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Final Report

Date 10-16-12

Part 302 B Crank Case

Inspected by Edward Mulvihill

- | | |
|--|---|
| <p>1. Base metal
<input checked="" type="checkbox"/> cast iron
<input type="checkbox"/> ductile iron
 cast steel
<input type="checkbox"/> cast aluminum
<input type="checkbox"/> other _____</p> <p>2. Machinability
<input checked="" type="checkbox"/> no previous repairs
 arc-welded
<input type="checkbox"/> brazed
<input type="checkbox"/> heat-related cracks
<input type="checkbox"/> other _____</p> <p>3. Casting shape where cracked
<input checked="" type="checkbox"/> flat
<input type="checkbox"/> inside/outside corner
 radius
<input type="checkbox"/> other _____</p> | <p>4. Cause of damage
<input type="checkbox"/> impact
 heat
<input type="checkbox"/> freezing
<input checked="" type="checkbox"/> normal operation
<input type="checkbox"/> other _____</p> <p>5. Length of crack/s
<u>7"</u></p> <p>6. Material thickness
<u>1 1/2"</u></p> <p>7. Operating pressure
<u>N/A</u></p> |
|--|---|

8. Operating temperature

N/A

9. Working environment

hot

cold

safety concerns

describe: H2S

other _____

10. Remachining requirements

bolt holes

bearing bores

machined surfaces

other Grinding

11. Customer's needs

permanent repair

temporary repair

turnaround time

describe: _____

other _____

12. Accessibility

room for the tools

room for the operator/s

need for disassembly?

describe: _____

other _____

13. Inspection method(s)

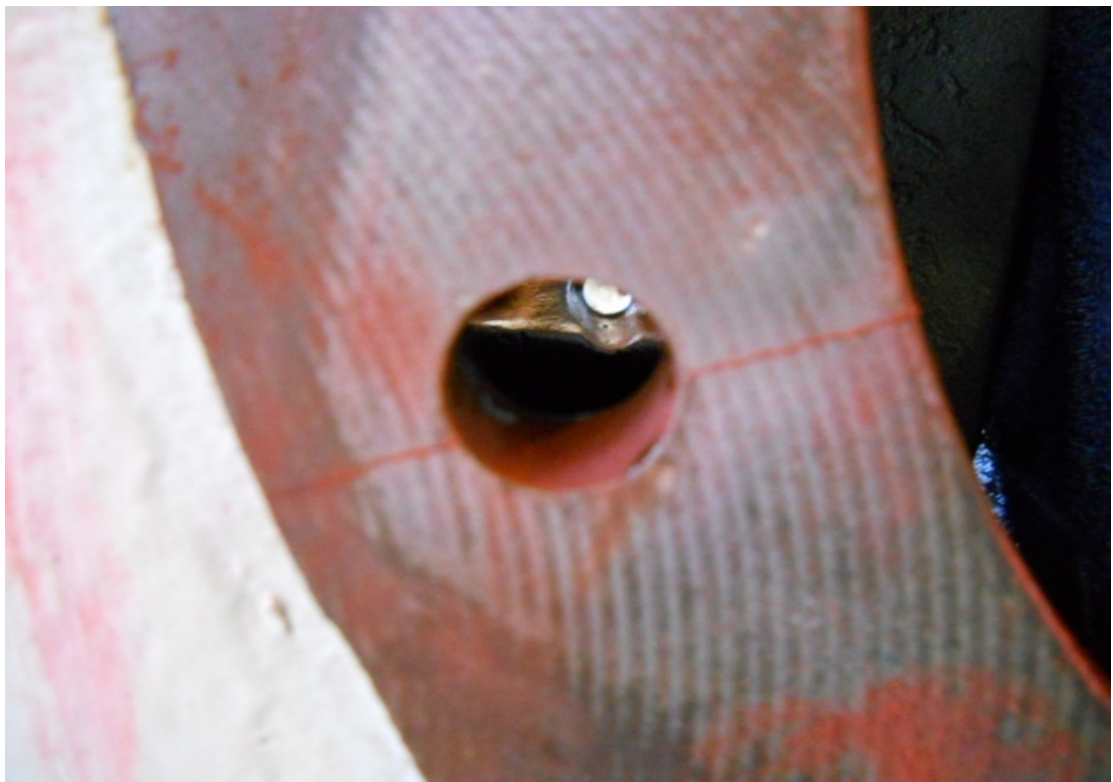
Mag check

14. Damage found:

7" of crack and 3 bolt holes

Inspection – Magnetic particle test performance on 302B Crank Case to identify cracks and length of crack.

Found—Inspection shows 7 inches of crack and 3 bad bolt holes.





Beginning stitching process on the flange portion of the crank case.



Continue with stitching process





Finish with stitching process, next step is setting up for bolt hole inserts



Preparing for bolt hole inserts



Project complete with stitching pins and inserts in place.



