

THE PORT AUTHORITY OF NY & NJ

**PROCUREMENT DEPARTMENT
4 WORLD TRADE CENTER
150 GREENWICH STREET, 21ST FL.
NEW YORK, NY 10007**

11/2/2016

ADDENDUM # 2

To prospective Bidder(s) on Bid # 47578 for Maintenance, Repair and Emergency Service of Cooling Towers at Newark Liberty International Airport (EWR) - Three (3) Year Service Contract

Now Due back on 11/15/2016, no later than 11:00AM
Originally Due back on 11/03/2016

I. CHANGES/MODIFICATIONS

The following changes/modifications are hereby made to the solicitation documents:

- A. The Bid due date is hereby extended to 11/15/2016, no later than 11:00 AM
- B. Part III, Section 4 “Price Adjustment” delete the following in its entirety:
All Contract prices submitted by the Contractor and agreed to by the Port Authority, shall be applicable to the three (3) years of the Base Term. For the Option Period(s) that are applicable to this Contract and are exercised hereunder (excluding the 120 day Extension Period as described in the paragraph entitled “Duration/Escalation” in Part IV hereof), the Port Authority shall adjust the compensation due to the Contractor utilizing the Consumer Price Index for all Urban Consumers; Series Id: CUURA101SA0L2; Not Seasonally Adjusted; New York-Northern New Jersey-Long Island, NY-NJ-CT-PA area; all items less shelter; 1982-1984=100, published by the Bureau of Labor Statistics of the United States Department of Labor (“Price Index”).

And replace it with the following:

All Contract prices submitted by the Contractor and agreed to by the Port Authority, shall be applicable to the three (3) years of the Base Term. For the Option Period(s) that are applicable to this Contract and are exercised hereunder (excluding the 120 day Extension Period as described in the paragraph entitled “Duration” in Part III hereof), the Port Authority shall adjust the compensation due to the Contractor utilizing the Consumer Price Index for all Urban Consumers; Series Id: CUURA101SA0L2; Not Seasonally Adjusted; New York-Northern New Jersey-Long Island, NY-NJ-CT-PA area; all items less shelter; 1982-1984=100, published by the Bureau of Labor Statistics of the United States Department of Labor (“Price Index”).

C. Part V, Section 4 “Service Visit” delete paragraph J in its entirety and replace it with the following:

J. Inspection of Tower Fan Blade

1. Inspect all nine (9) blades in each of the eight (8) towers that make up the Tower for a total of 72 blades.
2. Inspect the tower fan blades and provide the findings in the Service Report at the beginning of the Cooling Season in March and at the end of the Cooling Season in October.
3. Replace blades when Balancing Report finds units to be out of balance.
4. Replace blades upon any failure of such blades in the Tower.

II. BIDDER'S QUESTIONS AND ANSWERS

The following information is available in response to questions submitted by prospective Bidders. The responses should not be deemed to answer all questions which have been submitted by Bidders to the Port Authority. It addresses only those questions which the Port Authority has deemed to require additional information and/or clarification. The fact that information has not been supplied with respect to particular questions asked by Bidders does not mean or imply, nor should it be deemed to mean or imply, any meaning, construction, or implication with respect to the terms.

The Port Authority makes no representations, warranties or guarantees that the information contained herein is accurate, complete or timely or that such information accurately represents the conditions that would be encountered during the performance of the Contract. The furnishing of such information by the Port Authority shall not create or be deemed to create any obligation or liability upon it for any reason whatsoever and each Bidder, by submitting its Bid, expressly agrees that it has not relied upon the foregoing information, and that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever. Accordingly, nothing contained herein and no representation, statement or promise, of the Port Authority, its Commissioners, officers, agents, representatives, or employees, whether made orally or in writing, shall impair or limit the effect of the warranties of the Bidder required by this Bid or Contract and the Bidder agrees that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever.

The Questions and Answers numbering sequence will be continued sequentially in any forthcoming Addenda that may be issued.

Question #2	What union affiliations have been used for past cooling tower work?
Answer #2	The Port Authority is not a party to any such agreements, they would be between the contractors and any collective bargaining units and

	prospective bidders may on their own volition contact collective bargaining.
Question #3	A. Exhibit A, Item 8: At the Pre-Bid Meeting it was stated that all of the Pump work is to be performed by the manufacturer. B. Is it correct that the term “AS NEEDED” will be at the discretion of the pump manufacturer?
Answer #3	A. No. Refer to Part V, Page 9, Section 10 “Personnel Requirements”. B. No. Refer to Part V, Page 3, Section 4 “Service Visit”.
Question #4	How is a provision for escalation or changes in insurance costs to be administered over a 3-Year period?
Answer #4	There is no provision for escalation or changes in the document. Insurance liability limits are based on the estimated value of the contract.
Question #5	Exhibit A, Item 11: Is it to be determined that a quantity of 32 Defective Hubs are to be replaced six (6) times over the 3-Year Contract, a TOTAL of 192 hubs or 32 Hubs over a 3-Year Contract period?
Answer #5	There are a total of 32 hub assemblies. The pricing sheet has an estimated quantity of six (6) in a three-year period. Which equates to an overall estimated quantity of 192 hubs. Refer to Part V, Section 4 “Service Visit”, page 6, paragraph I “Tower Fan Hub Assemblies”.
Question #6	Exhibit A, Item 12: Is it to be determined that a quantity of 72 Defective Blades are to be replaced six (6) times over the 3-Year Contract, a TOTAL of 432 Blades, or 72 Blades over a 3-Year Contract period?
Answer #6	See CHANGES/MODIFICATIONS letter C above
Question #7	Exhibit A, Item 13: Is a sample vibration report available that defines the data acquisition detail that must be reported for each test?
Answer #7	Attached find Balancing Report for Cooling Tower # 5 after repairs were made.
Question #8	Can you confirm that an authorized Peerless Pump representative has to perform the inspections and any required work on the pumps?
Answer #8	Please refer to Answer #3 B
Question #9	Is the fan performance design criteria (CMF, Static Pressure, Velocity Pressure, Total Pressure, Fan Efficiency, Fan horsepower and noise prediction) available from New York Power Authority?
Answer #9	The Port Authority does not have this information available.

This communication should be initialed by you and annexed to your Bid upon submission.

In case any Bidder fails to conform to these instructions, its Bid will nevertheless be construed as though this communication had been so physically annexed and initialed.

THE PORT AUTHORITY OF NY & NJ

SELENE ORTEGA, MANAGER
COMMODITIES & SERVICES DIVISION

BIDDER'S FIRM NAME: _____

INITIALED: _____

DATE: _____

QUESTIONS CONCERNING THIS ADDENDUM MAY BE ADDRESSED TO
LUZ SANTANA AT LSANTANA@PANYNJ.GOV OR (212) 435-4625.



DYNAMIC BALANCING CORPORATION

PRECISION BALANCING AND VIBRATION ANALYSIS

264 WABASH AVENUE
PATERSON, NEW JERSEY 07503

VIBRATION TEST REPORT

FACILITY: PORT AUTHORITY NEWARK AP
BUILDING 46
COOLING TOWER

FOR: GEORGE S HALL INC
30 CHAPIN ROAD, UNIT 1204
PO BOX 103
PINE BROOK, NJ 07058

PREPARED BY: DON KNICE JR.

DATE: November 26, 2014

INTRODUCTION

Vibration analysis is an effective way to monitor equipment to save on costly repairs and downtime. Vibration analysis lets us monitor the rotating equipment without disrupting the normal equipment operation. The spectral analysis results on fan units let us check for bearing failures, pulleys and belt issues, shaft damage and out of balance problems. The spectral analysis on pump units let us check for bearing issues, coupling wear problems, misalignment, cavitations and out of balance problems. The spectral analysis is also effective for determining early electrical problems with the motors.

Data is collected on the rotating equipment in different bearing locations and positions. Each point helps DBC in determining possible issues that could be detrimental to the life of the unit. All units are rated in the status column. Many different criteria are used to judge the operation of the equipment. The following chart will help you in deciding what to address and when with your budget

STATUS LEGEND

A= ACCEPTABLE Vibration levels normal, No action required

FR=FAIR Vibration levels elevated, Recheck unit in the next 6 months

P=POOR Vibration levels excessive, Repair in the next 3-6 months

NA=NEEDS ATTENTION Vibration levels severe, Repair as soon as possible

UNIT	RECOMMENDATIONS	STATUS
CT 5	Vibration analysis indicates that no excessive levels of vibration were present at the time of data collection with the rotating equipment.	A



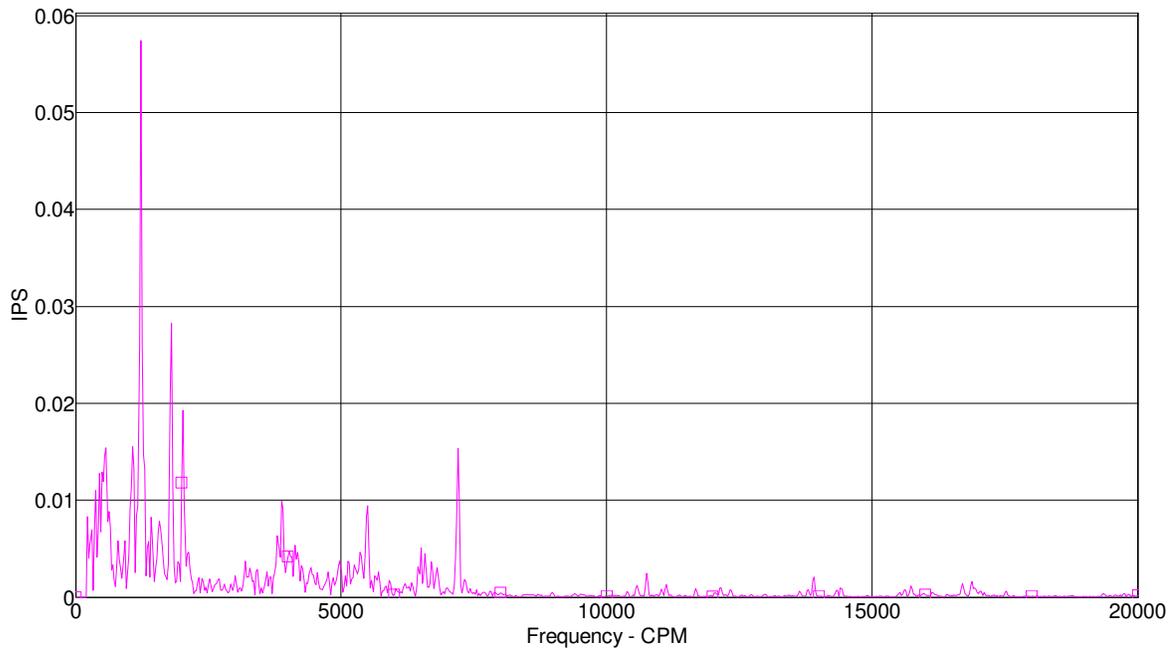
Report Description

Last Measurements

ID	Units	Date	Last Value	Previous Value	Percent Change	Alarm Status
Machine: 24-NOV-14 10:24:01 Desc:						
GSH CT5 MOH	IPS	21-NOV-14	0.08873	None	---	_____
GSH CT5 MOV	IPS	21-NOV-14	0.1017	None	---	_____
GSH CT5 MOA	IPS	21-NOV-14	0.1963	None	---	_____
GSH CT5 GBH	IPS	21-NOV-14	0.03885	None	---	_____
GSH CT5 GBV	IPS	21-NOV-14	0.02102	None	---	_____
GSH CT5 GBA	IPS	21-NOV-14	0.1268	None	---	_____

Report Description

Single Spectrum Plot



1: GSH CT5 MOH
Velocity (Acc to Vel) (Peak)
21-NOV-14 11:57:35

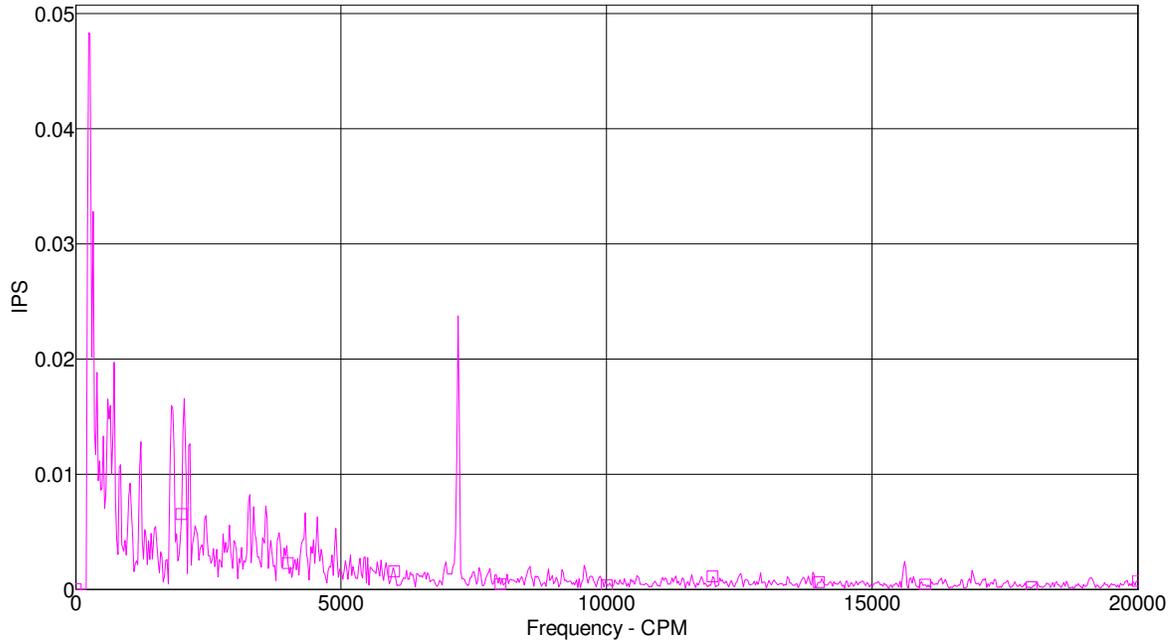
Machine: 24-NOV-14 10:24:01	POINT ID: GSH CT5 MOH	Desc:	
Date: 21-NOV-14 11:57:35	Window: Hanning	Speed: 1800.000 RPM	Overall: 0.089
Freq: 0.0 - 20000.0 CPM	Lines: 800	Threshold: 0.010000	Sync: 0.035
Detect: Peak	Aver: 0	Units: IPS	SubSync: 0.073
	Type: FFT		NonSync: 0.037

Spectral Peaks Above Threshold

Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order
0.011	375.000	0.208	0.015	575.000	0.319	0.028	1800.000	1.000
0.013	450.000	0.250	0.016	1075.000	0.597	0.019	2025.000	1.125
0.013	500.000	0.278	0.057	1225.000	0.681	0.015	7200.000	4.000

Report Description

Single Spectrum Plot



1: GSH CT5 MOV
Velocity (Acc to Vel) (Peak)
21-NOV-14 11:57:48

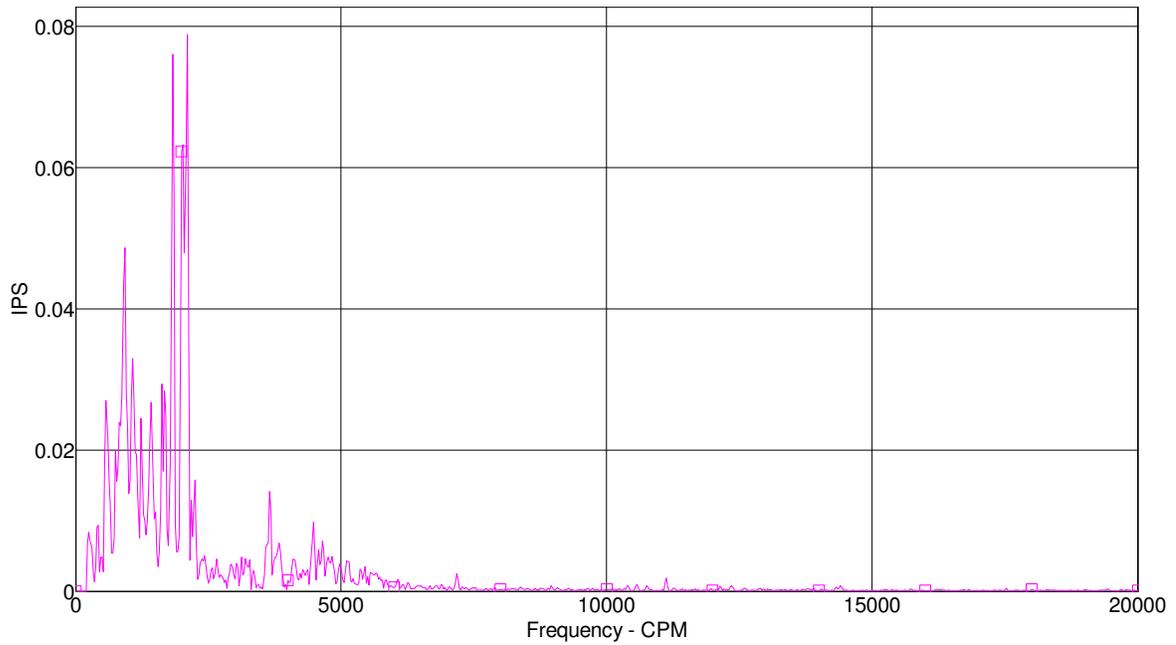
Machine: 24-NOV-14 10:24:01	Window: Hanning	Speed: 1800.000 RPM	Overall: 0.102
Date: 21-NOV-14 11:57:48	Lines: 800	Threshold: 0.005000	Sync: 0.033
Freq: 0.0 - 20000.0 CPM	Aver: 0	Units: IPS	SubSync: 0.085
Detect: Peak	Type: FFT		NonSync: 0.044

Spectral Peaks Above Threshold

Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order
0.048	250.000	0.139	0.016	650.000	0.361	0.016	1800.000	1.000
0.048	250.000	0.139	0.020	725.000	0.403	0.017	2050.000	1.139
0.033	325.000	0.181	0.011	850.000	0.472	0.013	2150.000	1.194
0.019	400.000	0.222	0.009	1025.000	0.569	0.005	2250.000	1.250
0.011	450.000	0.250	0.013	1225.000	0.681	0.006	2450.000	1.361
0.013	525.000	0.292	0.005	1300.000	0.722	0.006	2900.000	1.611
0.016	600.000	0.333	0.005	1500.000	0.833	0.008	3275.000	1.819

Report Description

Single Spectrum Plot



1: GSH CT5 MOA
Velocity (Acc to Vel) (Peak)
21-NOV-14 11:58:03

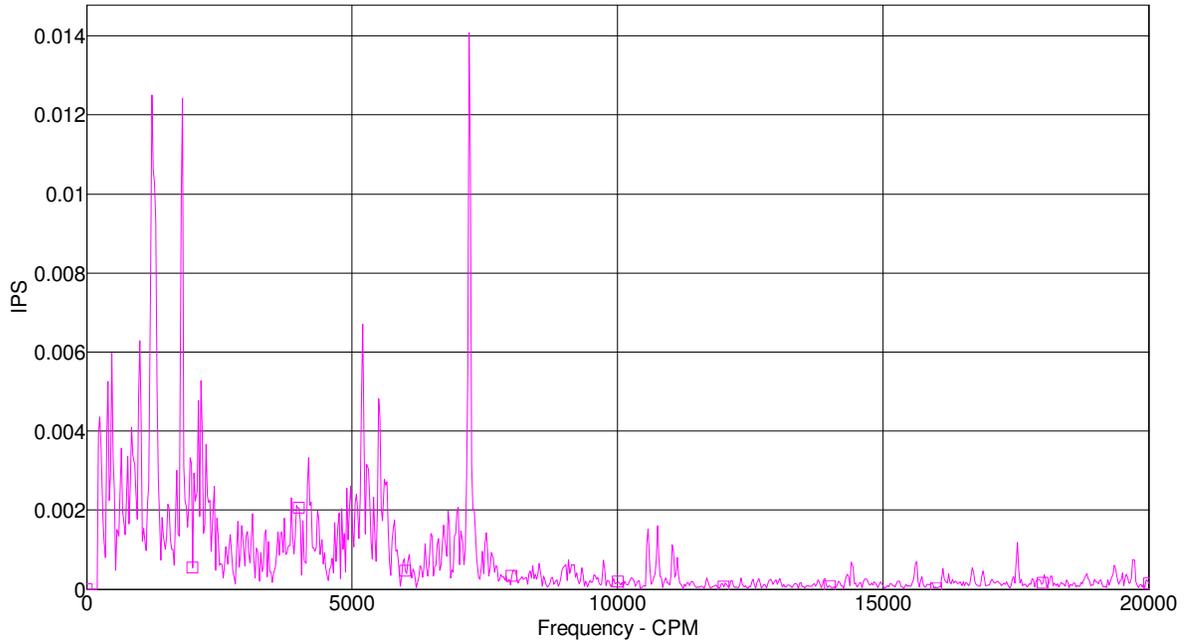
Machine: 24-NOV-14 10:24:01	Window: Hanning	Speed: 1800.000 RPM	Overall: 0.196
Date: 21-NOV-14 11:58:03	Lines: 800	Threshold: 0.010000	Sync: 0.074
Freq: 0.0 - 20000.0 CPM	Aver: 0	Units: IPS	SubSync: 0.119
Detect: Peak	Type: FFT		NonSync: 0.138

Spectral Peaks Above Threshold

Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order
0.027	575.000	0.319	0.027	1425.000	0.792	0.079	2100.000	1.167
0.020	750.000	0.417	0.011	1500.000	0.833	0.013	2175.000	1.208
0.024	825.000	0.458	0.029	1625.000	0.903	0.016	2250.000	1.250
0.049	925.000	0.514	0.028	1675.000	0.931	0.014	3650.000	2.028
0.033	1075.000	0.597	0.076	1825.000	1.014			
0.024	1225.000	0.681	0.063	2025.000	1.125			

Report Description

Single Spectrum Plot



1: GSH CT5 GBH
Velocity (Acc to Vel) (Peak)
21-NOV-14 11:58:20

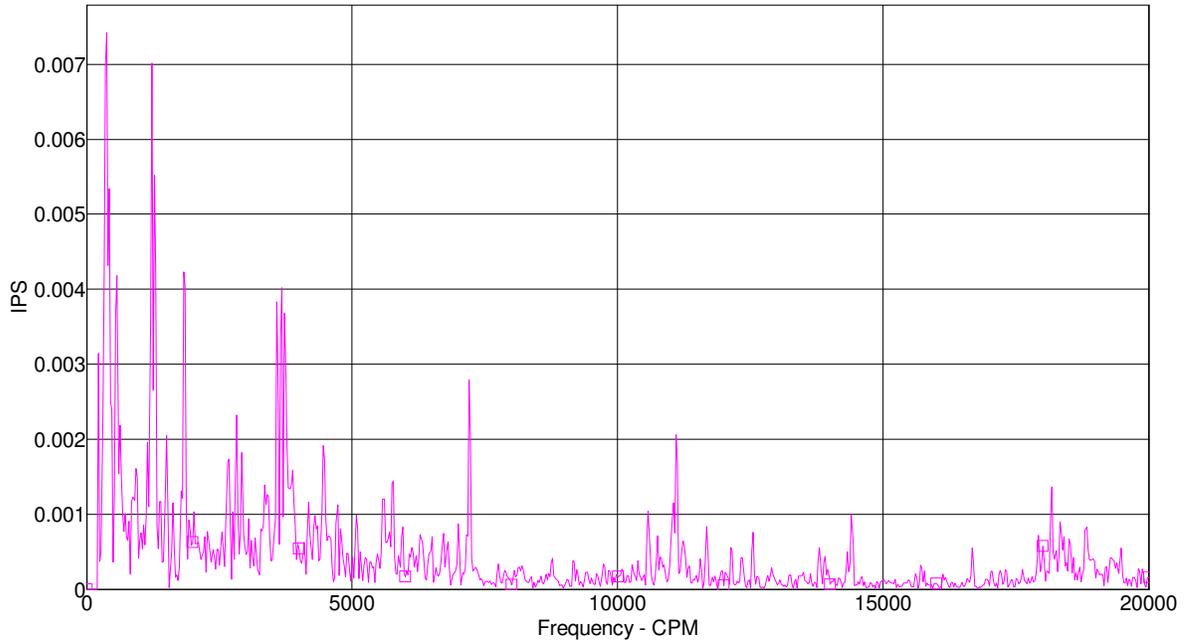
Machine: 24-NOV-14 10:24:01	Window: Hanning	Speed: 1800.000 RPM	Overall: 0.039
Date: 21-NOV-14 11:58:20	Lines: 800	Threshold: 0.002000	Sync: 0.020
Freq: 0.0 - 20000.0 CPM	Aver: 0	Units: IPS	SubSync: 0.025
Detect: Peak	Type: FFT		NonSync: 0.021

Spectral Peaks Above Threshold

Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order
0.004	250.000	0.139	0.013	1225.000	0.681	0.005	2150.000	1.194
0.005	400.000	0.222	0.002	1525.000	0.847	0.004	2250.000	1.250
0.006	475.000	0.264	0.003	1700.000	0.944	0.002	2325.000	1.292
0.004	650.000	0.361	0.012	1800.000	1.000	0.003	2400.000	1.333
0.003	775.000	0.431	0.003	1950.000	1.083	0.002	3850.000	2.139
0.004	850.000	0.472	0.003	2025.000	1.125	0.002	3950.000	2.194
0.006	1000.000	0.556	0.005	2100.000	1.167	0.003	4175.000	2.319

Report Description

Single Spectrum Plot



1: GSH CT5 GBV
Velocity (Acc to Vel) (Peak)
21-NOV-14 11:58:30

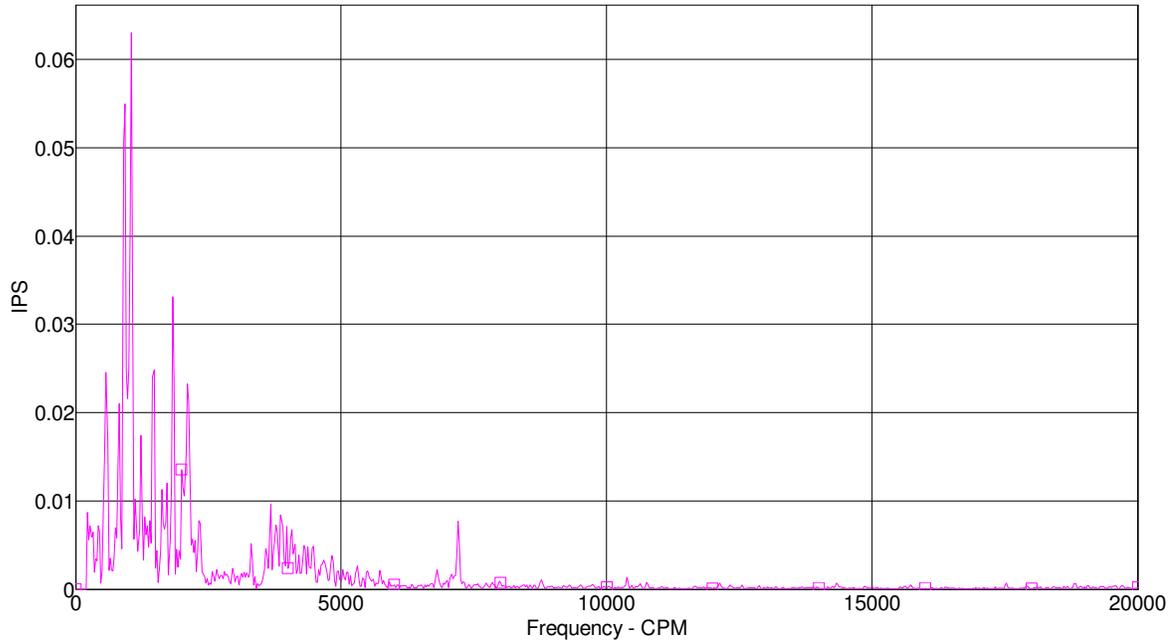
Machine: 24-NOV-14 10:24:01	Window: Hanning	Speed: 1800.000 RPM	Overall: 0.021
Date: 21-NOV-14 11:58:30	Lines: 800	Threshold: 0.001000	Sync: 0.006
Freq: 0.0 - 20000.0 CPM	Aver: 0	Units: IPS	SubSync: 0.016
Detect: Peak	Type: FFT		NonSync: 0.012

Spectral Peaks Above Threshold

Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order
0.003	225.000	0.125	0.002	925.000	0.514	0.001	1775.000	0.986
0.007	375.000	0.208	0.002	1150.000	0.639	0.004	1825.000	1.014
0.005	425.000	0.236	0.007	1225.000	0.681	0.001	2025.000	1.125
0.004	575.000	0.319	0.006	1275.000	0.708	0.002	2675.000	1.486
0.002	625.000	0.347	0.001	1400.000	0.778	0.001	2750.000	1.528
0.001	725.000	0.403	0.002	1500.000	0.833	0.002	2825.000	1.569
0.001	875.000	0.486	0.001	1625.000	0.903	0.002	2925.000	1.625

Report Description

Single Spectrum Plot



1: GSH CT5 GBA
Velocity (Acc to Vel) (Peak)
21-NOV-14 11:58:41

Machine: 24-NOV-14 10:24:01	Window: Hanning	Speed: 1800.000 RPM	Overall: 0.127
Date: 21-NOV-14 11:58:41	Lines: 800	Threshold: 0.010000	Sync: 0.031
Freq: 0.0 - 20000.0 CPM	Aver: 0	Units: IPS	SubSync: 0.112
Detect: Peak	Type: FFT		NonSync: 0.051

Spectral Peaks Above Threshold

Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order	Amplitude	Frequency (CPM)	Order
0.025	575.000	0.319	0.010	1125.000	0.625	0.012	1725.000	0.958
0.021	825.000	0.458	0.017	1225.000	0.681	0.033	1825.000	1.014
0.055	925.000	0.514	0.025	1475.000	0.819	0.014	2000.000	1.111
0.063	1050.000	0.583	0.011	1625.000	0.903	0.023	2100.000	1.167