

August 12, 2019

ARKEMA

Subject: August week 1 vibration service report

Weekly Equipment**Agitator, Hydrogenator C 7001-01**

No legitimate vibrations were found to be above 0.163"/sec velocity peak. Spectrum appears normal for unit. No action required.

A/B Concentrator Vacuum Pump 57

The unit does have what we suspect is a 16 x RPM vane is pass peak in the spectrum that dominates the data. The vibration moves with unit speed. Overall trend for the outboard pump bearing is above 0.25"/sec velocity peak. External water cooling could affect the amplitudes. **Rated a Class I Defect.**

Flash Vacuum Pump 2130-1

Vibrations in this unit appear normal. No actions required.

Air Compressor C-201

High unit loading could enhance the vibration readings for rotor defects. At least 2 of these units have now displayed high acceleration in the motor. No immediate actions are required at this time. **Rated a Class II Defect.**

Air Compressor C-202

Vibrations in this unit appear normal. No actions required.

Air Compressor C-203

Vibrations appear normal this week. The trend clearly shows that the vibrations vary considerably over time. We still believe the motor has possible weak rotor bar end connections that cause the vibrations to fluctuate higher due to increased loading. We will continue to monitor this unit for changes. **Rated a Class I Defect.**

Air Compressor NASH 201-08

Vibrations in this unit appear normal. No actions required.

D Hydrogenator Agitator 9002-10

Data sets for the gearbox output top bearing show overall vibrations are just below 0.28"/sec velocity peak. Vibrations of interest were around 11 and 278 HZ. Check the unit fasteners for tightness. **Rated a Class I Defect.**

Instrument Air Compressor new

Vibrations in this unit appear normal. No actions required.

C Concentrator Vacuum Pump 2130-1 old

Vibrations in this unit appear normal. No actions required.

Monthly Equipment this Survey on report

No noted issues to report.

An Abbreviated Last Measurement Summary follows below:

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 Specialist

dshook@gohispeed.com

Hi-Speed Industrial Service

Last Monitored Machine List

Database: Arkema.rbm
Station: PEROXIDE
Route No. 3: ARK WK 1
Report Date: 12-Aug-19 09:48
Report Interval: 30-Jul-19 To 02-Aug-19

PERIODIC VIBRATION TECHNOLOGY

Collected Machine...

MACHINE ID	DESCRIPTION	NUMBER OF POINTS	LATEST DATE
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7000-01	AGITATOR, HYDROGENATOR C	22 OUT OF 22	02-Aug-19
57	A/B Concentr Vac Pmp-var RPM	10 OUT OF 10	02-Aug-19
2130-1	FLASH VAP VAC PUMP-var speed	10 OUT OF 10	02-Aug-19
236-06	HYDRO FD PUMP N 236-06 -2FLR	2 OUT OF 2	02-Aug-19
2130-6	ABC SEC FILT FEED PUMP-NORTH	5 OUT OF 5	02-Aug-19
9001-1	EAST OXIDIZER FEED PUMP	5 OUT OF 5	02-Aug-19
9001-2	MIDDLE OXIDIZER FEED PUMP	5 OUT OF 5	02-Aug-19
7016-11	WEST OXIDIZER FEED PUMP	5 OUT OF 5	02-Aug-19
234-01	CHILL WATER PUMP 234-01	7 OUT OF 7	02-Aug-19
C-203	C-203 Comp (Old Joy)	18 OUT OF 20	02-Aug-19
9000-01	D HYDROGENATOR FD PUMP- WEST	5 OUT OF 5	02-Aug-19
236-04A	HYDROGNATOR PRECOOLER FD PUMP	5 OUT OF 5	02-Aug-19
C-201	C-201 Comp (Old Centac)	18 OUT OF 20	02-Aug-19
C-202	C-202 Comp (New Location)	18 OUT OF 20	02-Aug-19
9002-10	D-HYDROGENATOR AGITATOR	16 OUT OF 16	02-Aug-19
new AC	INSTRUMENT AIR COMPRESSOR	18 OUT OF 18	02-Aug-19
201-08A	COMPRESSOR, NASH A 201-08A	16 OUT OF 16	02-Aug-19
2130-1old	C Concentrator Vacuum Pump	6 OUT OF 6	02-Aug-19

Missed Machine...

MACHINE ID	DESCRIPTION	
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236-26	HYDRO FD PUMP S 236-26-2FLR	0 OUT OF 5
7007-24	ABC SEC. FILT FEED PMP-SOUTH	0 OUT OF 5
265-C	STABILIZER PUMP	0 OUT OF 12
234-19	Trane Refrig Machine (NEW)	0 OUT OF 4
9000-02	D HYDROGENATOR FD PUMP- EAST	0 OUT OF 5
EP15	CENTAC Compressor	0 OUT OF 9

Monitored Point Total = 191 OUT OF 237
Monitored Machine Total = 18 OUT OF 24