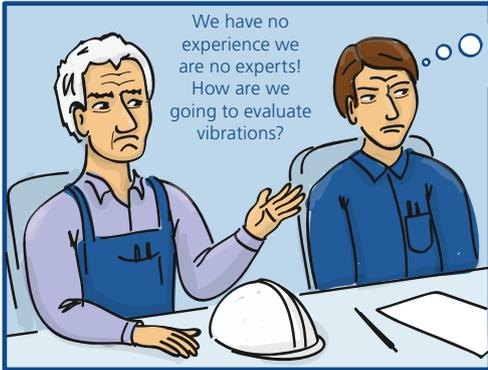


# CONTROL THE CONDITION

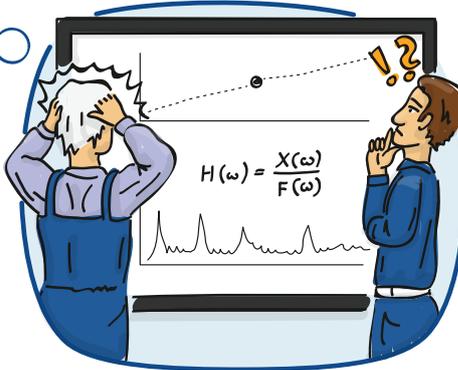
Not the trends of the Vibrations

We have to avoid sudden system break downs. Lets do vibration analysis to check machinery conditions.

Break downs		
Week 26	9	!
Week 27	13	!
28	15	!
9	18	!

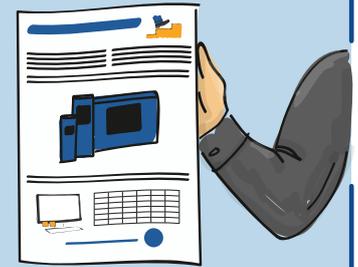


We have no experience we are no experts! How are we going to evaluate vibrations?



$$H(\omega) = \frac{X(\omega)}{F(\omega)}$$

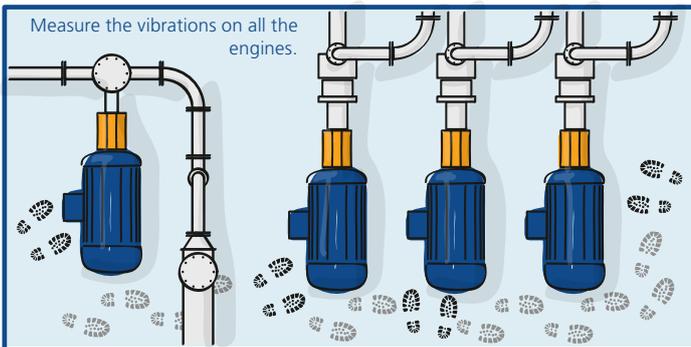
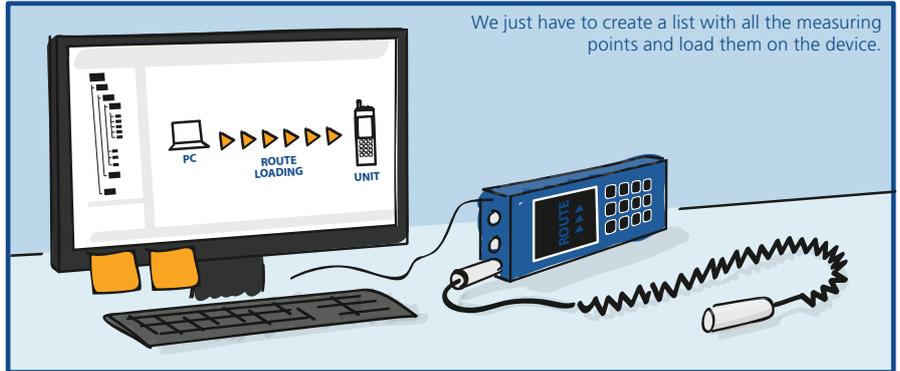
There is a device, which helps to diagnose the results.



It directly analyses the whole size of the defect.



We just have to create a list with all the measuring points and load them on the device.



Measure the vibrations on all the engines.



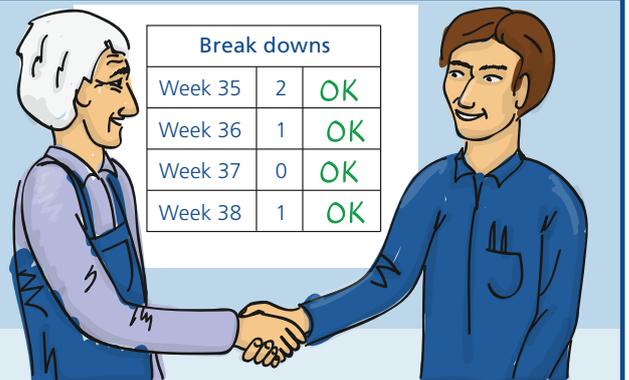
Immediately we will see all problems and their magnitude.



After a few measurements we will see the trend of the problems.

Such a pity that we did not start earlier with the measurements.

Break downs		
Week 35	2	OK
Week 36	1	OK
Week 37	0	OK
Week 38	1	OK



# Make the next step with CM Technologies

## Watch the fault severity trend, not the vibration trend.

CM Technologies introduces a new approach to vibration analysis. All of us in the vibration world used the same concept in the past. For detection of faults we used overall measurements and then spectra, time waveforms etc. for deeper analysis. After that, we derived the severity of faults for each machine.

## Why waste time with overalls and spectra?

At CMT we have been developing the expert system FASIT for many years. This system enables us to directly measure fault severity based on vibration. The vibration data is the input, and fault severity diagnosis is the output.

## The FASIT method is available in all CMT instruments.

You can save the data to the DDS database and then view fault severity trend graphs. In the past you could only view trends of overall values.



## The DDS software can be widely used by all maintenance staff, not only by vibration experts.

This new approach opens the DDS data for a much larger group of users. When DDS graphs were only about vibration, only vibration analysts really used it and had to create severity reports manually. Now these reports are available directly from the DDS software. This means that the DDS software can now be used by individuals who work not only in maintenance, but also in production or financial departments.



Machine	Last Measurement Date	Fault	Severity	Alarm
Line 1\Pump	2016-08-28 12:26:05	Unbalance	77%	Red
Line 2\Motor	2016-08-23 8:13:14	Unbalance	82%	Red
Line 2\Gearbox	2016-07-21 9:55:00	Lose parts	51%	Yellow
Line 4\Motor	2016-08-01 11:14:57	Alignment	99%	Red
Line 7\Motor	2016-08-15 10:45:31	Lose parts	60%	Yellow
Line 9\Gearbox	2016-08-16 14:44:13	Unbalance	85%	Red
Line 9\Pump	2016-07-21 9:17:01	Unbalance	62%	Red