Meastim
solutions that deliver

MEASTIM

Online Condition Monitoring

Changing The Market Offering

Smart Online Rotating Equipment

In the manufacturing environment, rotating equipment is key to the overall productivity of business. As a result, it is of vital importance that we know their condition at all times to determine the optimum time for maintenance and replacement.

Based on these challenges, Measstim have developed a new solution to ensure the current high cost of online condition monitoring deployment is changed and this technology can be adopted on all machinery.

Measstim have solved that problem with a new generation of hardware and MEM (Micro-electromechanical Systems) sensors.

Challenging The Market Place

Online Vibration monitoring data is one of the key data types that can be used for rotating equipment optimisation.

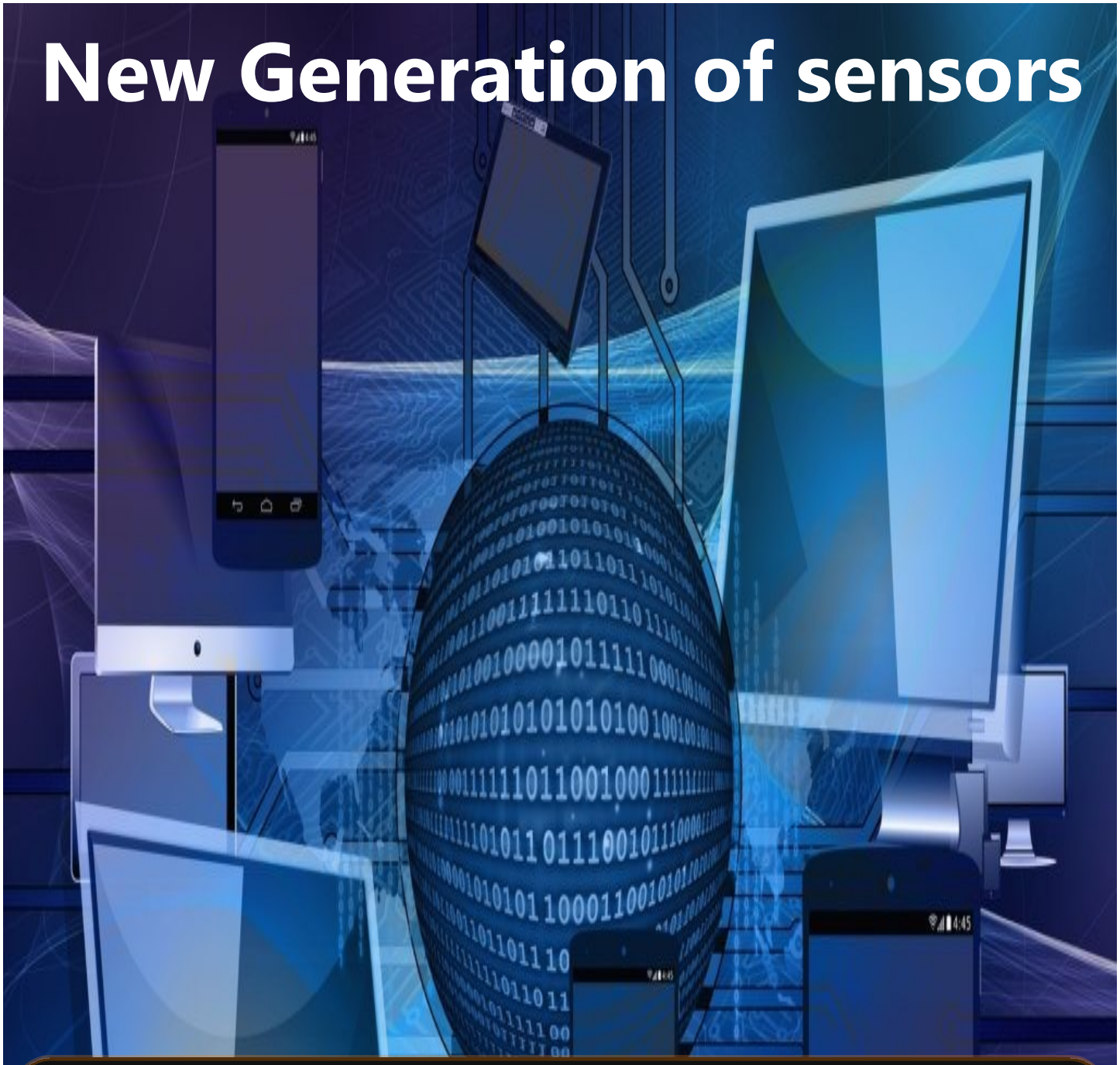
Following extensive research and development we have now taken a number of steps to help with global deployments of online condition monitoring.

Stage 1
Move away from the standard IEPE Sensor to MEMS technology sensors.
Reducing the overall cost of the sensors to allow the deployment in critical and non critical equipment.
Reduction in the size of sensors to allow the sensor to fit inside the machinery

Stage 2
Provide easy to use intelligent predictive software
Provide secure software that doesn't put the plant at risk

Stage 3
Supply rotating equipment with onboard sensors at no additional cost

New Generation of sensors

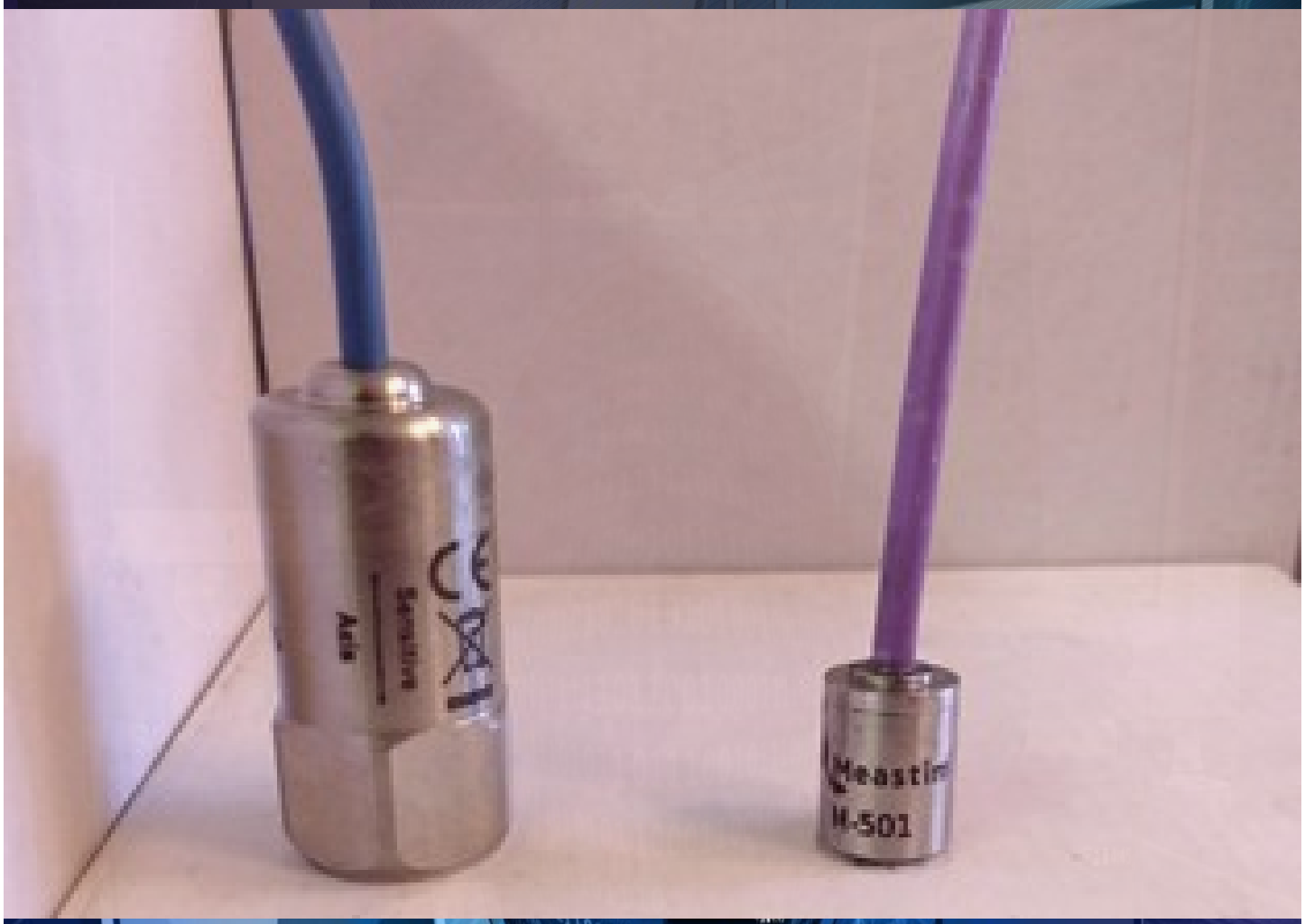


The current offering market offering for vibration monitoring sensors is based on an IEPE model.

This technology has served the industry well for many years, but due to cost, the mass roll out of this technology has been limited to critical machinery.

The new sensor technology is based on MEMS technology, which has helped reduce the overall cost of the technology.

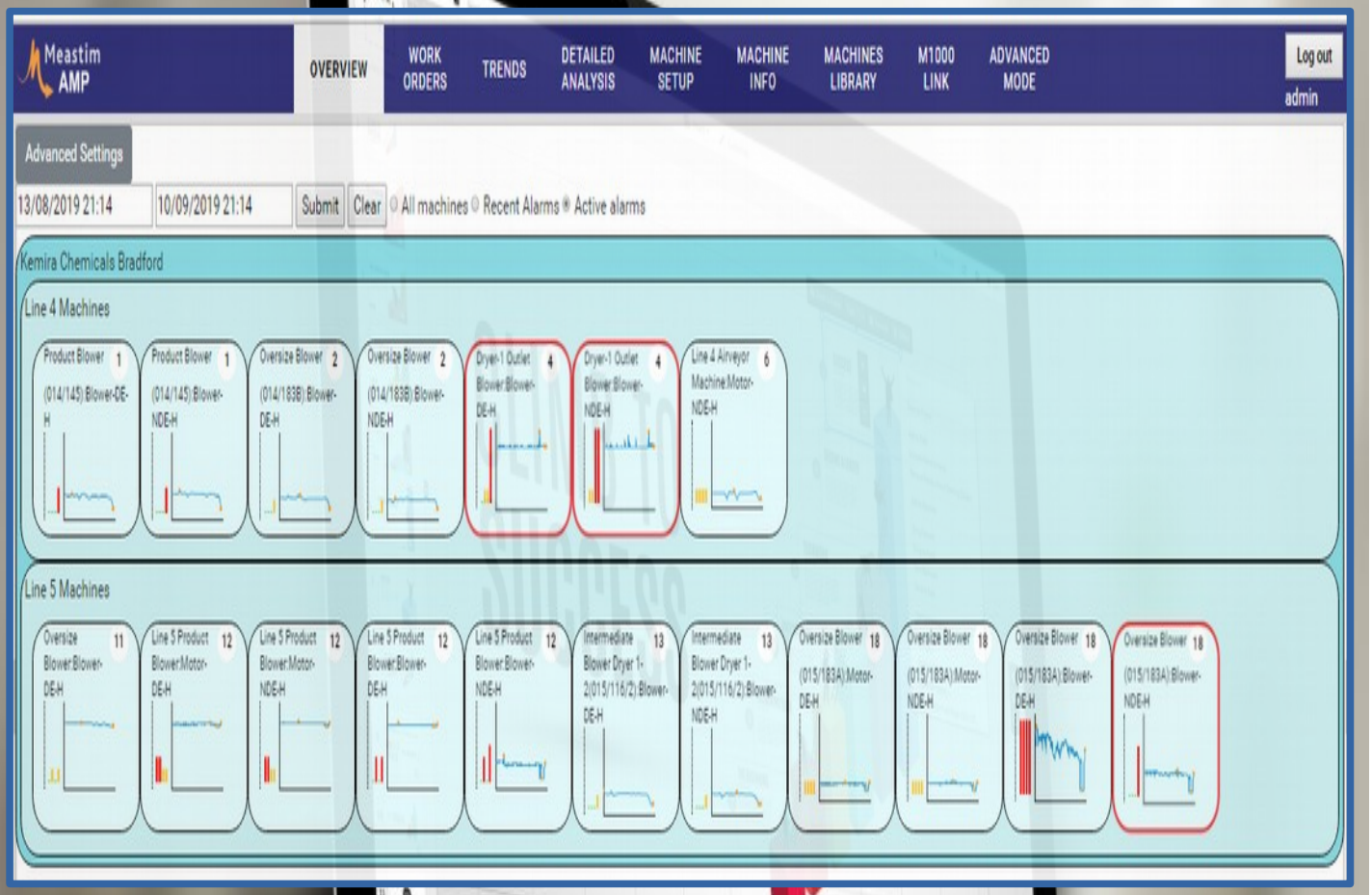
Sensor Specification



The new generation of sensor has the following attributes,

- 20 mm in height
- 15 mm in width
- Frequency range up to 7Khz
- Sensitivity 80mv/g
- Suitable for low rotational speed equipment
- Atex Approved

AMP Asset Management Platform

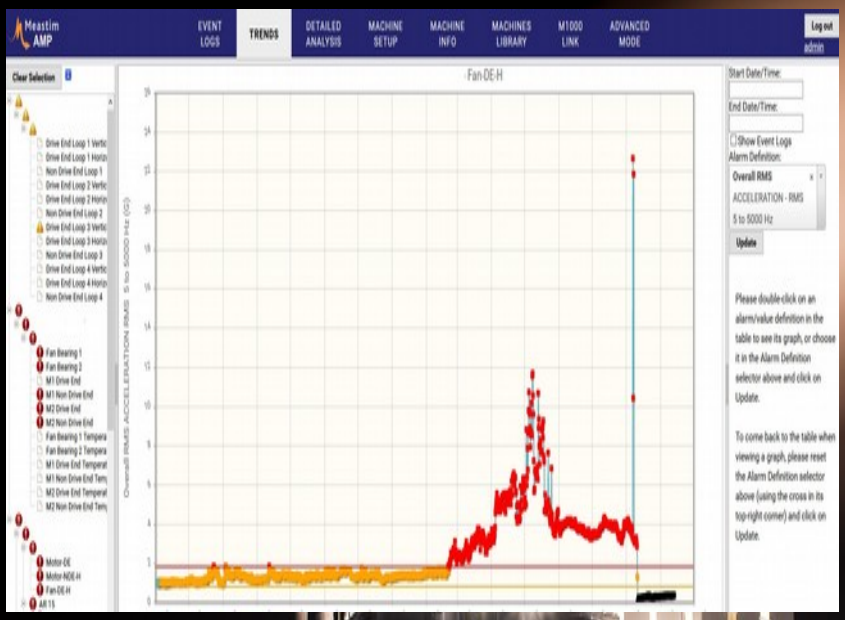


One of the key features of having data is the ability to view and understand it with ease.

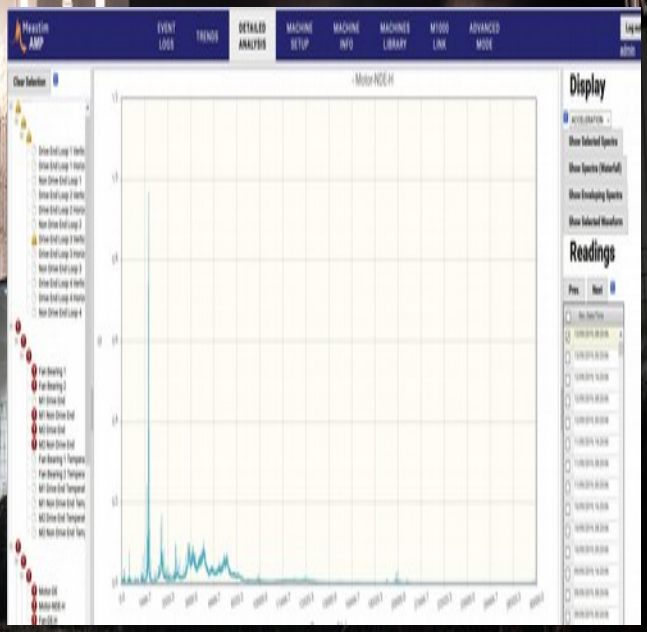
AMP has been designed to provide an easy to use platform that allows the user to see a number of key features from the machine.

The main displays shows the number of machines in alerts and how many days each of them has been in alert.

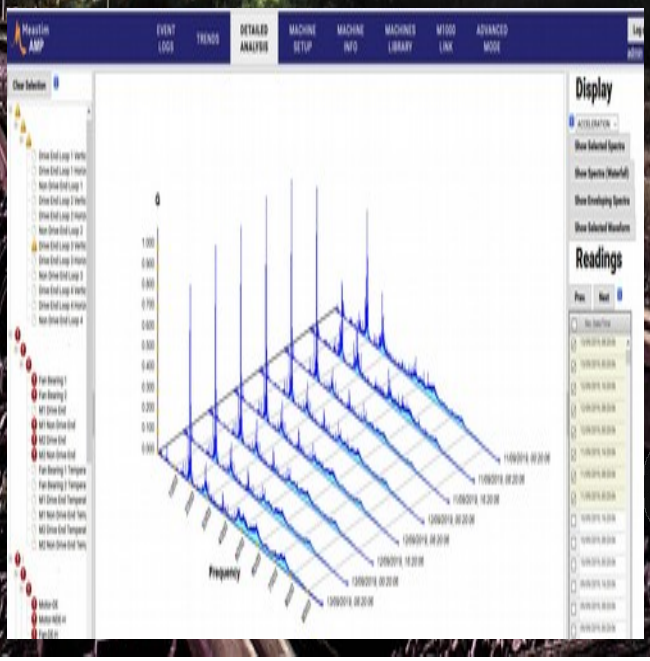
Trend Analysis



Overall Trend Analysis



FFT Analysis



Waterfall plot

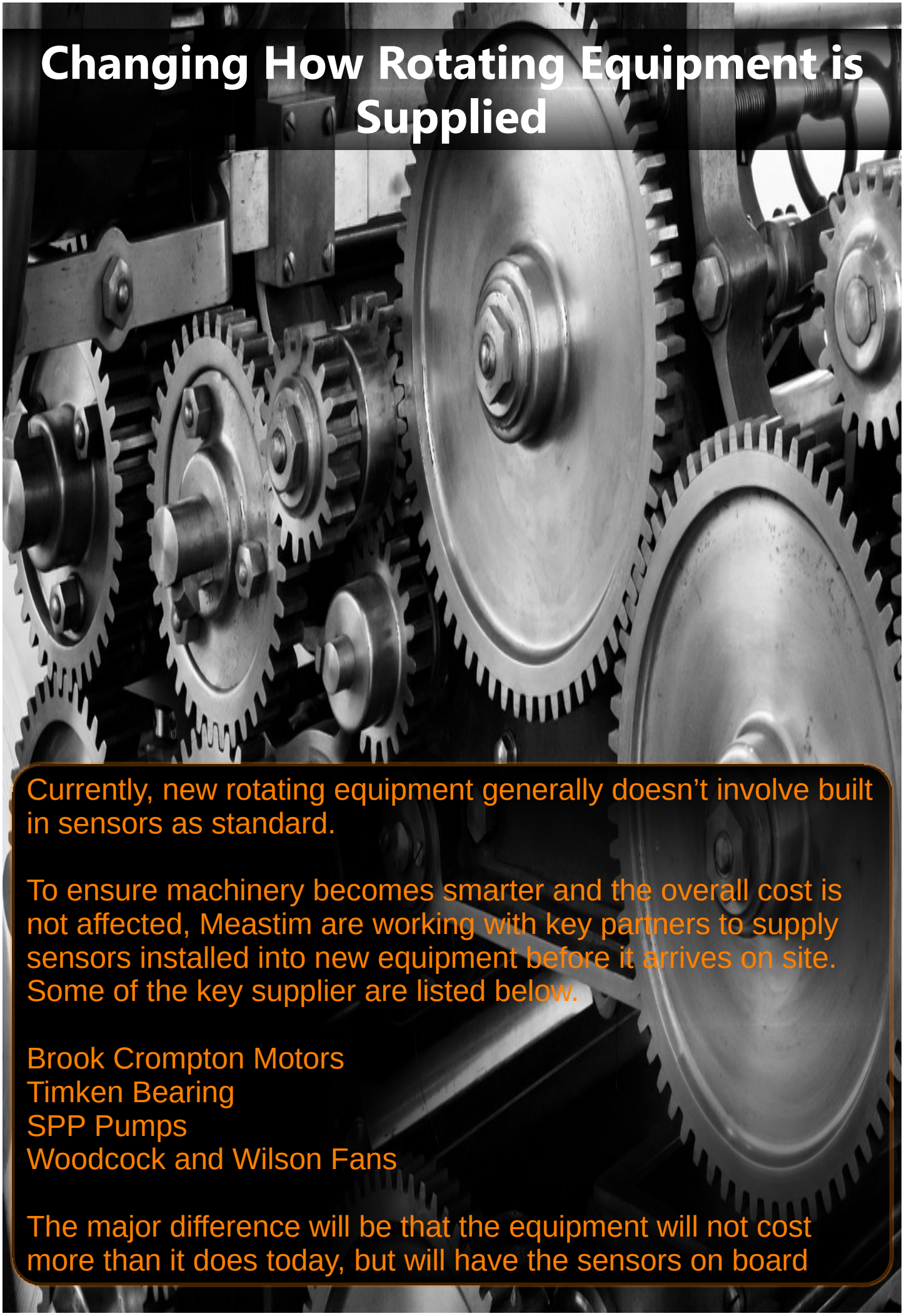
Communications and Security

At Meastim we understand that security of data is one of the key concerns that needs to be considered when deploying any new system arrangement

We take the security of our systems very seriously and as a result before deployment, we will agree the correct strategy for your business. Some of the available options for our systems are

- Hard wired back to a PC and server on site with no external connections
- Hard wired back to a PC and exported to Meastim Servers
- Wireless transferred back to an onsite PC
- Wireless transferred to a PC and exported to Meastim vie 4G or data export

Changing How Rotating Equipment is Supplied



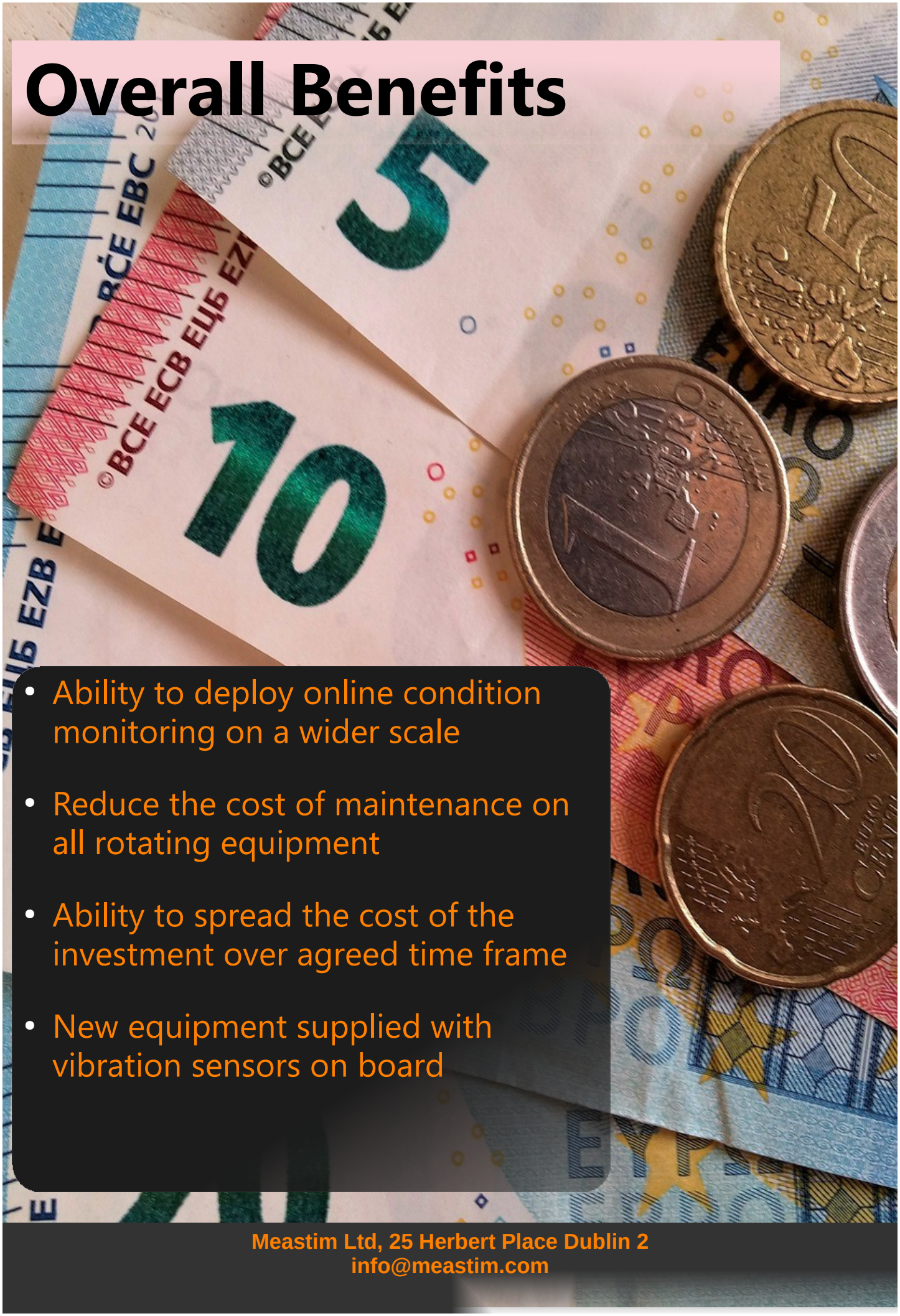
Currently, new rotating equipment generally doesn't involve built in sensors as standard.

To ensure machinery becomes smarter and the overall cost is not affected, Measstim are working with key partners to supply sensors installed into new equipment before it arrives on site. Some of the key supplier are listed below.

Brook Crompton Motors
Timken Bearing
SPP Pumps
Woodcock and Wilson Fans

The major difference will be that the equipment will not cost more than it does today, but will have the sensors on board

Overall Benefits



- Ability to deploy online condition monitoring on a wider scale
- Reduce the cost of maintenance on all rotating equipment
- Ability to spread the cost of the investment over agreed time frame
- New equipment supplied with vibration sensors on board

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