Hello everyone;

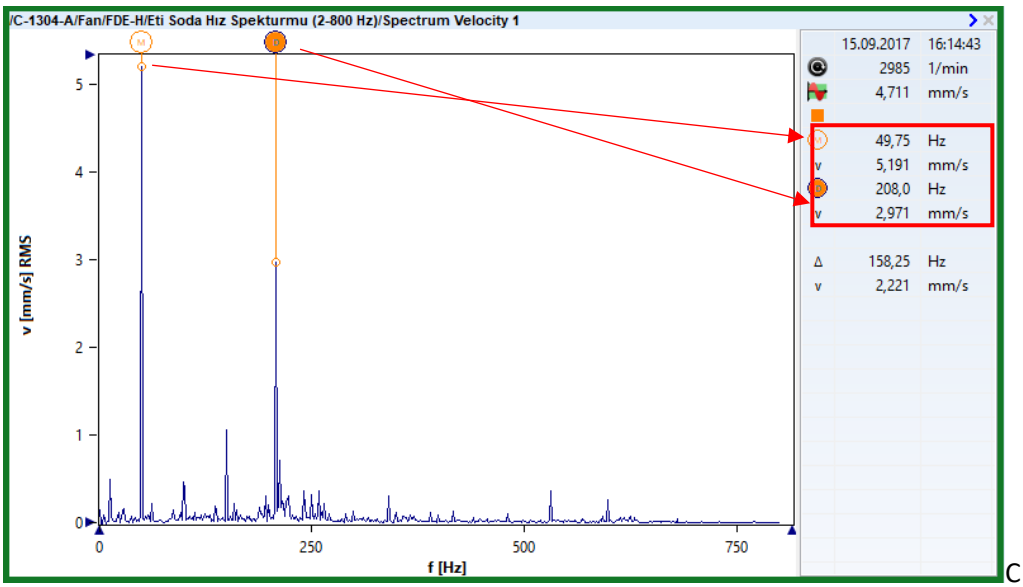
I have vibration problem about a fan like below Picture. Motor bearings are 6317 and fan bearings are 6220. Coupling is Metastream TSKS coupling. Motor RPM is 2985 RPM. Structure is flexible as you can see from picture.

1X vibration is high (8,212 mm/s RMS) in fan bearing which is near the coupling. Also I've seen this vibration in motor drive end bearing.

Vertical vibrations are higher than other directions. 2X peak can be seen in the spectrums but the amplitude is not high as 1X.

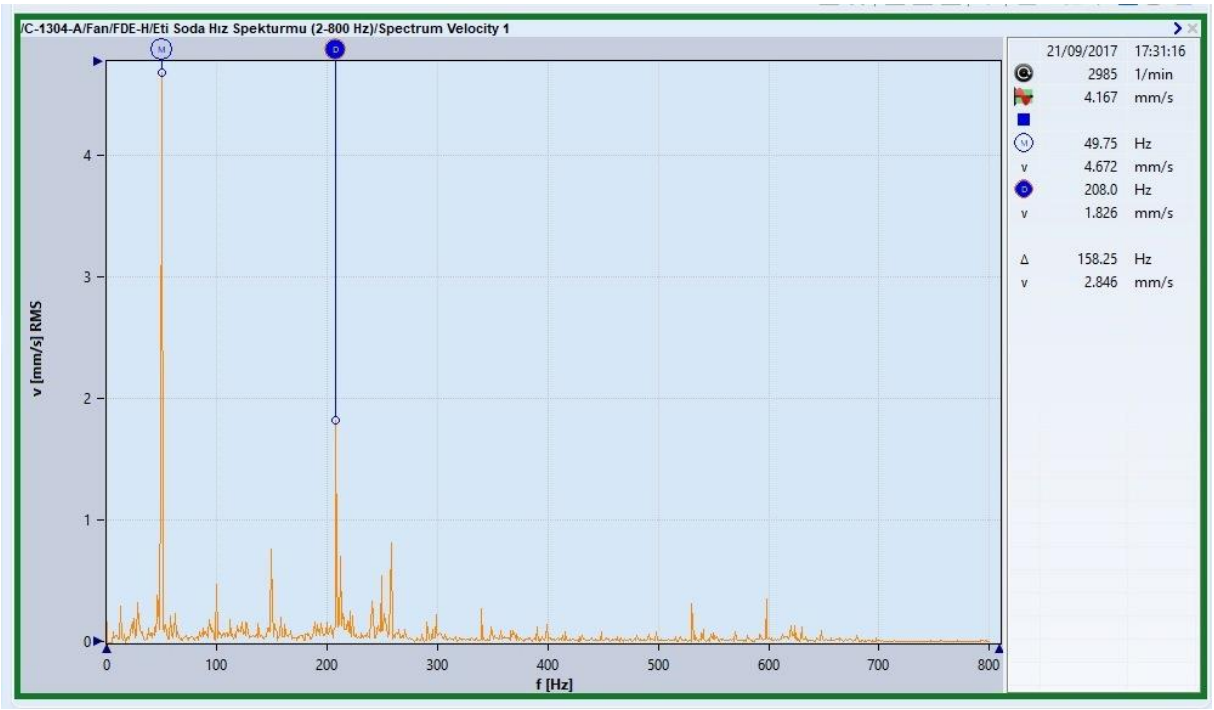
On the other hand, We've seen 208 Hz vibration from velocity spectrums. 208 Hz is not a synchronous peak and also it's not a bearing failure frequency.
We add some rigit part under base frame small changing! (After FFT graf.)

FDE-H Hız Spektrumu



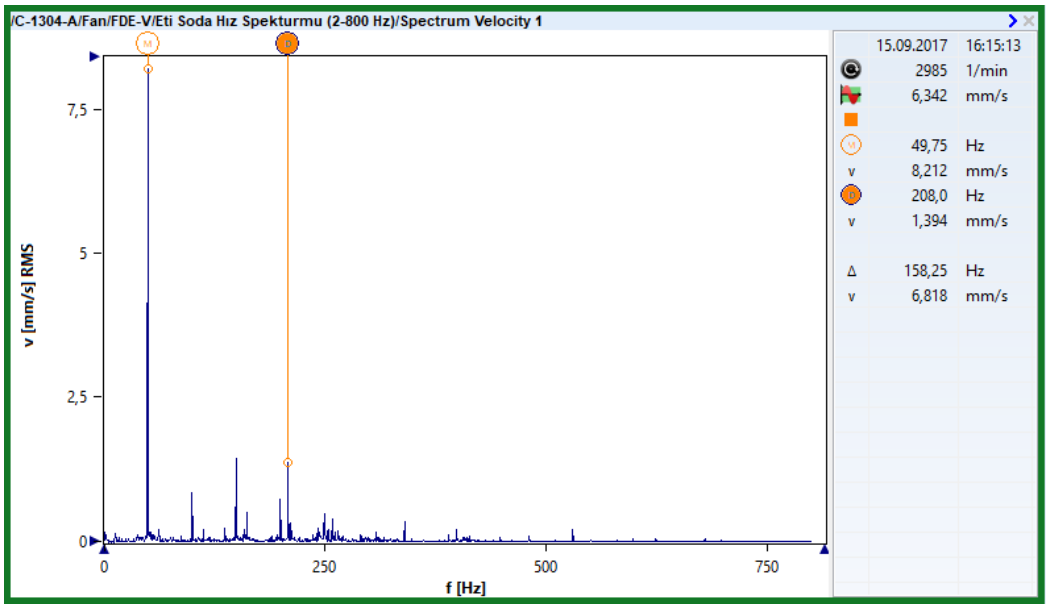
C

Before



After

FDE-V Hız Spektrumu



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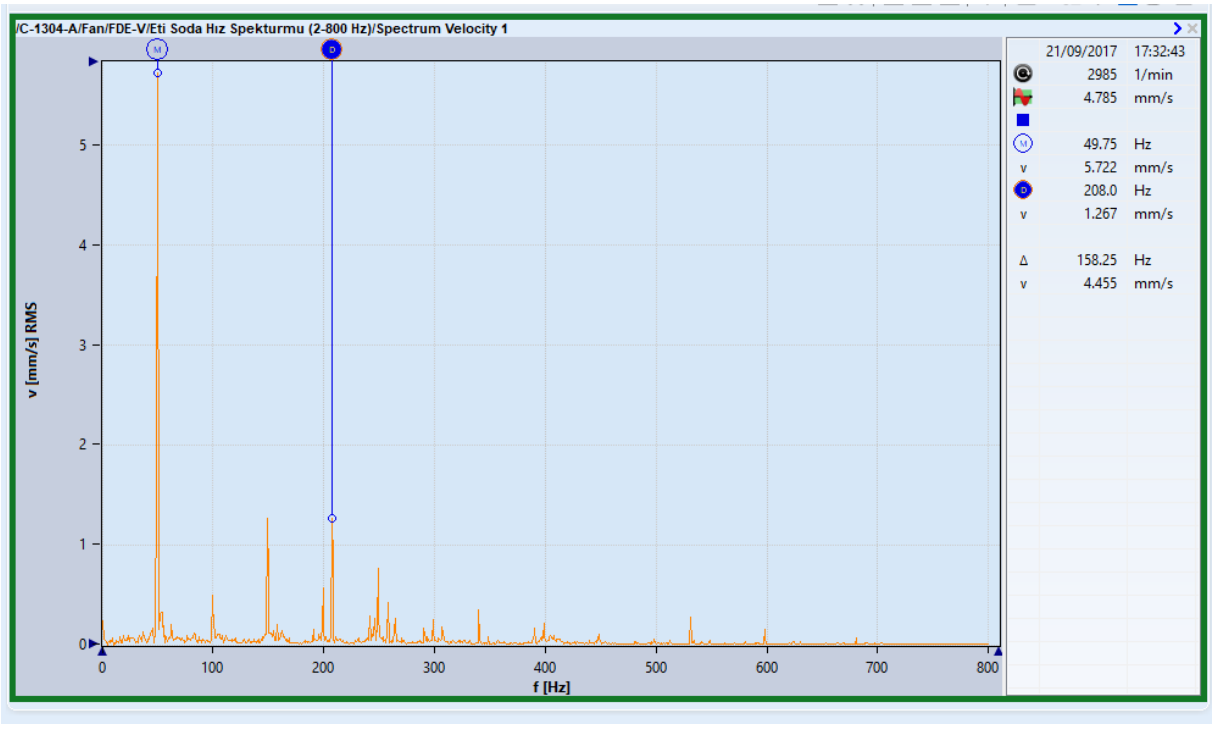
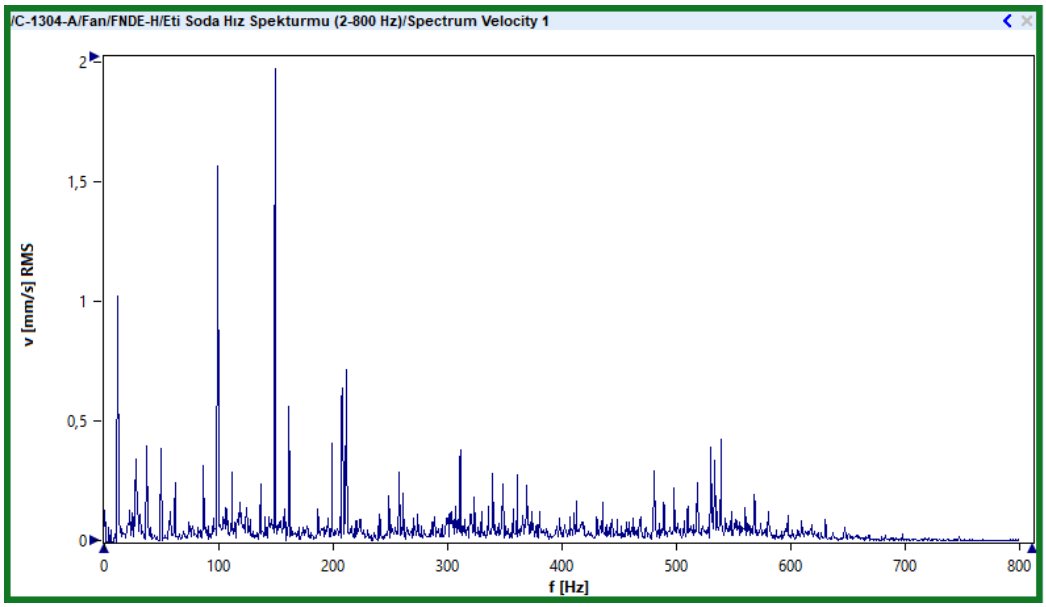
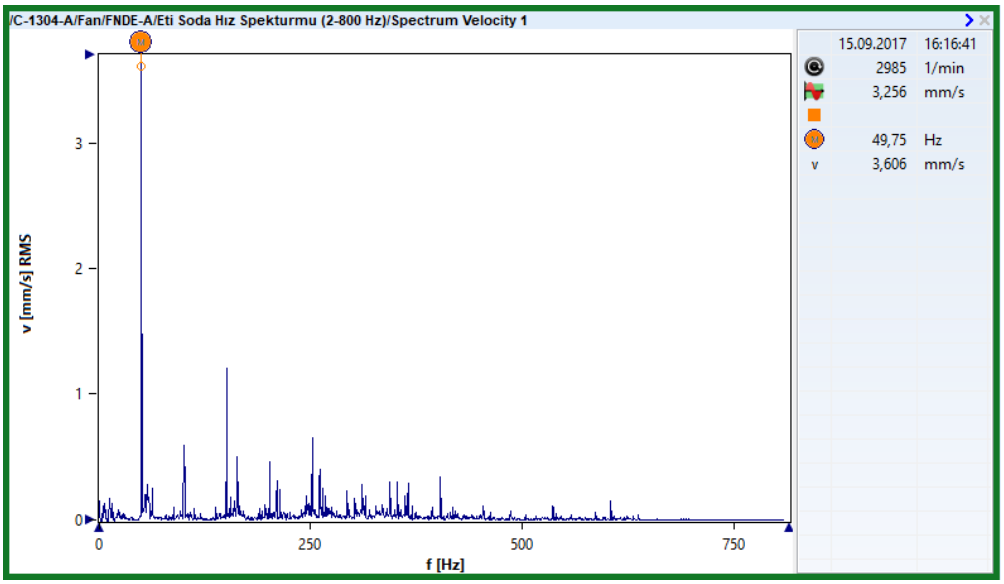


After

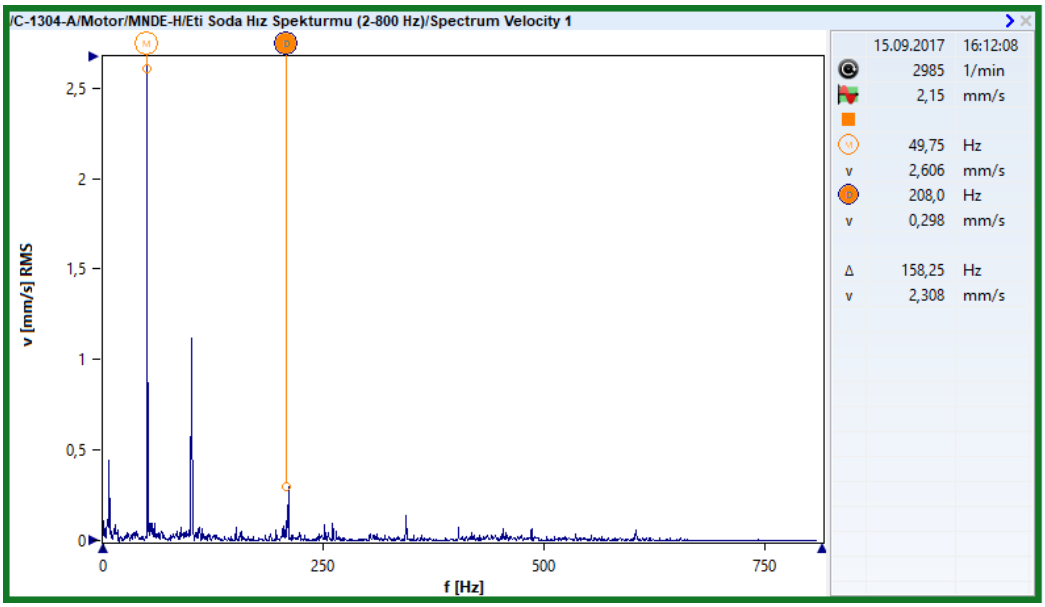
FNDE-H Hız Spektrumu



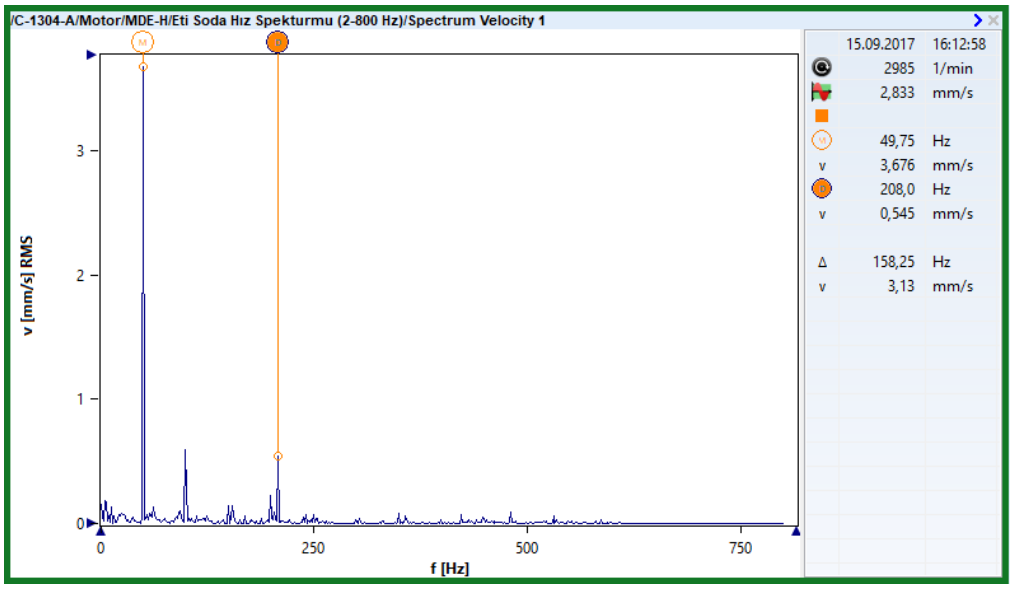
FNDE-A Hız Spektrumu



MNDE-H Hız Spektrumu



MDE-H Hız Spektrumu



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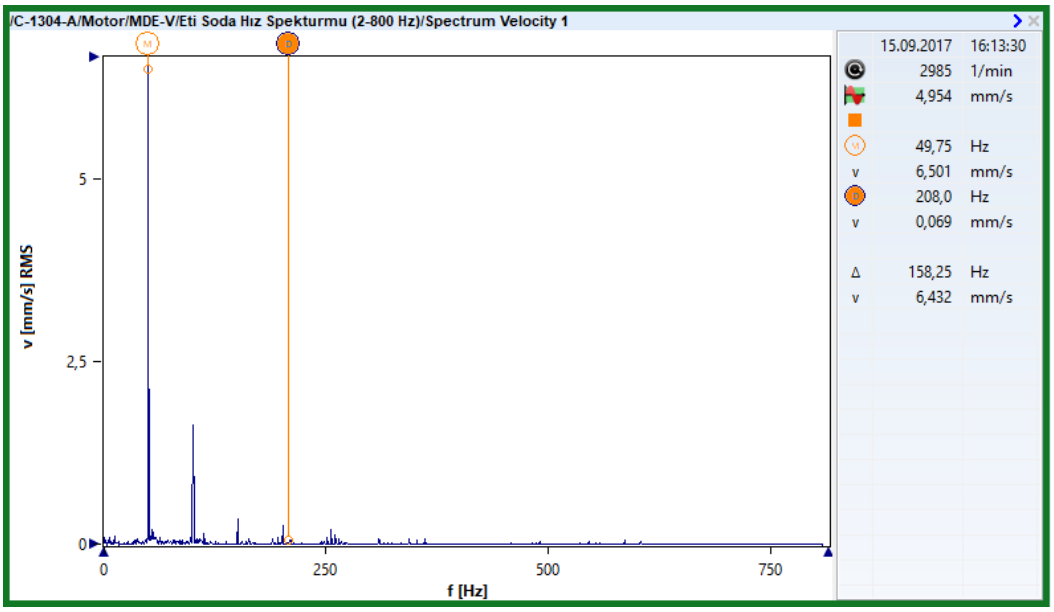

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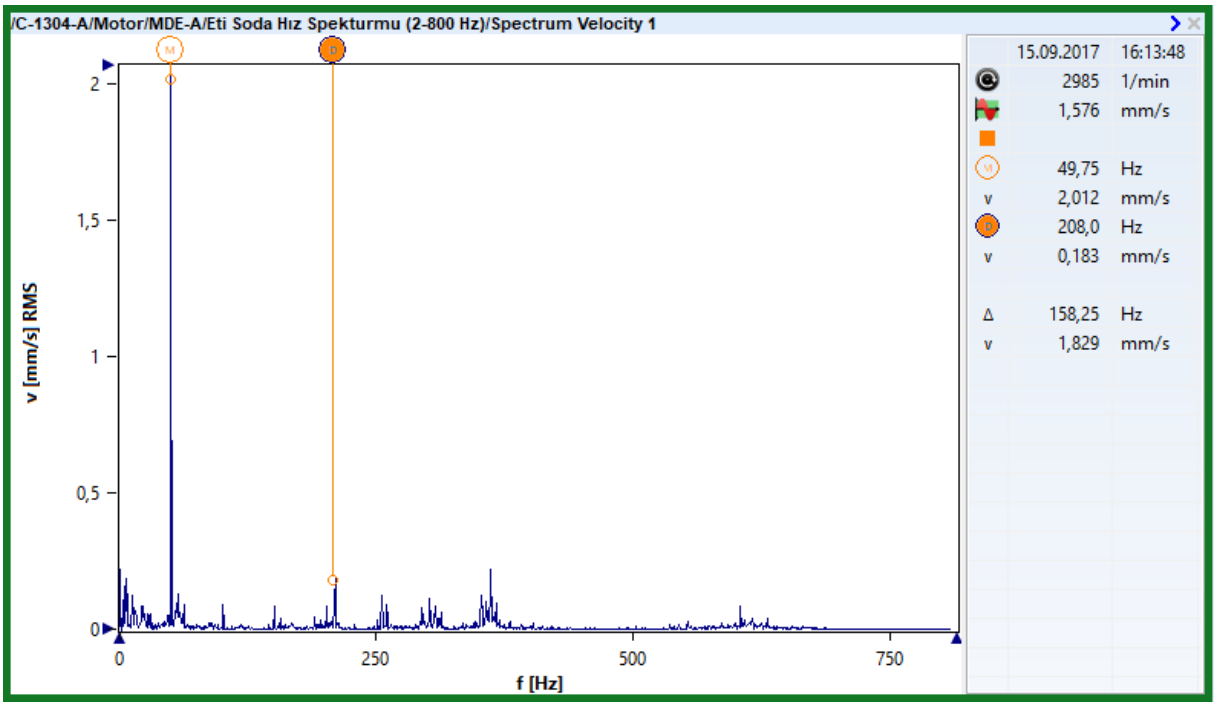

SERVICE REPORT