



QualiTest® Diagnostics

7030 Ryburn Dr. Millington, TN

Phone: (901) 873-5300

Fax: (901) 873-5301

www.gohispeed.com

February 5, 2021

Steve Patton
Chemours
Memphis, TN

The following is a summary of findings from the vibration analysis on the Dust Collector blower that was performed on 2/2/21. Please let us know if there are any questions or comments.

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.

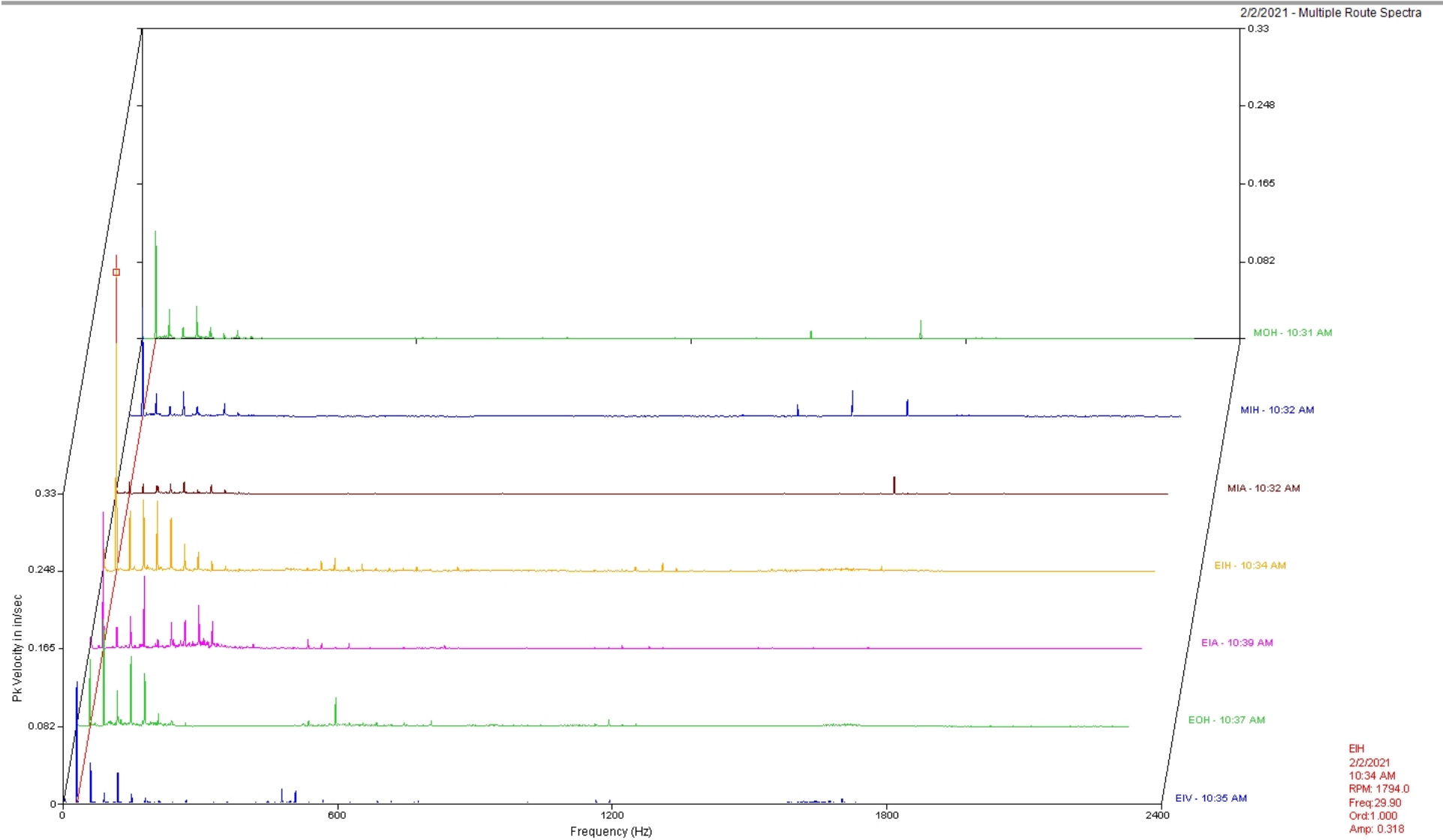
Class III: Defect (s) present that may cause failure in short term (less than 2 months). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

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.

SUMMARY

cotton oil.rbm / SCTN / SPARE



Vibration data of the blower indicates some imbalance with a high 1 x rpm vibration being present especially at the drive end of the blower. Highest amplitude is at the blower inboard horizontal. There are also several harmonics of rpm in this spectral data which indicates some mechanical looseness. Both bearings are showing signs of looseness with the DE bearing having the higher amplitude harmonics. Our recommendation is to clean the area around the bearings, remove the top half of the bearing housings (one at a time), and check bearing clearances. Refer to manufacturer's specification for the recommended clearances. If looseness harmonics are still present in the data after adjusting internal bearing clearances, then it may be the fact that the looseness is in the bearing housing fit. A lift check of the blower shaft will be needed to determine if fit looseness is present. It is also recommended to inspect the coupling for excessive wear and inspect/clean the fan wheel. If high 1 x rpm vibration persists after cleaning the wheel, then a field balance is recommended. In order to achieve a good balance of the unit, the bearing clearances will have to be within tolerance. This issue is rated as a **CLASS II** defect



Abbreviated Last Measurement Summary

DUST COLLECTOR BLOWER

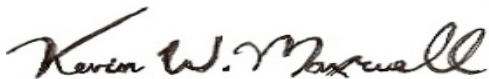
MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD
-----	-----	-----
S5 - SPARE	(02-Feb-21)	
	OVERALL LEVEL	1 - 20 KHz
MOH	.148 In/Sec	.525 G-s
MIH	.150 In/Sec	.815 G-s
MIA	.043 In/Sec	.473 G-s
EIH	.408 In/Sec	.604 G-s
EIA	.216 In/Sec	.446 G-s
EOH	.190 In/Sec	.404 G-s
EIV	.168 In/Sec	.587 G-s

Clarification Of Vibration Units:

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

As always, it has been a pleasure to serve Chemours Memphis Plant. If there are any comments or questions, do not hesitate to contact us.

Sincerely,



ISO Certified Vibration Analyst, Category III



QualiTest® Diagnostics

Cell: 901-486-4565

Email: kwilliam@gohispeed.com