Crusher Final Report

Date 12/18/2012

Part HP 300 Crusher
Inspected by Alaa Al’Robaie

1. Base metal
   cast iron
   ductile iron
   ✓ cast steel
   cast aluminum
   other _____________________

2. Machinability
   no previous repairs
   ✓ arc-welded
   brazed
   heat-related cracks
   other _____________________

3. Casting shape where cracked
   ✓ flat
   inside/outside corner
   ✓ radius
   other _____________________

4. Cause of damage
   impact
   ✓ heat
   freezing
   normal operation
   other _____________________

5. Length of crack/s
   26”

6. Material thickness
   1-4”

7. Operating pressure
   N/A
8. Operating temperature
   N/A

9. Working environment
   hot
   ✓ cold
   safety concerns
   describe: ___________________
               ___________________
               ___________________
   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:
    26” of crack
Inspection – Magnetic particle test performance on HP 300 Crusher to identify cracks and length of crack.

Found—Inspection shows 4 cracks on HP300 Crusher, totaling 26” of crack. (interior & exterior)

Exterior:
Interior:
Exterior:
Exterior:
Installed locks L50, L30, and L20 locks on the exterior and interior sides of HP300 Crusher for additional strength.
Exterior:
Interior:
Metal stitch remaining cracks with C3 high-strength Castmaster pins.

Exterior:
Interior:
Hand finished on HP300 Crusher.

Exterior:
Exterior: