



## *Imagine an Industry without loss. A manufacturer without unscheduled downtime*

Oil pipeline leakage and mechanical breakdowns are far too prevalent in today's world. Diagsense has developed a state of the art statistical algorithm designed to detect evolving malfunctions in mechanical systems and pipelines long before they become a real problem. Thanks to unique advances in arithmetic approaches and artificial intelligence, our prediction algorithm is among the most accurate in existence today. Our solution is already saving clients (down) time and money.

### **Leakage and Breakdowns**

Mechanical breakdowns and oil pipeline leakage - caused by aging infrastructures, error or even malice are common problems in today's industries in Water and oil & gas sectors. These never come at a good time and always cause unexpected downtime to a factory, loss of product in a pipeline, unplanned emergency response maintenance team deployment, rushed procurement and other collateral damages to a company and the environment.

Many industries try to curb this with expensive preventative maintenance schedules and enhanced control and surveillance- all work well until the unforeseen occurs.

### **Expect the Unexpected**

Our diagnostic software solution is based on a statistical algorithm that processes data from sensors which are, most probably, already installed on your system. Our technology will reduce leaks and downtime whilst decreasing false alarms by 85% guaranteed. Together, we will help you migrate your plant or pipeline maintenance strategies from preventative to predictive. Our clients include Israel's largest oil pipeline (PEI), municipal water supply companies such as Galcon, and companies worldwide.

At Diagsense we understand, that industry professionals know their business much better than we ever will. We work together to squeeze out even more performance, uptime and better, predictive, maintenance. These translate to time savings, more revenues and peace of mind for our clients and good working relationships for us. One good example is an oil pipeline leak that a Diagsense's system discovered within 20 seconds while the in-house, incumbent system took 390 seconds to identify.

## **Our Advantage**

Ours is a real-time system with no need for recalibration after changes of operational state. Our technology learns the operational parameters of a plant or pipeline and predict its future performance - any deviation from the prediction is first studied by our Artificial Intelligence algorithm to remove doubt of a change of state and reduce false positives and only when the software is certain that this is an actual or evolving malfunction, it will alert the operator or take autonomous preventative measures.

## **Why work with us?**

That's easy – it costs nothing until you're absolutely confident we offer you real value. Send us your raw sensor data. We will study it and learn the system. Send us data of malfunctions and we'll tell you when and where these happened. We will then proceed to an online blinded pilot where you can simulate breakage, leakage or malfunctions and we'll have to find them. After that - we believe you'll understand why you want to work with us. Even more after you learn of our competitive pricing.

## **We'd love to hear from you!**

Please contact us at:

**[tal@diagsense.com](mailto:tal@diagsense.com)**

## **Schedule a pilot for FREE and start enjoying...**

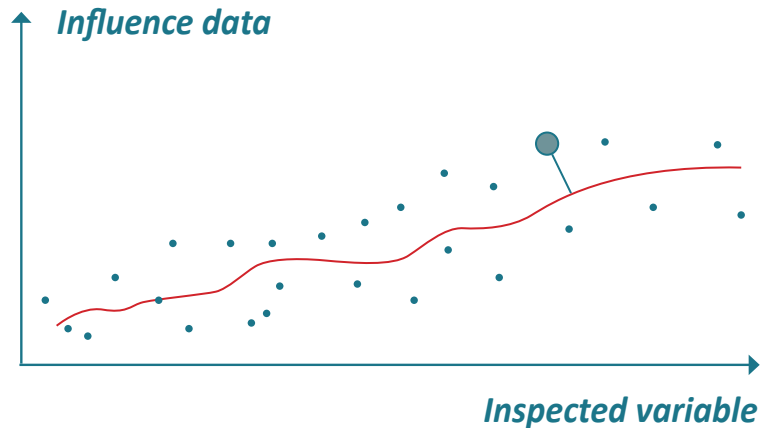
- A robust monitoring system running 24/7 without the need for calibration at any change in operational state of the monitored system.
- We decrease false alarms by 97% guaranteed!
- No misdetections guaranteed!
- No installation of additional equipment required, we connect to your existing system.
- Unexpected downtime
- Our system is self-adaptive to the changes in the environment and doesn't require any human intervention.

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Our algorithm is based on artificial intelligence, machine learning and data mining.

We study the monitored system at its normal, healthy operation. This could be any stationary process of machines or pipelines. Our algorithm discovers and learns possible correlation between different parameters collected by the sensors installed to the system. The first sign of alteration from normal behavior is considered at first as a new case study. If the situation continues – meaning the correlation is broken: the system will produce an alert. Since our system is adaptive and learning it will not alert in transient stages, in these cases it will continue operating normally with no need for recalibration.

The Diagsense monitoring system's technique is based on analyzing the system's normal behavior. Most other systems compare the current state of the system to a large database of faulty data simulations. Normal operational data is always available and can be well characterized using statistical training techniques. While any database of faulty data will never include all the malfunctions that can occur in complex systems.



Any deviation from the “normal system behavior” is classified by the Diagsense system as a “novelty” which will be caused by a developing defect that may eventually become a failure.

Our algorithm tracks and predicts your system on-line behaviour. Thanks to its ability to learn, it can alert to abnormal behavior which predicts an evolving malfunction.

**Visit our website for further information  
or e-mail us ...**

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