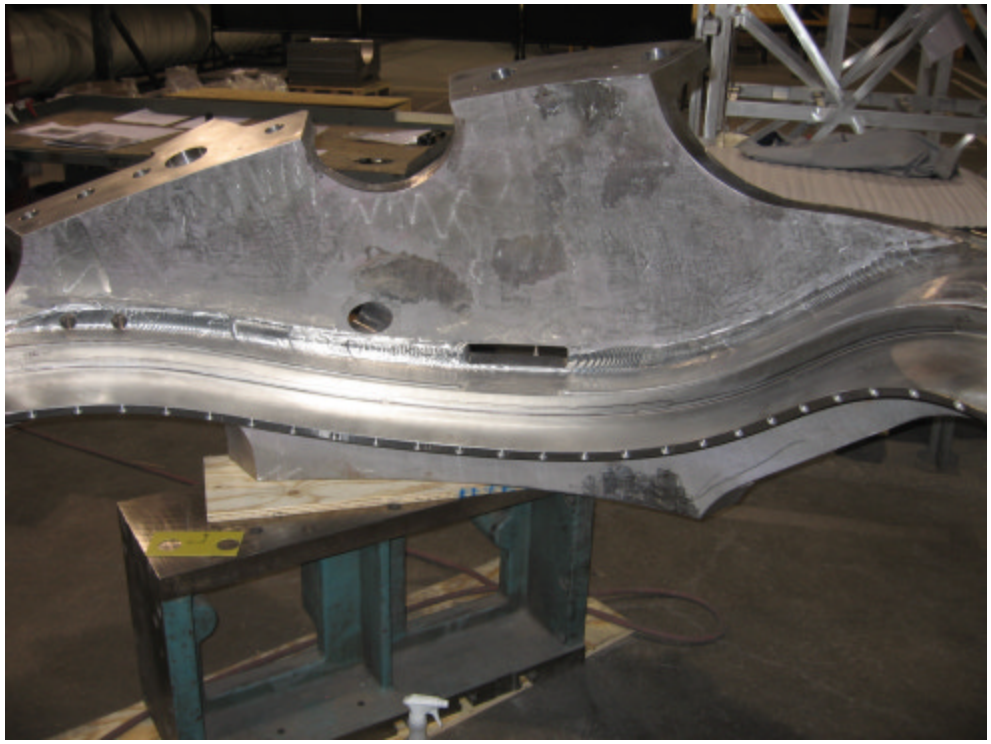
Tool Gouge on perimeter of Datum E flange, approximately 1” wide by .50” deep.

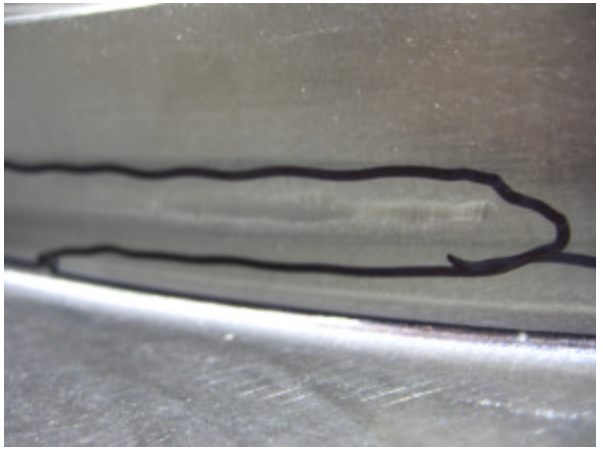
Picture to the left is of the 3” counterbore in the datum E flange as reported on NC21252 step 810. Area shows heavy stock around hole (too much to grind).



NC21265 – A5 Visual Review

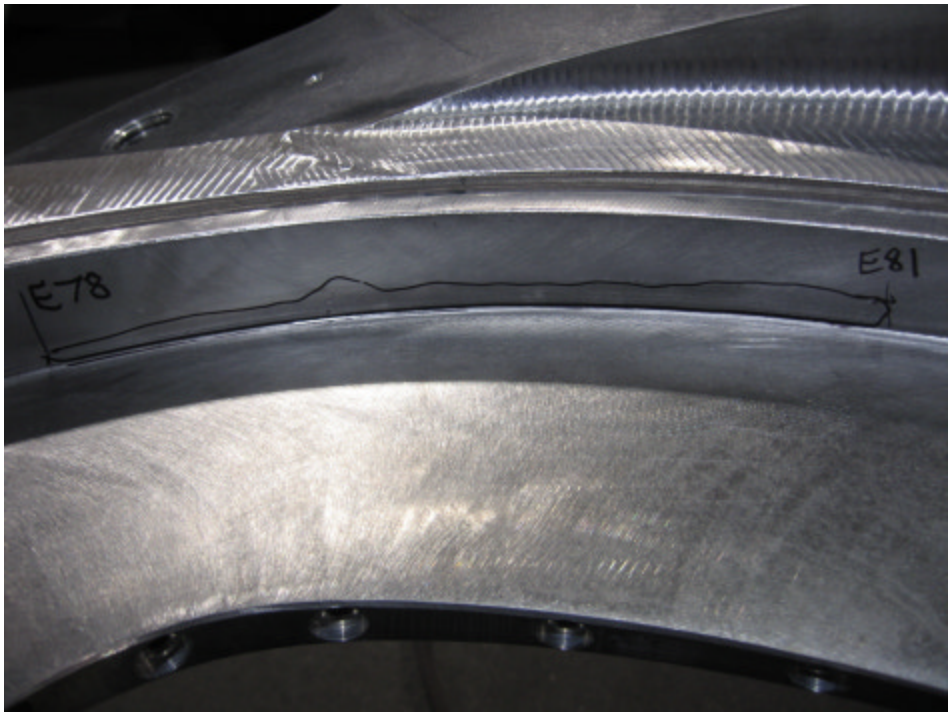
Shallow tool marks on short leg of E side from T hole E86 to E1 thru E12. Marks are less than .005” but in too big of an area to try to blend out. Pictures to the right are close-up of the tool marks but even in the picture they are hard to see

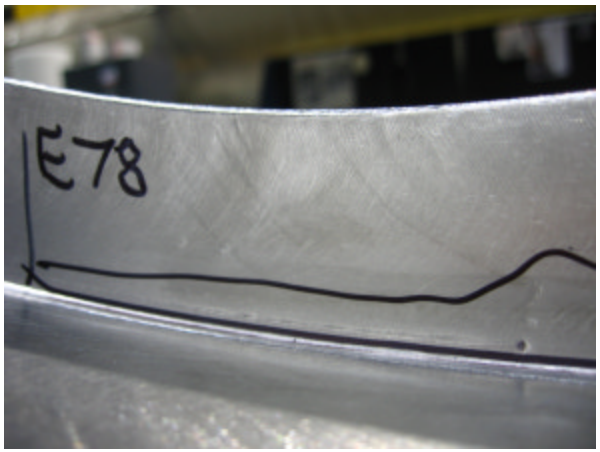




NC21265 – A5 Visual Review

Another area of tool marks between holes 78 and 81 on the E side short leg. Again, very shallow (<.005”).





Photos showing chamfers added to lead pad