



Machinery & Systems Diagnostics

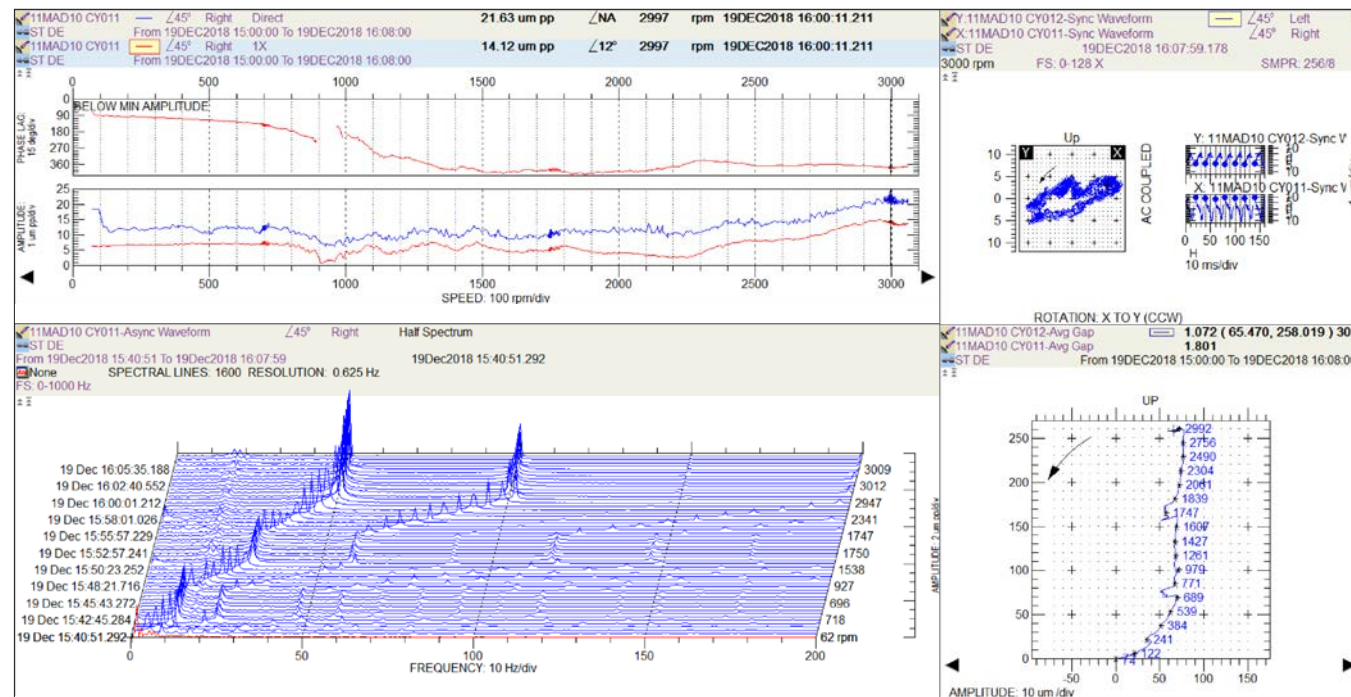
MAN PrimeServ





Machinery & Systems Diagnostics **Vibration analysis**

If there is a change in the vibration behavior of your machinery, our experts from the MAN PrimeServ Machinery & Systems Diagnostics team can help you with the diagnosis and root cause analysis. Thanks to our deep experience and analytical capabilities, we can identify and analyze vibration problems to significantly improve the availability of your machines. To become your solution provider of choice, we place all our knowledge and experience at your disposal and provide our services with maximum flexibility and reliability.



Advantages

Challenge

The availability of the machinery in your entire plant is vital to your success, and your rotating equipment plays an important role in that.

Knowing the exact condition of that machinery is the first important step for defining the measures required to keep overall machinery availability high.

Solution

The Machinery & Systems Diagnostics team measures casing vibrations at predefined measurement points, records signals from the machinery protection system and measures sound emissions to form a diagnosis.

The team then analyses the data obtained, evaluates the condition of the unit, and draws up measures to improve vibration characteristics.

The preparation of a “fingerprint” is highly advisable if a unit has been altered through a revamp, upgrade or retrofit.

The proper condition of the unit is documented during this period. If there are subsequent changes in the vibration behaviour of the machine, the cause can easily be determined by comparing current data against the recorded measured values.

If a change in noise emission of the unit occurs, the Machinery & Systems Diagnostics team can localize the sound and analyse the cause. Measures to reduce the noise can be devised, based on the findings (for example, acoustic insulation and damping, sound-absorbing cladding, pipe insulation, the decoupling of pipes).

Because of our many years of experience with your machines and their operating modes, we are your first choice for vibration analysis and the technical evaluation of compressors and other units.

Our mission is to help you to efficiently improve the availability of your machines so that you can ensure the sustained profitability of your operation.

Nobody knows your equipment better than we do, because we built it. Let us service it, and you will profit from our fast, efficient and reliable execution.

We have extensive experience in the following areas:

- Vibration measurement
- Analysis of vibration data
- Vibration evaluation of behaviour in operation under various operating modes
- Field balancing
- Machinery diagnosis on site and by remote access
- Sound measurement and evaluation
- Associated structural dynamic and acoustic investigations with computer-based simulations (FEM)
- Preparation of “fingerprints”.

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