

August 9, 2021

Most

Subject: Dust Collector vibration service

Both units need attention, but at different ratings. Supporting data follows.

QualiTest® uses a four step rating system for defects.

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

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

<u>Class III:</u> 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.

<u>Class IV</u>; 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

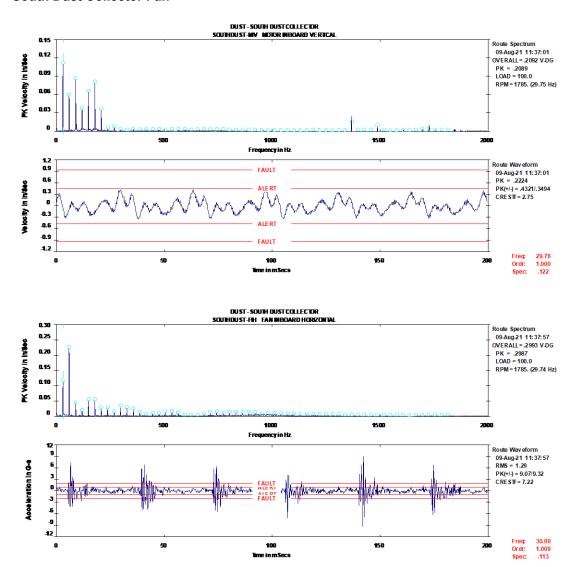
Hi-Speed Industrial Service tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty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

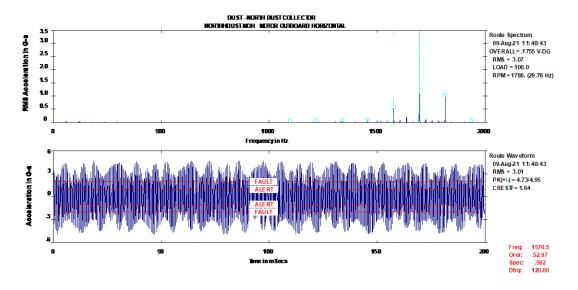
David W. Shook Senior Reliability Specialists **Hi-Speed** Industrial Service dshook@gohispeed.com

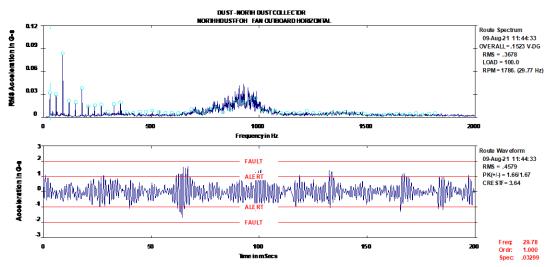
South Dust Collector Fan

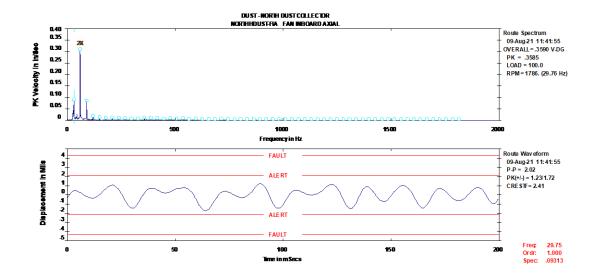


The South motor and fan bearing data shows multiple shaft speed harmonic vibration peaks. The fan bearings also show a once per rev pulse. We suspect that both the motor and fan bearings have excessive shaft and/or housing fit looseness. Perform a lift check on both shafts to help confirm excessive clearance. Inspect for wear and recondition/replace worn components. Clean the fan wheel of build up as necessary. Rated a Class II Defect.

North Dust Collector Fan







The North fan looks to have some bearing wear and a few shaft speed harmonics. Inspect the bearings, purge the grease and re-lubricate s specified by manufacturer. Fan axial data shows a dominant 2x RPM vibration which usually indicates possible alignment/coupling issues. The motor data shows strong rotor bar related vibrations. Inspect the coupling and have the alignment checked. Check all motor electrical connections and have the motor electrically checked (PdMA). Rated a Class II Defect

Abbreviated Last Measurement Summary ********

Database: MOST.rbm

Area: DUST COLLECTORS
Route No. 1: MOST
Report Date: 09-Aug-21 14:42

SOUTHDUST - SOUTH DUST COLLECTOR (09-Aug-21)	
OVERALL LEVEL HFD	
MOH .167 In/Sec .051 G-s 1785.0 RPM	
MOV .107 In/Sec .0089 G-s	
MIV .209 In/Sec .094 G-s	
MIH .191 In/Sec .078 G-s	
MIA .160 In/Sec .012 G-s	
FIA .338 In/Sec .121 G-s	
FIH .299 In/Sec .363 G-s	
FIV .163 In/Sec .389 G-s	
FOV .328 In/Sec .280 G-s	
FOH .309 In/Sec .268 G-s	
NORTHHDUST - NORTH DUST COLLECTOR (09-Aug-21)	
OVERALL LEVEL HFD	
MOH .176 In/Sec .018 G-s 1785.0 RPM	
MOV .049 In/Sec .014 G-s	
MIV .039 In/Sec .017 G-s	
MIH .086 In/Sec .022 G-s	
MIA .047 In/Sec .015 G-s	
FIA .359 In/Sec .097 G-s	
FIH .200 In/Sec .074 G-s	
FIV .093 In/Sec .590 G-s	
FOV .121 In/Sec .069 G-s	
FOH .152 In/Sec .023 G-s	

Clarification Of Vibration Units:

Vel --> In/Sec PK HFD --> G-s RMS