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August 31<sup>st</sup>, 2023

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The following is a summary of findings from the August 2023 WEEK 4 vibration survey at the H2O2 Plant and the H2 WEEKLY FAN vibration survey.

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.

### WEEK 3 H2O2 Plant

# C Concentrator Vacuum Pump CLASS I



### **Observation:**

Data above is a multipoint spectral waterfall. Data point labeled 71 is the pump drive end horizontal. The small peaks in mid to high range of the spectrum are non-synchronous peaks and are very likely bearing defect frequencies.

#### **Recommendation:**

The pump appears to have early to mid stage bearing defects/wear. We are monitoring this issue closely.

# Agitator, Hydrogenator C CLASS I



### **Observation:**

Data above is a multipoint spectral waterfall. Data still shows some noise floor in the motor data. Data points labeled 11-23.

### **Recommendation:**

Motor data still suggests a possible issue in the motor. May be rolling element defects in bearings. This issue appears to be minor at this time and we are monitoring this closely.

### D Hydrogenator Agitator CLASS II



#### **Observation:**

Data above is a multi-point spectra of the motor and gear drive. There is quite a bit of low frequency vibration in the gear drive. Spectral and waveform data shows a dominant low frequency vibration that is likely a harmonic of output speed of the gearbox. Gearbox does appear to have visible torsional movement. There is also some gear mesh harmonics on the output axial.

#### **Recommendation:**

Ensure output shaft does not excessive shaft defection. Check coupling hubs and shaft for run out using a dial indicator. Will continue to monitor closely.

### H2O2 Plant WEEKLY



#### **Observation:**

Data above is the motor and fan inboard axial. Data shows a high 1 x rpm with a smaller 2, 3, and 4 x rpm vibration. Vibration has increased significantly since replacing fan shaft and fan bearings. The shaft that in place right now has excessive run-out (.003 to .005" in various spots on shaft).

#### **Recommendation:**

Fan shaft and or the fan wheel is likely the issue here. We recommend replacing the fan shaft with a TGP 4140 (steel type) shaft. Replace bearings also. Ensure fan wheel is not warped or cracked. Fan wheel needs to be dynamically balanced with new shaft and coupling. **Replace ASAP due to high vibration.** 

### ID Blower CLASS II



### **Observation:**

Data above is a multi-point spectrum of the motor and the fan Spectral data indicates bearing defects are present in the fan bearings.

#### **Recommendation:**

Not a lot of change since last survey. Fan bearings may need to be replaced in the next few months. Monitoring this issue closely.

#### 

Database:	Arkema.rbm
Station:	PEROXIDE
Route No.	4: ARK WK4

MEASUREMENT	F POINT	OVERALL LEVEL	HFD / VHFD
P102	- ARKEMA PIIMP P10	2 (2 <sup>.</sup>	3-Aug-23)
1102		OVERALL LEVEL	1K-20KHz
мон		.067 In/Sec	.320 G-s
MOV		.058 In/Sec	.304 G-s
MIH		.073 In/Sec	.421 G-s
MTV		113 In/Sec	517 G-s
MTA		065 Tn/Sec	382 G-s
ETA		247 In/Sec	2 033 G-s
ETH		287 In/Sec	1 112 G-s
ETV		209 In/Sec	2 121 G-s
EOH		154 Tn/Sec	999 G-s
EOV		.138 In/Sec	1.154 G-s
XSTORPMP	- X STORAGE PUMP	(2:	3-Aug-23)
		OVERALL LEVEL	1-20 KHz
11		.045 In/Sec	.590 G-s
21		.046 In/Sec	.548 G-s
23		.045 In/Sec	.277 G-s
71		.084 In/Sec	.159 G-s
72		.036 In/Sec	.136 G-s
2130-1old	- C Concentrator	Vacuum Pump (2)	3-Aug-23)
		OVERALL LEVEL	1-20 KHz
11		.068 In/Sec	.360 G-s
21		.090 In/Sec	.541 G-s
23		.127 In/Sec	.171 G-s
71		.159 In/Sec	2.390 G-s
81		.212 In/Sec	.660 G-s
83		.178 In/Sec	.384 G-s
7000-01	- AGITATOR, HYDROG	ENATOR C (2)	3-Aug-23)
		OVERALL LEVEL	1-20 KHZ
02		.046 In/Sec	.032 G-s
03		.049 In/Sec	.011 G-s
11		.079 In/Sec	1.545 G-s
12		.113 In/Sec	.509 G-s
13		.129 In/Sec	.536 G-s
21		.101 In/Sec	1.270 G-s
22		.198 In/Sec	.248 G-s
23		.128 In/Sec	.231 G-s
31		.072 In/Sec	.462 G-s
32		.098 In/Sec	.116 G-s
33		.072 In/Sec	.083 G-s
41		063 Tn/Sec	256 G-s
42		090 Tr/Sec	113 C-s
51		062  Tr/Sec	192 6-6
53		083  Tr/Sec	129 G-s
23		0.003  m/3ec	212 C-C
01 71		072 Tr/Sec	.213 G-8 175 C c
/1		.0/2 IN/Sec	.1/3 G-S
83		.024 IN/Sec .052 In/Sec	.243 G-S .259 G-S
57	- A/B Concentr Va	c Pmp-var RPM (2)	3-Aug-23)
	-, 2 concentr va	OVERALL LEVEL	1-20 KH7
11		$051 T_{\rm D}/200$	523 C-c
10		040  Tr/Sec	177 6-6
1Z 01		043 To/Sec	110 C-C
21		.045 IN/Sec	.412 G-S

	25					.051	In/Sec	.125 (	G-s
	71					.065	In/Sec	. 439 (	G-s
	81					.070	In/Sec	.688 (	G-s
	83					.080	In/Sec	.430 (	G-s
2130-1		-	FLASH	VAP	VAC	PUMP-var	speed	(23-Aug-23)	
						OVERAL	LL LEVEL	1-20 K	Hz
	11					.052	In/Sec	.412 (	3-8 7 -
	21					.042	In/Sec	.007 (	3-8 7-8
	21					.043	In/Sec	.323	3-S
	22					.058	In/Sec	.096 0	3-S
	23					.064	In/Sec	.105 (	3-S
	71					.070	In/Sec	. 302 (	3-5
	/2					.071	In/Sec	.433 (	3-S
	81					.075	In/Sec	. 993 (	3-S
	02 02					.078	In/Sec	.547 (	3-5
	63					.054	In/Sec	.502 (	3-8
C-203		_	C-203	Com	~			(23-Aug-23)	
0 205			C 205	Com	,	OVERA		(25  Aug 25) 1-20  Kl	47
	11					057		2 441 0	2-9
	12					032	In/Sec	2.441	3-8 2-8
	21					050	In/Sec	1 975 (	3-8 2-8
	22					.030		1 004 0	3-5
	22					.037	In/Sec	250 (	3-8 7-9
	23					.020	IN/Sec	1-20	3-8 17
	71M					OVERAL 062	Tr/Soc	1 1-20 Ki	12 ?_?
	7214					.002	In/Sec	4.009 0	3-5
	721					.044	In/Sec	. 010 (	3-5
	/ 3M					.056	In/Sec	.990 (	3-S
	81M					.039	In/Sec	11.08	3-S
	82M					.031	In/Sec	1.052	3-S
	715					.034	In/Sec	3.235	3-S
	725					.061	In/Sec	1.548	3-S
	73E					.039	In/Sec	1.127 0	3-S
	81F.					.034	In/Sec	5.243	3-S
	82F					.032	In/Sec	1.302 0	3-S
C-202		_	C-202	Com	<b>`</b>			(23-Aug-23)	
0 202			C 202	com	,	OVERA	.T. T.EVET	(25 Aug 25) 1-20 Ki	H-7
	11					0980		4 842 (	2-9
	12					148	In/Sec	1 597 (	3 3 2-e
	21					.140		1 / 59 /	3-5
	22					065	In/Sec	168 (	3 3 2-e
	~~					.005	- /-	.100	3 3 2-e
	23					049	Tn/Soc	<11/1	
	23					.049 OVERAI	In/Sec	.307 0 1-20 Ki	47
	23 71м					.049 OVERAI	In/Sec LL LEVEL	1-20 Ki	HZ G-S
	23 71M 72M					.049 OVERAI .048 031	In/Sec LL LEVEL In/Sec	1-20 Ki 5.976 (	HZ G-s
	23 71M 72M 73M					.049 OVERAI .048 .031	In/Sec LL LEVEL In/Sec In/Sec	.307 ( 1-20 Ki 5.976 ( .964 (	HZ G-s G-s
	23 71M 72M 73M 81M					.049 OVERAI .048 .031 .077	In/Sec LL LEVEL In/Sec In/Sec In/Sec	.307 ( 1-20 K 5.976 ( .964 ( .922 (	HZ G-s G-s G-s
	23 71M 72M 73M 81M 82M					.049 OVERAI .048 .031 .077 .048 036	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 Ki 5.976 ( .964 ( .922 ( 10.66 (	HZ G-s G-s G-s G-s
	23 71M 72M 73M 81M 82M 71F					.049 OVERAJ .048 .031 .077 .048 .036	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4 953 (	HZ G-s G-s G-s G-s G-s
	23 71M 72M 73M 81M 82M 71F 72F					.049 OVERAJ .048 .031 .077 .048 .036 .032 .063	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec	.3070 1-20 KJ 5.9760 .9640 .9220 10.660 1.1800 4.9530	HZ G-s G-s G-s G-s G-s G-s G-s
	23 71M 72M 73M 81M 82M 71F 72F 73F					.049 OVERAJ .048 .031 .077 .048 .036 .032 .063	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .614 (	HZ G-s G-s G-s G-s G-s G-s G-s
	23 71M 72M 73M 81M 82M 71F 72F 73F 81F					.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .034	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 1.344 ( 1.344 ( 1.2.32 ( .618	HZ G-s G-s G-s G-s G-s G-s G-s G-s
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C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F	_	C-201	Com	0	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 KJ 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23))	HG-ssss GG-ssss GG-ssss GG-ssss GG-ss
C-201	23 71M 72M 81M 82M 71F 72F 73F 81F 82F	_	C-201	Comp	þ	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 KJ 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 KJ	HZ-sssss GG-sssss GG-sssss HZ-sssss GG-ssss H
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F	_	C-201	Comp	þ	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 OVERAJ .099	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec LL LEVEL In/Sec	.307 ( 1-20 KJ 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 KJ 2.512 (	HZ-SSSSSSSSS HZ-SSSSSSSSS HZ-SSSSSSSS HG-SSSSSSSS HG-SSSSSSS HG-SSSSSSSS HG-SSSSSSSS HG-SSSSSSSS HG-SSSSSSS HG-SSSSSSS HG-SSSSSSS HG-SSSSSSS HG-SSSSSS HG-SSSSSSS HG-SSSSSSS HG-SSSSSS HG-SSSSS HG-SSSSS HG-SSSSS HG-SSSSS HG-SSSSS HG-SSSSS HG-SSSSS HG-SSSSS HG-SSSSS HG-SSSSS HG-SSS HG-SS
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F	_	C-201	Comp	þ	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 OVERAJ .099 .052	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec LL LEVEL In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( 1.105 (	HGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21	_	C-201	Com	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 OVERAJ .099 .052 .101	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( 1.105 ( .725 (	HZGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22	_	C-201	Comj	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 OVERAJ .099 .052 .101	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( 1.105 ( .725 ( .303 (	HZGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22 23	_	C-201	Comj	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 OVERAJ .099 .052 .101 .042	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( 1.105 ( .725 ( .303 ( .194 (	HZGG-SSGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22 23	_	C-201	Comj	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 OVERAJ .099 .052 .101 .042 .057 OVERAJ	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( 1.105 ( .725 ( .303 ( .194 ( 1-20 K)	UZSGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22 23 71M	_	C-201	Comj	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 .052 .101 .042 .057 OVERAJ .057	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( .105 ( .725 ( .303 ( .194 ( 1-20 K) 5.319 (	HZ SGG-SSGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22 23 71M 72M	_	C-201	Com	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 .052 .101 .042 .057 OVERAJ .057	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( 1.105 ( .725 ( .303 ( .194 ( 5.319 ( .754 (	HZ SGG-SSGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22 23 71M 72M 73M	_	C-201	Com	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 .052 .101 .042 .057 OVERAJ .057 OVERAJ .057	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( .725 ( .303 ( .194 ( 1-20 K) 5.319 ( .754 ( 1.037 ( .754 ( 1.037 ( .754 ( 1.037 ( .754 ( 1.037 ( .754 ( 1.037 ( .754 ( 1.037 ( .754 ( .037 (	HZ SGG-SSGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22 23 71M 72M 73M 81M	_	C-201	Com	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 .057 .009 .052 .101 .042 .057 OVERAJ .061 .037 .066 .037	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( .303 ( .194 ( 1-20 K) 5.319 ( .754 ( 1.037 ( .328 ( .328 ( .326 ( .336 ( .336 ( .336 ( .346 ( .336 ( .337 ( .336 ( .33	HZ S G G G G G G G G G G G G G G G G G G
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22 23 71M 72M 73M 81M 82M	_	C-201	Com	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 .057 OVERAJ .042 .057 OVERAJ .057 OVERAJ .061 .037 .066 .037	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( .105 ( .725 ( .303 ( .194 ( 1-20 K) 5.319 ( .754 ( 1.037 ( 6.328 ( .928 ( .938 ( .9	HZ S G G G G G G G G G G G G G G G G G G
C-201	23 71M 72M 73M 81M 82M 71F 72F 73F 81F 82F 11 12 21 22 23 71M 72M 73M 81M 82M 71F	_	C-201	Com	2	.049 OVERAJ .048 .031 .077 .048 .036 .032 .063 .034 .040 .049 .057 OVERAJ .099 .052 .101 .042 .057 OVERAJ .061 .037 .066 .037	In/Sec LL LEVEL In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec In/Sec	.307 ( 1-20 K) 5.976 ( .964 ( .922 ( 10.66 ( 1.180 ( 4.953 ( .618 ( 1.344 ( 12.32 ( 1.301 ( (23-Aug-23)) 1-20 K) 2.512 ( 1.105 ( .725 ( .303 ( .194 ( 1-20 K) 5.319 ( 1-20 K) 5.319 ( .754 ( 1.037 ( 6.328 ( .928 ( .928 ( 5.186 ( .928 (	HZGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG

	.055 In/Sec	2.289 G-s
73F	.030 In/Sec	.874 G-s
81F	.046 In/Sec	10.94 G-s
82F	.054 In/Sec	2.215 G-s
new AC -	INSTRUMENT AIR COMPRESSOR	(23-Aug-23)
	OVERALL LEVEL	1-20 KHz
11	.091 In/Sec	1.108 G-s
12	.102 In/Sec	.461 G-s
13	.047 In/Sec	.145 G-s
21	.077 In/Sec	1.700 G-s
22	.069 In/Sec	.660 G-s
23	.044 In/Sec	.310 G-s
	OVERALL LEVEL	1-20 KHZ
71M	.136 In/Sec	7.703 G-s
72M	.092 In/Sec	1.883 G-s
7.3M	.070 In/Sec	1.930 G-s
81M	145 In/Sec	2 971 G-s
82M	190 In/Sec	1 434 C-s
83M	268 In/Sec	1 216 C-s
71 F	177 In/Sec	12 23 G-s
725	071 In/Sec	2 534 C-s
725	120 In/Sec	2.006 G-s
7JF 91 m	.120 III/Sec	2.000 G-S
81F 007	.143 IN/Sec	5.427 G-S
82F	.344 In/Sec	2.039 G-S
83F.	.218 In/Sec	2.178 G-s
001 005		(00 <b>-</b> 00)
201-08A -	COMPRESSOR, NASH A 201-08A	(23-Aug-23)
	OVERALL LEVEL	1-20 KHz
11	.047 In/Sec	.127 G-s
12	.059 In/Sec	.072 G-s
13	.110 In/Sec	.055 G-s
21	.049 In/Sec	.224 G-s
22	.068 In/Sec	.125 G-s
23	.116 In/Sec	.152 G-s
23 71	.116 In/Sec .151 In/Sec	.152 G-s .629 G-s
23 71 72	.116 In/Sec .151 In/Sec .174 In/Sec	.152 G-s .629 G-s .136 G-s
23 71 72 73	.116 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s
23 71 72 73 81	.116 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s
23 71 72 73 81 82	.116 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s
23 71 72 73 81 82 83	.116 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s
23 71 72 73 81 82 83	.116 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s
23 71 72 73 81 82 83 202-05 -	.116 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec .140 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s
23 71 72 73 81 82 83 202-05 -	.116 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz
23 71 72 73 81 82 83 202-05 -	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s
23 71 72 73 81 82 83 202-05 -	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23	.116 In/Sec .151 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .028 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .028 In/Sec .019 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72	.116 In/Sec .151 In/Sec .151 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .028 In/Sec .019 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 -	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec .130 In/Sec .018 In/Sec .021 In/Sec .028 In/Sec .019 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 -	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec .130 In/Sec .018 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23	.116 In/Sec .151 In/Sec .151 In/Sec .174 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .086 In/Sec .072 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 31	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec .019 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec OVERALL LEVEL .167 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 31 31 31L	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .021 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec .086 In/Sec .004 In/Sec .101 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 31 311 31L	.116 In/Sec .151 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec .072 In/Sec .086 In/Sec .072 In/Sec .101 In/Sec .004 In/Sec .005 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s 1-20 KHz
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 31 311 311 51	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec .072 In/Sec .101 In/Sec .101 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s 1-20 KHz .243 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 31 311 311 51 511	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec .072 In/Sec .101 In/Sec .101 In/Sec .075 In/Sec .175 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s 1-20 KHz .243 G-s .243 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 31 31L 31L 51 51L 52	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec .004 In/Sec .101 In/Sec .101 In/Sec .105 In/Sec .175 In/Sec .066 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s 1-20 KHz .243 G-s .243 G-s .230 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 31 31L 51 51L 52 52L	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec .004 In/Sec .101 In/Sec .101 In/Sec .175 In/Sec .175 In/Sec .066 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s 1-20 KHz .243 G-s .243 G-s .230 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 71 72 9002-10 - 11 21 23 31 31L 51 51L 52 52L 53	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec D-HYDROGENATOR AGITATOR OVERALL LEVEL .066 In/Sec .072 In/Sec .086 In/Sec .004 In/Sec .101 In/Sec .101 In/Sec .105 In/Sec .175 In/Sec .166 In/Sec .190 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s .243 G-s .243 G-s .243 G-s .230 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 31 311 31L 51 511 52 52L 53 53L	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .140 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec .019 In/Sec .019 In/Sec .072 In/Sec .086 In/Sec .072 In/Sec .086 In/Sec .00VERALL LEVEL .167 In/Sec .101 In/Sec .101 In/Sec .175 In/Sec .175 In/Sec .066 In/Sec .190 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s .243 G-s .243 G-s .243 G-s .230 G-s .285 G-s .325 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 71 72 9002-10 - 11 21 23 31 31L 51 51L 52 52L 53 53L 61	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .027 In/Sec .028 In/Sec .019 In/Sec .019 In/Sec .019 In/Sec .072 In/Sec .086 In/Sec .086 In/Sec .072 In/Sec .086 In/Sec .086 In/Sec .101 In/Sec .101 In/Sec .101 In/Sec .175 In/Sec .175 In/Sec .190 In/Sec .185 In/Sec .110 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s .243 G-s .243 G-s .243 G-s .243 G-s .243 G-s .230 G-s .285 G-s .325 G-s .209 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 71 72 9002-10 - 11 21 23 71 72 9002-10 - 11 21 23 71 72 51 51L 52 52L 53 53L 61 61 61L	.116 In/Sec .151 In/Sec .174 In/Sec .174 In/Sec .170 In/Sec .170 In/Sec .188 In/Sec .130 In/Sec NASH SEAL LIQUID PUMP-A OVERALL LEVEL .018 In/Sec .021 In/Sec .021 In/Sec .028 In/Sec .019 In/Sec .019 In/Sec .019 In/Sec .019 In/Sec .072 In/Sec .086 In/Sec .086 In/Sec .086 In/Sec .00VERALL LEVEL .167 In/Sec .101 In/Sec .101 In/Sec .066 In/Sec .175 In/Sec .175 In/Sec .190 In/Sec .185 In/Sec .181 In/Sec	.152 G-s .629 G-s .136 G-s .218 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s .243 G-s .243 G-s .243 G-s .243 G-s .230 G-s .235 G-s .209 G-s .209 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 71 72 9002-10 - 11 21 23 31 31L 51 51L 52 52L 53 53L 61 61L 81	<ul> <li>.116 In/Sec</li> <li>.151 In/Sec</li> <li>.174 In/Sec</li> <li>.174 In/Sec</li> <li>.140 In/Sec</li> <li>.170 In/Sec</li> <li>.188 In/Sec</li> <li>.130 In/Sec</li> </ul> NASH SEAL LIQUID PUMP-A OVERALL LEVEL <ul> <li>.018 In/Sec</li> <li>.021 In/Sec</li> <li>.021 In/Sec</li> <li>.027 In/Sec</li> <li>.028 In/Sec</li> <li>.019 In/Sec</li> </ul> D-HYDROGENATOR AGITATOR OVERALL LEVEL <ul> <li>.066 In/Sec</li> <li>.072 In/Sec</li> <li>.086 In/Sec</li> <li>.072 In/Sec</li> <li>.086 In/Sec</li> <li>.072 In/Sec</li> <li>.086 In/Sec</li> <li>.072 In/Sec</li> <li>.086 In/Sec</li> <li>.011 In/Sec</li> <li>.101 In/Sec</li> <li>.175 In/Sec</li> <li>.175 In/Sec</li> <li>.166 In/Sec</li> <li>.216 In/Sec</li> <li>.185 In/Sec</li> <li>.110 In/Sec</li> <li>.110 In/Sec</li> <li>.110 In/Sec</li> <li>.110 In/Sec</li> <li>.110 In/Sec</li> </ul>	.152 G-s .629 G-s .136 G-s .218 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s .243 G-s .243 G-s .243 G-s .243 G-s .230 G-s .230 G-s .209 G-s .209 G-s .209 G-s .021 G-s
23 71 72 73 81 82 83 202-05 - 11 21 23 71 72 9002-10 - 11 21 23 71 72 9002-10 - 11 21 23 31 31L 51 51L 52 52L 53 53L 61 61L 81 82	<ul> <li>.116 In/Sec</li> <li>.151 In/Sec</li> <li>.174 In/Sec</li> <li>.174 In/Sec</li> <li>.140 In/Sec</li> <li>.170 In/Sec</li> <li>.188 In/Sec</li> <li>.130 In/Sec</li> </ul> NASH SEAL LIQUID PUMP-A OVERALL LEVEL <ul> <li>.018 In/Sec</li> <li>.021 In/Sec</li> <li>.027 In/Sec</li> <li>.028 In/Sec</li> <li>.019 In/Sec</li> </ul> D-HYDROGENATOR AGITATOR OVERALL LEVEL <ul> <li>.066 In/Sec</li> <li>.072 In/Sec</li> <li>.086 In/Sec</li> <li>.072 In/Sec</li> <li>.086 In/Sec</li> <li>.072 In/Sec</li> <li>.086 In/Sec</li> <li>.072 In/Sec</li> <li>.101 In/Sec</li> <li>.101 In/Sec</li> <li>.175 In/Sec</li> <li>.175 In/Sec</li> <li>.166 In/Sec</li> <li>.216 In/Sec</li> <li>.110 In/Sec</li> <li>.185 In/Sec</li> <li>.110 In/Sec</li> <li>.181 In/Sec</li> <li>.027 In/Sec</li> </ul>	.152 G-s .629 G-s .136 G-s .218 G-s .250 G-s .068 G-s .066 G-s (23-Aug-23) 1-20 KHz .088 G-s .244 G-s .050 G-s .071 G-s .036 G-s (23-Aug-23) 1-20 KHz .239 G-s .404 G-s .097 G-s 1-20 KHZ .715 G-s .821 G-s .243 G-s .243 G-s .243 G-s .243 G-s .243 G-s .230 G-s .230 G-s .209 G-s .209 G-s .209 G-s .021 G-s .022 G-s

MEASURI	EMENT POINT	(	OVERALL LEVEL	HFD / VHFD
<b>C</b> 2	- FD BLOWFR	<b>C</b> 2	(3)	)-2110-23)
02		02	OVERALL LEVEL	1-20 KHz
	MOH		.555 In/Sec	.856 G-s
	MOV		.617 In/Sec	.341 G-s
	MIH		.417 In/Sec	1.202 G-s
	MIV		.833 In/Sec	.261 G-s
	MIA		1.902 In/Sec	.275 G-s
	FIH		.750 In/Sec	3.859 G-s
	FIV		1.054 In/Sec	.622 G-s
	FIA		2.119 In/Sec	.531 G-s
	FOH		1.207 In/Sec	3.284 G-s
	FOV		1.612 In/Sec	.628 G-s
C1 - ID -BLOWER		C1	(23	3-Aug-23)
			OVERALL LEVEL	1-20 KHz
			116 Tp/900	272 0 -
	11		.IIO IN/Sec	.3/2 G-S
	11 21		.119 In/Sec	.372 G-s .478 G-s
	11 21 23		.110 In/Sec .119 In/Sec .115 In/Sec	.372 G-s .478 G-s .107 G-s
	11 21 23 71		.110 In/Sec .119 In/Sec .115 In/Sec .112 In/Sec	.372 G-s .478 G-s .107 G-s .684 G-s
	11 21 23 71 72		.110 In/Sec .119 In/Sec .115 In/Sec .112 In/Sec .054 In/Sec	.372 G-S .478 G-S .107 G-S .684 G-S .517 G-S
	11 21 23 71 72 81		.110 In/Sec .119 In/Sec .115 In/Sec .054 In/Sec .286 In/Sec	.372 G-s .478 G-s .107 G-s .684 G-s .517 G-s 1.120 G-s
	11 21 23 71 72 81 82		.110 In/Sec .119 In/Sec .115 In/Sec .112 In/Sec .054 In/Sec .286 In/Sec .237 In/Sec	.372 G-s .478 G-s .107 G-s .684 G-s .517 G-s 1.120 G-s .382 G-s
	11 21 23 71 72 81 82		.110 In/Sec .119 In/Sec .115 In/Sec .112 In/Sec .054 In/Sec .286 In/Sec .237 In/Sec	.372 G-s .478 G-s .107 G-s .684 G-s .517 G-s 1.120 G-s .382 G-s
	11 21 23 71 72 81 82		.110 In/Sec .119 In/Sec .115 In/Sec .112 In/Sec .054 In/Sec .286 In/Sec .237 In/Sec	.372 G-s .478 G-s .107 G-s .684 G-s .517 G-s 1.120 G-s .382 G-s
	11 21 23 71 72 81 82 tion Of Vibration	Units	.110 In/Sec .119 In/Sec .115 In/Sec .112 In/Sec .054 In/Sec .286 In/Sec .237 In/Sec	.372 G-s .478 G-s .107 G-s .684 G-s .517 G-s 1.120 G-s .382 G-s

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

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Sincerely,

Kerin W. Maxuell

ISO Certified Vibration Analyst, Category III



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