

7030 Ryburn Dr. Millington, TN Phone: (901) 873-5300 Fax: (901) 873-5301 <u>www.gohispeed.com</u>

May 10, 2021

General Recycling
Subject: April vibration survey

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.

<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.

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.

Defects

Conveyor 11

This unit continues to have high radial and axial vibration that is likely due to the conveyor drum shaft being bent and the motor base being flexible. Inspect conveyor shaft for excessive run-out soon. Ensure belts and sheaves are aligned properly and not excessively worn. Rated as a **CLASS II** defect.

Cyclone Fan

Outboard (opposite drive end) fan bearing is showing some signs of race defects according to the spectral data. We will continue to monitor this closely. Rated as a **CLASS II** defect for now.

Abbreviated Last Measurement Summary

Database: nucorja9.rbm Station: Scrap Yard

MEASUREMENT POINT	OVERALL LEVEL	HFD / VHFD	
SHREDDER - SHREDDE		(28-Apr-21)	
	OVERALL LEVEL	1K-20KHz	
МОН	.219 In/Sec	.047 G-s	
MOV	.167 In/Sec .139 In/Sec	.043 G-s	
MIV	.139 In/Sec	.157 G-s	
MIH	.238 In/Sec	.117 G-s	
MIA	.139 In/Sec	.190 G-s	
CYCLONE - CYCLONE		(28-Apr-21)	
	OVERALL LEVEL	1K-20KHz	
MOH	.120 In/Sec	.565 G-s	
MIH	.135 In/Sec	.113 G-s	
MIA	.109 In/Sec	.224 G-s .148 G-s	
EIH	.177 In/Sec	.148 G-s	
ЕОН	.188 In/Sec	.114 G-s	
M3 - MAG DRU	лм	(28-Apr-21)	
	OVERALL LEVEL	1K-20KHz	
MOH	.087 In/Sec .082 In/Sec	.149 G-s	
MIH	.082 In/Sec	.194 G-s	
MIA	.065 In/Sec	.048 G-s	
GIH	.078 In/Sec .056 In/Sec	.075 G-s	
GOH	.056 In/Sec	.098 G-s	
IDB	.041 In/Sec	.0052 G-s	
ODB	.056 In/Sec	.0023 G-s	
NUMBER 11 - NUMBER	11	(28-Apr-21)	
	OVERALL LEVEL	1K-20KHz	
MOH	.653 In/Sec	.434 G-s	
MIH	.810 In/Sec	.358 G-s	
MIA	.479 In/Sec	.275 G-s	
EIH	.497 In/Sec	.275 G-s 1.198 G-s	
EIA		1.353 G-s	
EOH	.263 In/Sec	.054 G-s	
SAIRCOMP - NEW SEE	PARATOR SOUTH AIR COMP	(28-Apr-21)	
	OVERALL LEVEL	1K-20KHz	
MOH	OVERALL LEVEL .088 In/Sec	.146 G-s	
MIH		.725 G-s	
MIA	.079 In/Sec	1.551 G-s	
EIH	.071 In/Sec	1.551 G-s .338 G-s	

EIA EOH		In/Sec .639 In/Sec 1.250	
NAIRCOMP - NEW	SEPARATOR NORTH AI	R COMP (28-Apr-21)
	OVERA	LL LEVEL 1K-20	KHz
MOH	.524	In/Sec .296	G-s
MIH	.121	In/Sec .626	G-s
MIA	.075	In/Sec 1.081	G-s
EIH	.170	In/Sec .390	G-s
EIA	.069	In/Sec .850	G-s
EOH	.076	In/Sec .816	G-s
Clarification Of Vib	ration Units:		
Acc> G-s	RMS		
Vel> In/	Sec PK		

As always, it has been a pleasure to serve General Recycling. If there are any comments or questions, do not

Sincerely,

hesitate to contact us.

ISO Certified Vibration Analyst, Category III

Kevin W. Morruell



QualiTest_® Diagnostics

Cell: 901-486-4565

Email: kwilliam@gohispeed.com