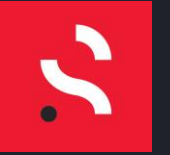




RMS 
RELIABILITY MAINTENANCE SOLUTIONS



Wireless Kappa X Case Study Fan Bearing Defect

CHP Power Plant

Case Example – Fan Bearing Defect



RMS
RELIABILITY MAINTENANCE SOLUTIONS

GLOBAL DATA
CHI DATA
ANALYSIS
ALARMS
REPORTS
SETTINGS

USER GUIDE
PRIVACY
MINIMIZE

W [redacted] D. FAN OVERVIEW

Search... 🔍 🔔 👁️ 📄

I.D. Fan No alarm issues

Blower / Fan - General direct drive fan (with coupling)

MEASURING POINTS
2 measuring points installed

- S FAN D.E. PEDESTAL**
Sleeping (seen 24 minutes ago) Zz ✓
- S FAN N.D.E. PEDESTAL**
Sleeping (seen 9 minutes ago) Zz ✓

MACHINE STATUS
OVERALL TEMP. SPECTRUM THERMAL

RECENT ALARM EVENTS

No alarm issues detected

RECENT ALARM EVENTS

No recent alarms
Recently triggered alarm events will be listed here.

IMAGES

ALARM SCORE
1W 1M

Live score

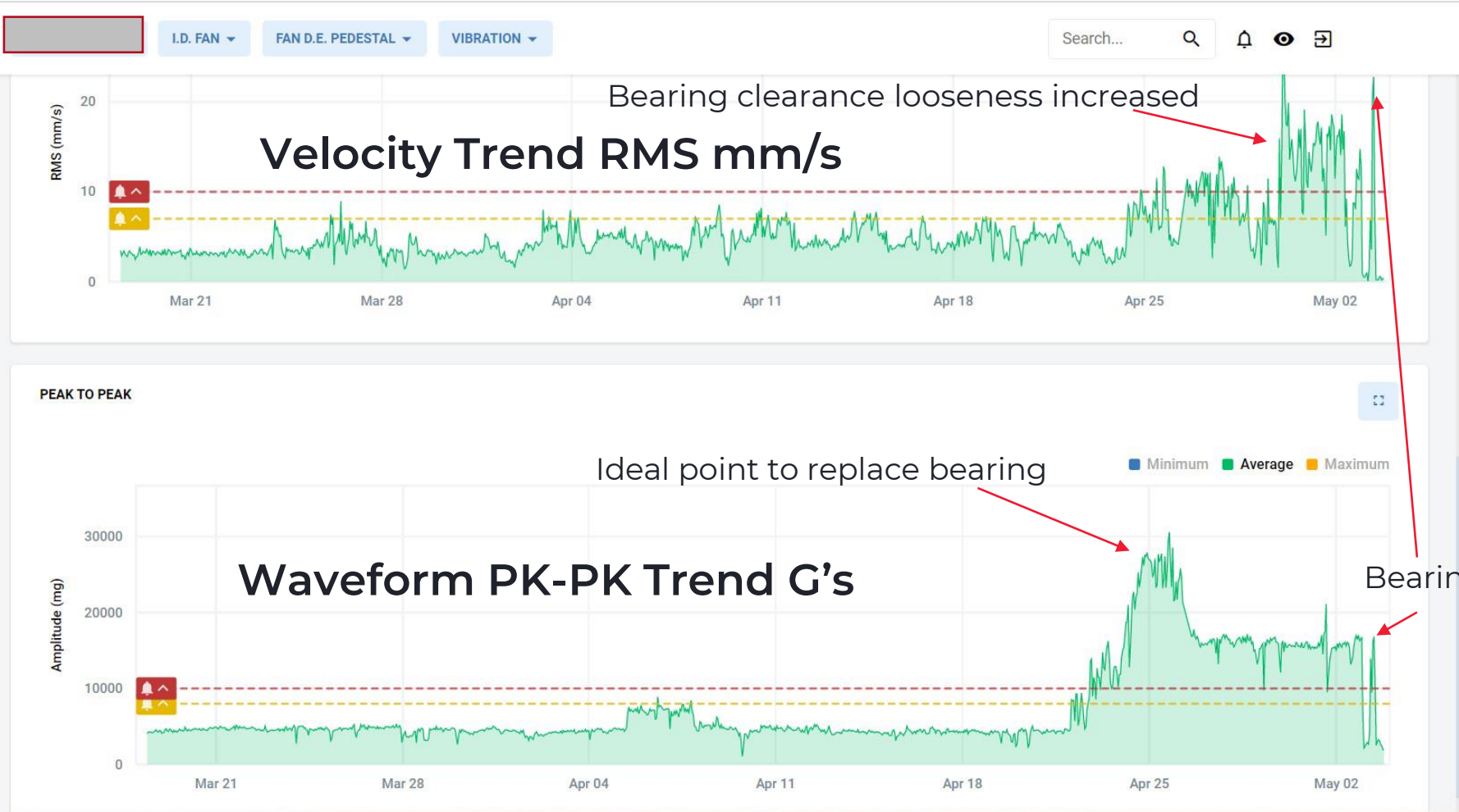
Case Example – Fan Bearing Defect



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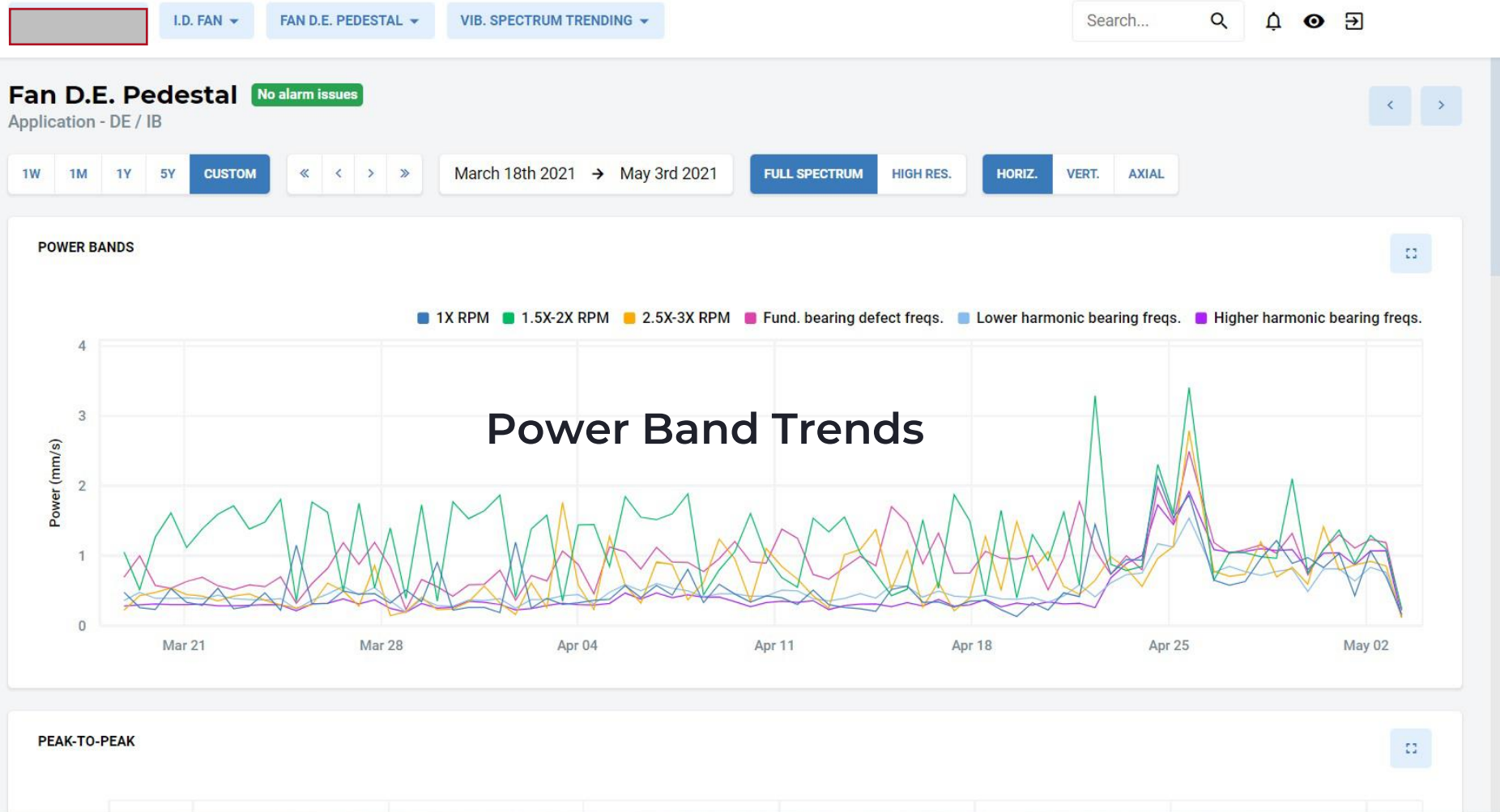


Case Example – Fan Bearing Defect

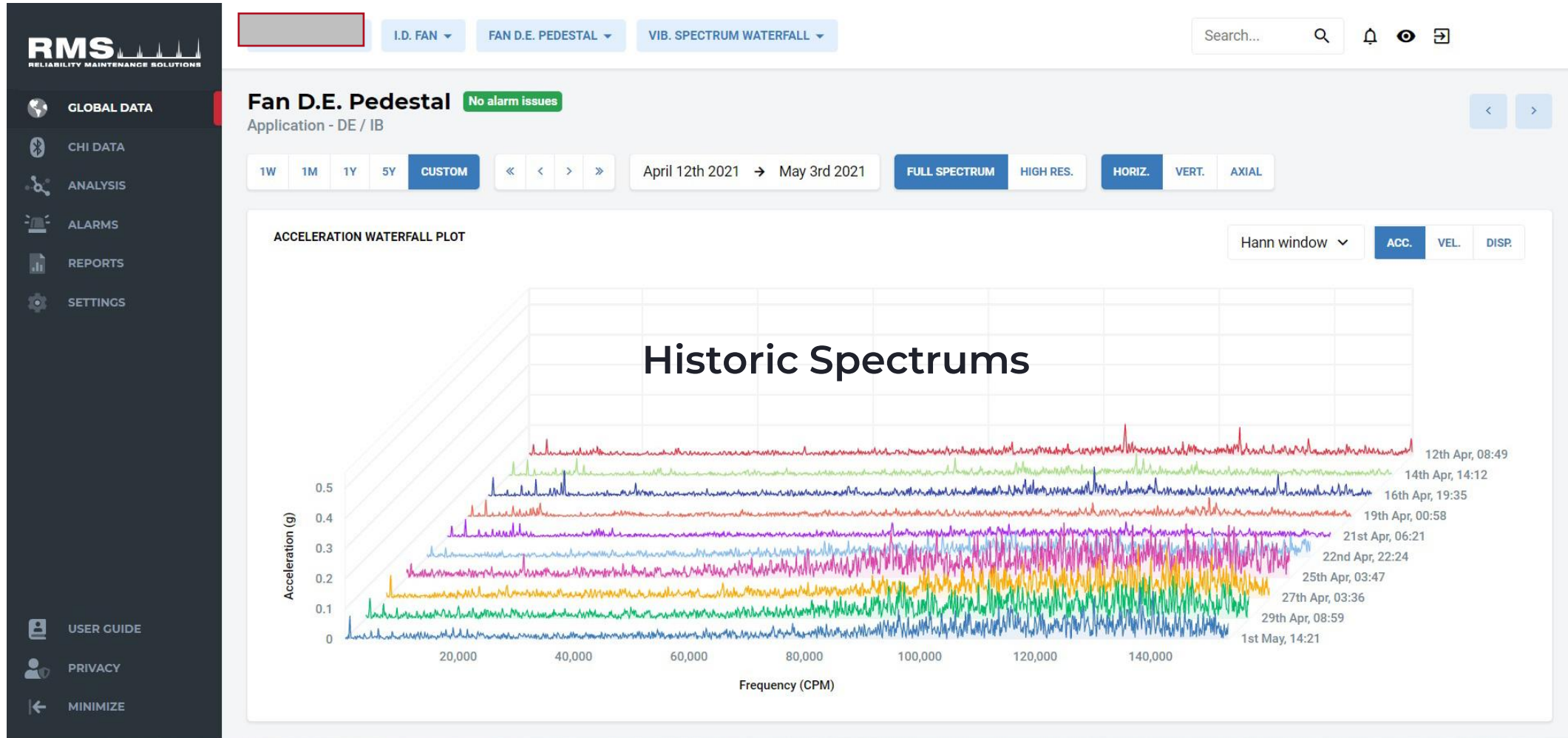


RMS
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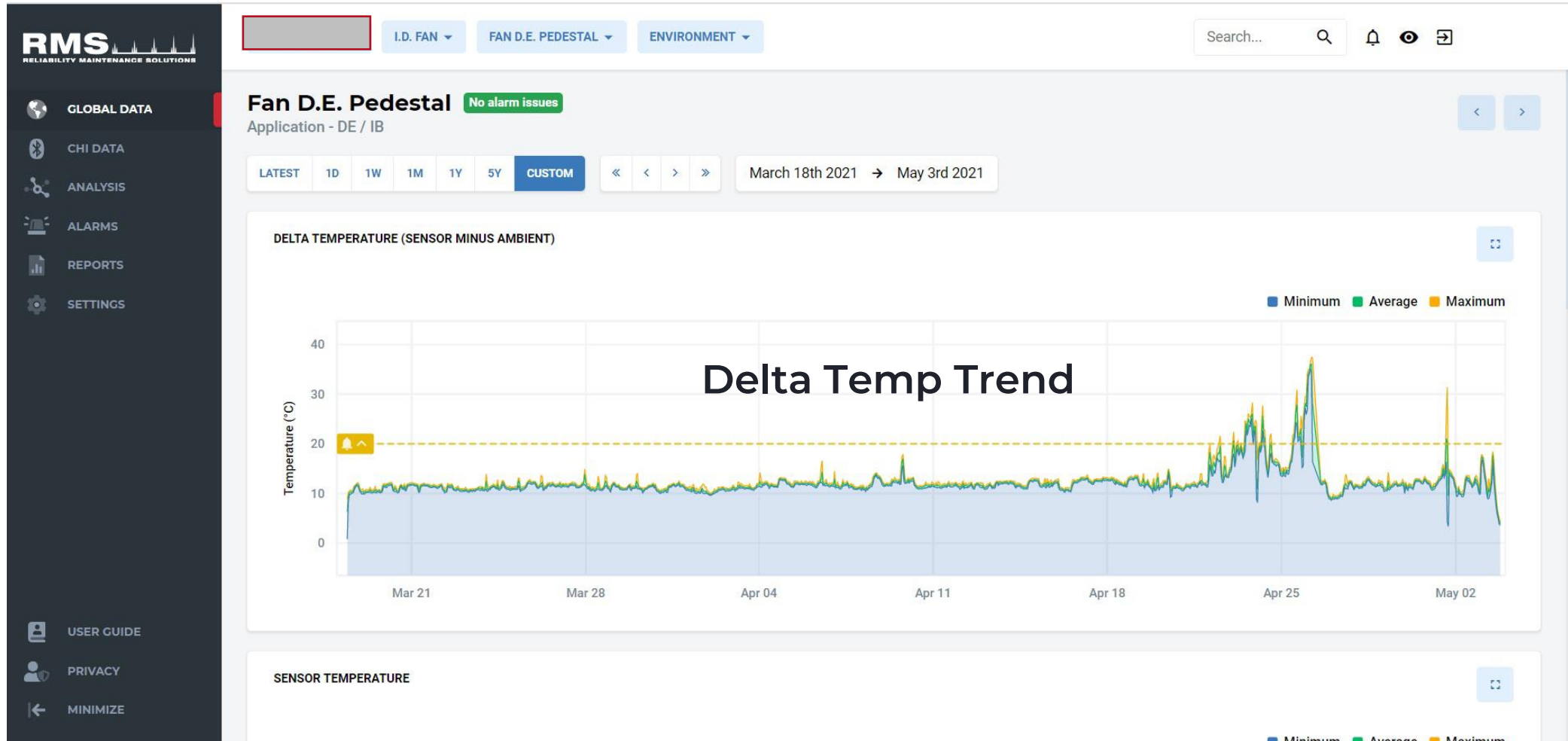
- GLOBAL DATA
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Case Example – Fan Bearing Defect



Case Example – Fan Bearing Defect



Case Example – Fan Bearing Defect



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I.D. FAN ▾ FAN D.E. PEDESTAL ▾ VIB. SPECTRUM ▾

Search... 🔍 🔔 👁️ 🗺️

Fan D.E. Pedestal No alarm issues

Application - DE / IB

LATEST CUSTOM DATE April 25th 2021 TIME 17:07:55 ▾ FULL SPECTRUM HIGH RES. HORIZ. VERT. AXIAL

INFORMATION	
TIME	17:07:55 on 25th April
RMS (ACC)	3 g
PEAK-TO-PEAK	31.9 g
RMS (VEL)	14.5 mm/s
OA	0.571 in/s
CREST FACTOR	3.52 (ratio)
SAVED RPM	1625

ANALYSIS OPTIONS
These settings are not saved

RPM

FFT WINDOWING

SPECTRUM

ACC. VEL. DISP. 🔄

Acceleration - pk (g)

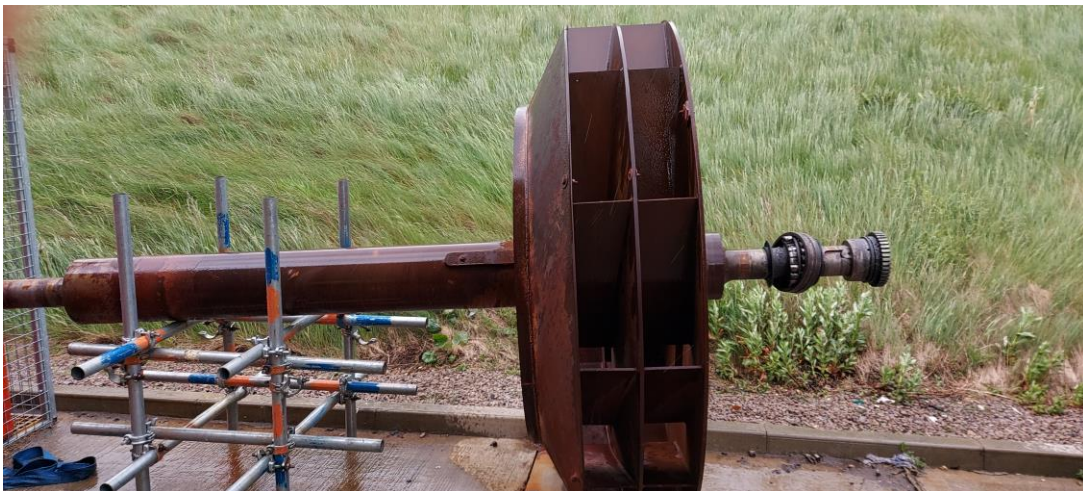
Frequency (CPM)

TIME WAVEFORM

ACC. VEL. DISP. 🔄

(g)

Case Example – Fan Bearing



Analysis

- Wireless system highlighted bearing defect, early on.
- Recommendation by PDM team was to replace bearing, early when PK-PK levels increased.
- Production overruled and fan was left to run until severe looseness and bearing failure occurred



FURTHER INFORMATION

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