CONDITION MONITORING PROGRAM REPORT

28/06/2020

Airbus Single isle Building 160

Report reference: June 2020 CMP

Data collected by: Dexter Henderson

Report written by: Dexter Henderson

Report signed off by: Colin Leigh

Unit 10 Quarry Bank Workshops. Quarry Bank St. Birkenhead. CH412ZD | T.+44 (0)151 3456784 | E. INFO@CLENG.CO.UK | WWW.CLENG.CO.UK

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PLANT ASSET HEALTH REPORT

LATEST SURVEY

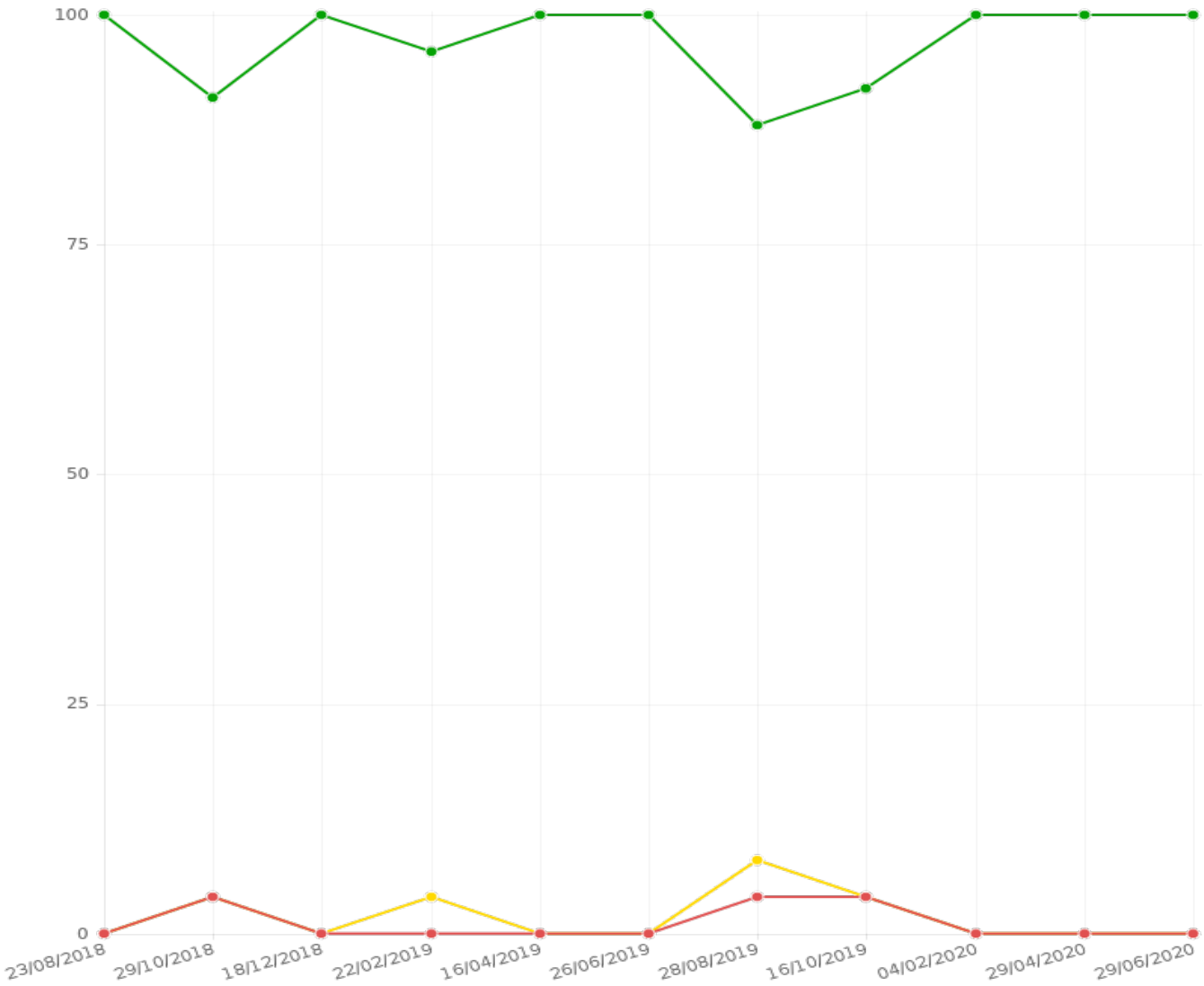
Acceptable: 100%

Caution: 0%

Warning: 0%

Not Running: 0%

PLANT ASSET HEALTH HISTORY



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TECHNICAL INFORMATION

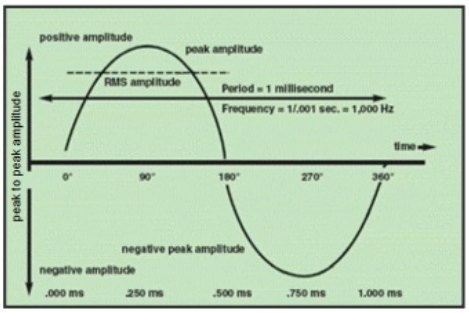
SUMMARY OF SURVEY ACTIVITIES

To carry out Condition Monitoring Survey using Vibration Analysis at Airbus Single isle Building 160, . Data collection was carried out on all available plant as per contract. Where equipment was found to be out of service and independent operation was unavailable this has been noted. Where possible rotation speeds (rpm) or relevant line or production speeds have been recording for trending purposes.

MEASUREMENTS POSITIONS

On all equipment the velocity measurements are taken in the vertical, horizontal and axial positions. Acceleration readings are taken in two radial positions, typically vertical and horizontal. On a machine train readings will usually be taken in the following sequence; Motor Non Drive End Bearing, Motor Drive End Bearing, any Support Bearings, Driven Unit Drive End Bearing and Driven Non Drive end Bearing. For vertically mounted units a convention will be set on the first survey and marked for future continuity.

VIBRATION MAGNITUDE UNITS



- **Vibration Velocity in mm/s RMS** (Root Mean Square 0.7071 of the Peak value).
- **Vibration Acceleration in 'g' peak** (Acceleration of gravity 'g', is the acceleration produced by the force of gravity at the earths surface. By international agreement the value of 9.81m/s squared has been chosen as the standard).
- **Vibration Displacement in microns peakto-peak**

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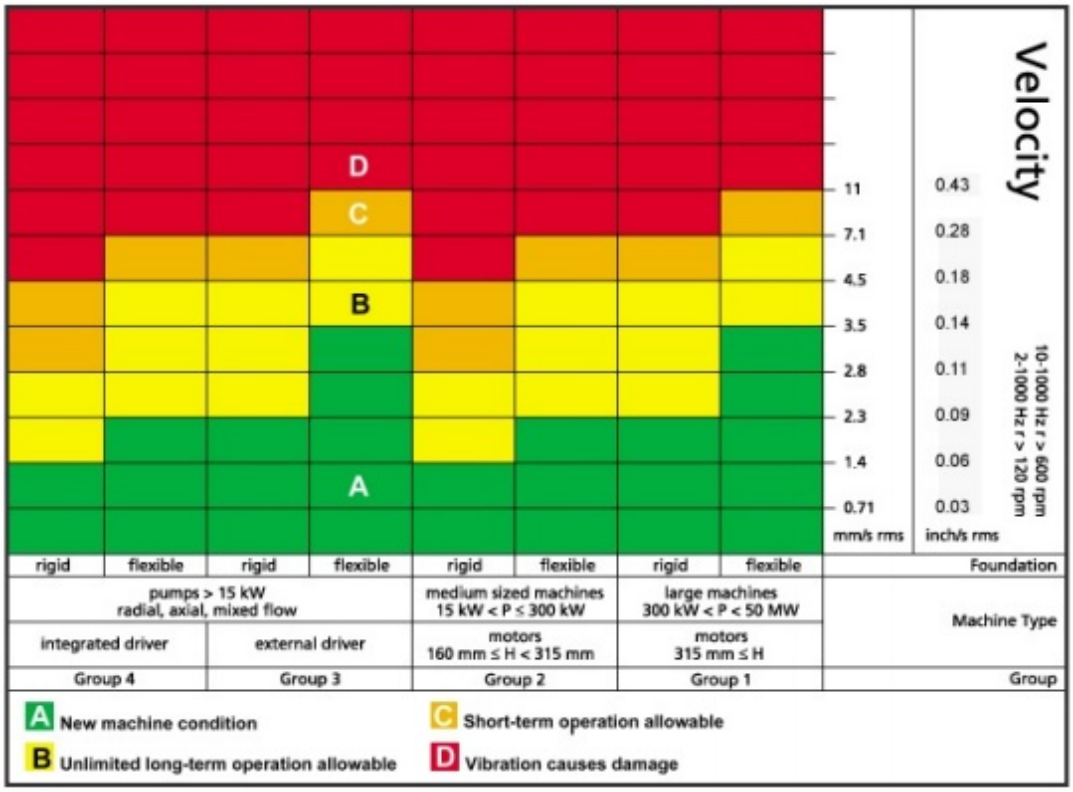
ALARM LEVELS

Alarm levels are based on the standard ISO 10816-3 shown below, (relevant to normal steady state operation at the machine rated speed) unless otherwise stated by the manufacturer and agreed when setting up the survey. Trending of the unit over time may allow the alarm levels to be reset at levels more appropriate to that specific unit or machine system.



WARNING ZONE D	Vibration values in this zone are normally considered to be of sufficient severity to cause damage to the machine
CAUTION ZONE C	Machines with vibration in this zone are normally considered unsatisfactory for long term operation. Generally they may be operated for a limited period in this condition until remedial action can be taken
ACCEPTABLE ZONE B	Machines in this zone are normally considered acceptable for long term unrestricted operation
ACCEPTABLE ZONE A	New Machine Systems.

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SUMMARY OF MACHINERY CONDITION

For ease of use this report will combine Zones A & B as ACCEPTABLE with a GREEN traffic light condition, Zone C as CAUTION with an amber traffic light condition and Zone D as WARNING with a RED traffic light condition.

WARNING	Vibration levels for this machine have breached the HIGH ALARM level. This could potentially be of sufficient severity to cause damage to the machine. Immediate action is recommended or reduced use until action is possible.
CAUTION	Vibration levels for this machine have breached the LOW ALARM level. Machines with vibration in this zone are normally considered unsatisfactory for long term operation. Generally they may be operated for a limited period in this condition until remedial action can be taken. Further Analysis may be required to give an accurate diagnosis, use of alternative Condition Monitoring technologies may
ACCEPTABLE	Machines in this zone are normally considered acceptable for long term unrestricted operation.

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ASSET HISTORY

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CMP ID	AREA	ASSET	Jun	May	Apr	Mar	Feb	Jan
CMP 1	Booth 1	CMP 1 60M1 Supply Fan 1						
CMP 2	Booth 1	CMP 2 61M1 Supply Fan 2						
CMP 3	Booth 1	CMP 3 62M1 Exh Fan 1						
CMP 4	Booth 1	CMP 4 63M1 Exh Fan 2						
CMP 5	Booth 2	CMP 5 65M1 Supply Fan 1						
CMP 6	Booth 2	CMP 6 66M1 Supply Fan 1						
CMP 7	Booth 2	CMP 7 67M1 Exh Fan 1						
CMP 8	Booth 2	CMP 8 68M1 Exh Fan 2						
CMP 9	Prep Booth 1	CMP 9 Extract Fan						
CMP 10	Prep Booth 1	CMP 10 Supply Fan						
CMP 11	Booth 3	CMP 11 60M1 Supply Fan 1						
CMP 12	Booth 3	CMP 12 61M1 Supply Fan 1						
CMP 13	Booth 3	CMP 13 62M1 Exh Fan 1						
CMP 14	Booth 3	CMP 14 63M1 Exh Fan 2						
CMP 15	Booth 4	CMP 15 65M1 Supply Fan 1						
CMP 16	Booth 4	CMP 16 66M1 Supply Fan 1						
CMP 17	Booth 4	CMP 17 67M1 Exh Fan 1						
CMP 18	Booth 4	CMP 18 68M1 Exh Fan 2						
CMP 19	Booth 5	CMP 19 M21 Supply Fan 1						
CMP 20	Booth 5	CMP 20 M11 Supply Fan 1						
CMP 21	Booth 5	CMP 21 M11 Exh Fan 1						
CMP 22	Booth 5	CMP 22 M21 Exh Fan 2						
CMP 23	Prep Booth 2	CMP 23 M21 Supply 1						
CMP 24	Prep Booth 2	CMP 24 M11 Exh 1						