

July 21, 2020

US Farathane

Subject: July vibration service report

Most of the machines surveyed were found to be in good condition with the exception of the following:

QualiTest® uses a four step rating system for defects.

Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue to normally monitor.

Class II: Defect (s) present that may cause problem in long term (2-6 months.). Repair during normal maintenance scheduling. Continue to monitor.

Class III: Defect (s) present that may cause failure in short term (less than 2 months.). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

Class IV: Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

Hi-Speed Industrial Service tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

This completes our assessment of your equipment for this survey. Thank you for your business and don't hesitate to call if you have any comments or questions.

Sincerely,

David W. Shook
Senior Reliability Specialists
Hi-Speed Industrial Service
dshook@gohispeed.com

Detailed Defects

Press 11

This unit has a large 1x RPM vibration that is dominant in the pump. Inspect the drivetrain, frame, base, and all fasteners. We suspect a coupling issue is the root cause. **Rated a Class III Defect.**

Press 15 Unit 1

Check pump operation, screens, and filters due to harmonics in the data. **Rated a Class II Defect.**

Press 16 Unit 2

Large shaft speed vibration still at near 0.5"/sec velocity with multiple harmonics in the data for pump 1 and most other measurements. Time waveform is somewhat asymmetrical. Check all shafts couplings and fasteners. **Rated a Class II Defect.**

Observations

Press 5B

Increase in 1x RPM vibration at the pumps near 0.36"/sec velocity peak. Inspect the pump couplings. **Rated a Class II Defect.**

Press 3-Unit 1

Increase in harmonics, especially the second. Overall vibrations at 0.36"/sec velocity peak. Check unit operation and the filters and screens. **Rated a Class II Defect.**

Press 18 Unit 1

Multiple vane pass vibration peaks still show in the data for Pump 1. We suspect pump wear or hydraulic system issues. Check operating parameters first. **Rated a Class I Defect.**

Press 18 Unit 2

Possible pump issue, but data is still inconclusive. Inspect unit as time allows. **Rated a Class I Defect.**

Press 30-Unit 2

Some increase in harmonic amplitude in the pumps. Inspect unit operation as time allows. **Rated a Class I Defect.**