



vibration - thermography - oil analysis - laser alignment - in-situ balancing

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condition monitoring
Report
Report ID
customer.
day. month. year

Equipment

The following equipment was used to carry out the survey:

SKF Microlog CMVA60.

Serial No 602995

Accelerometer:

Serial No 003088

SKF @ptitude Analysis Software.

Dell Notebook Computer

Analyst

Technician

Date:	Report No.			
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Location	Equipment	Status	Page	Fault/Comment
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Line One

GEL G' Floor	2025 FA115 No.2 FD Fan			
	2025 FA127 No.3 FD Fan			
Burner G' Floor	2025 FA202 Zone 1 Comb Fan			
	2025 FA203 Zone 1 Re-Circ Fan			
	2025 FA205 Zone 2 Comb Fan			
	2025 FA206 Zone 2 Re-Circ Fan			
GEL 2 nd Floor	2025 FA102 No.1 FD Fan			
	2025 FA113 No.1 ID Fan			
	2025 FA125 No.2 ID Fan	See August 2013 Report		Fan Unbalance.
Powder	2026 FA117 Grinder Asperation Fan			

Line Two

GEL G' Floor	2035 FA115 No.2 FD Fan			
	2035 FA127 No.3 FD Fan	See August 2013 Report		Fan Unbalance
Burner G' Floor	2035 FA202 Zone 1 Comb Fan		3	Vibration Increases
	2035 FA203 Zone 1 Re-Circ Fan		4	Fan Unbalance
	2035 FA205 Zone 2 Comb Fan			
	2035 FA206 Zone 2 Re-Circ Fan			
GEL 2 nd Floor	2035 FA102 No.1 FD Fan	Advisory Report	5	
	2035 FA113 No.1 ID Fan			
	2035 FA125 No.2 ID Fan		6	Vibration
Powder	2036 FA117 Grinder Asperation Fan			

Refrigerated Water

	2006 PU 101			
	2006 PU 102			
	2006 PU 103			
	2006 PU 104 A			
	2006 PU 104 B	No Data		

Cooling Water

	2005 PU 101			
	2005 PU 102			
	2005 PU 103	Last Data Jan 2014		
	2005 PU 104	No Data		

Key:-

	Recommend Action
	Fluctuating
	Satisfactory
	Not Running

All quoted velocity amplitudes are mm/s RMS.
Overall Values are 30Kcpm frequency length.

Report

Line Two

Gel Section Ground Floor

No.1 Burner
2035 FA 202

Burner Zone 1 Combustion Fan

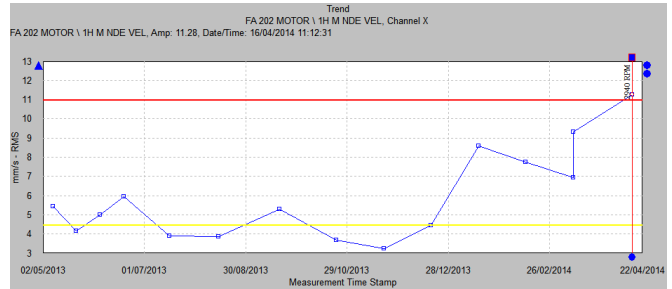
Motor

As discussed during the site visit the noise level and vibration has increased on this unit. The increase in vibration on this unit isn't due to an increase in 1x vibration but turbulence possibly caused by air flow restriction (See motor non drive end horizontal vibration trend & waterfall spectrum 1H).

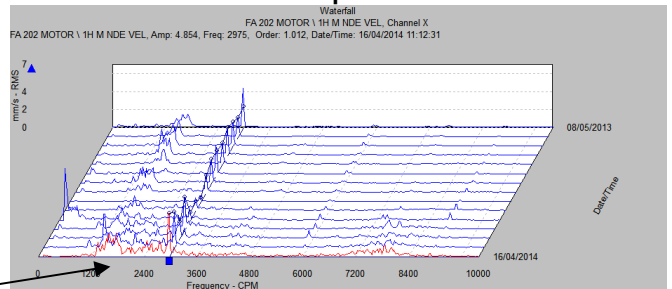
Increased Turbulence

Trend/Spectrums

Motor Non Drive End Horizontal Vibration Trend 1H



Motor Non Drive End Horizontal Vibration Waterfall Spectrum 1H



Recommended Action:

Motor

Due to the increase in air turbulence I would recommend checking the dampner settings and pipe work for any blockages/restrictions

Inspection :

Repaired by:

Date:

Comment:

Report

Line Two

Gel Section Ground Floor

No.2 Burner

2035 FA 206

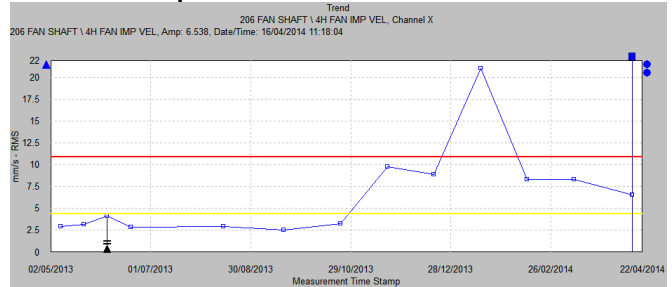
Burner Zone 2 Re-Circ Fan

Motor & Fan Shaft

Although at a reduced level the vibration remains above 'baseline' levels (See fan shaft impellor end horizontal vibration trend 4H).

Trend/Spectrums

Fan Shaft Impellor End Horizontal Vibration Trend 4H



Recommended Action:

Motor & Fan Shaft

The increased vibration is due to 1x rpm frequency, I would therefore recommend inspecting the impellor for wear/damage and check it is free from build up.

If the impellor is in a satisfactory condition check all holding down bolts are tight and secure, then re-align the motor and fan shaft.

If the vibration remains above 'baseline' levels after the above corrective actions have been carried out, I would recommend the impellor is in-situ balanced.

Inspection :

Repaired by:

Date:

Comment:

Report

Line Two

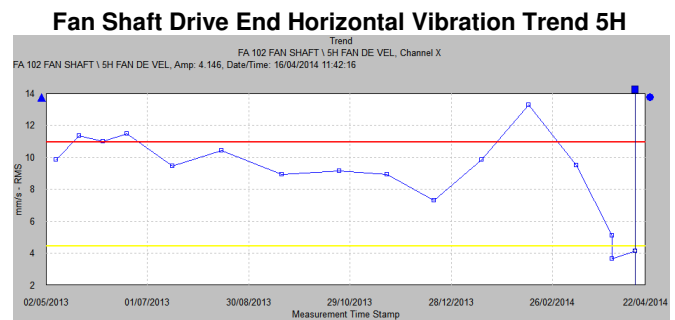
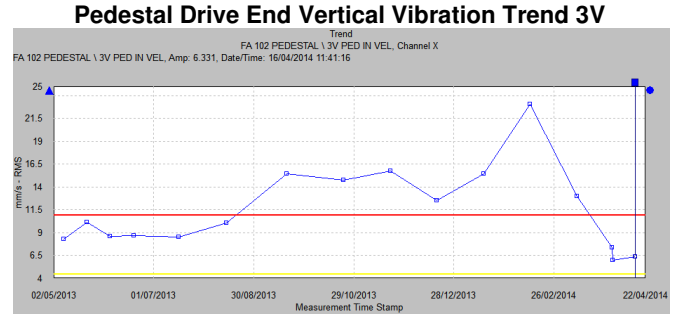
Gel Section Second Floor

2035 FA 102 No 1 FD Fan

Motor, Pedestal Bearings & Fan Shaft

Following the re-setting and re-alignment of the motor/pedestal coupling and the in-situ balancing of the impellor, the vibration on the unit has reduced to an acceptable level (See pedestal drive end vertical vibration trend 3V & fan shaft drive end horizontal vibration trend 5H).

Trend/Spectrums



Recommended Action:

Motor, Pedestal Bearings & Fan Shaft

We will use these levels as the new 'baseline'.

Inspection :

Repaired by:

Date:

Comment:

Report

Line Two

Gel Section Second Floor

2035 FA 125 No 2 ID Fan

Motor

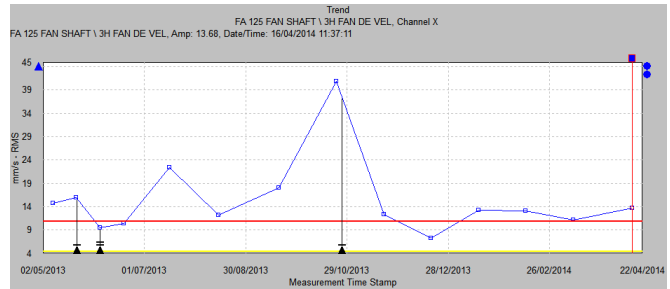
The motor readings remain at an acceptable level.

Fan shaft

The vibration on the fan shaft drive end remains at a higher than acceptable level (See fan shaft drive end horizontal vibration trend 3H).

Trend/Spectrums

Fan Shaft Drive End Horizontal Vibration Trend 3H



Recommended Action:

Motor

None.

Fan shaft

New balanced pulleys are to be fitted to the unit, following this work we will assess the fan shaft vibration and report accordingly.

Inspection :

Repaired by:

Date:

Comment: