

Machine
Health

Fault
Diagnosis
and
Analysis

System
Integration
Ready

Artificial
Intelligence

Cloud or
Edge
Deployment

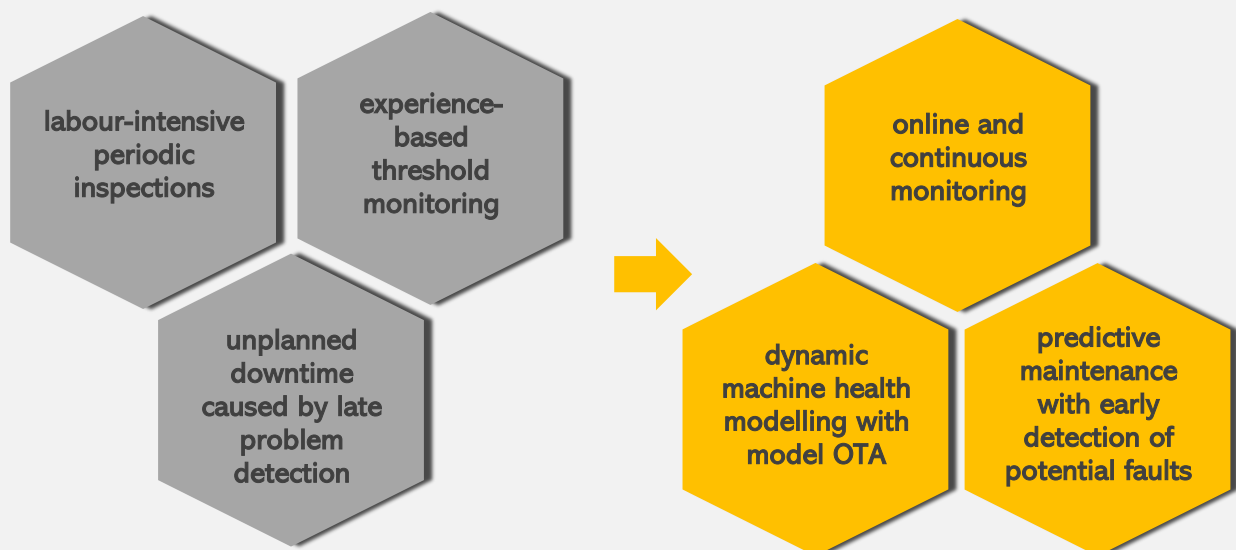
Email info@infinode.io
to book a demo

Introducing **Wisper**

AI-enhanced Condition Monitoring



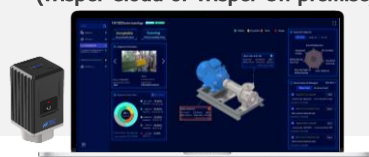
As the owner of rotating machinery assets like air compressors, coolers, and wind turbines, you need peace of mind when it comes to the health of your equipment. Our **Wisper** solution can turn unexpected downtime into planned maintenance. Offering automated, real-time fault diagnosis, condition assessment, and precise fault location for rotating machinery, **Wisper** is the missing link for smarter, more efficient operations.



**CUSTOMIZED
SYSTEM
SOLUTION**



Wisper
inline monitoring system
(Wisper Cloud or Wisper On-premise)

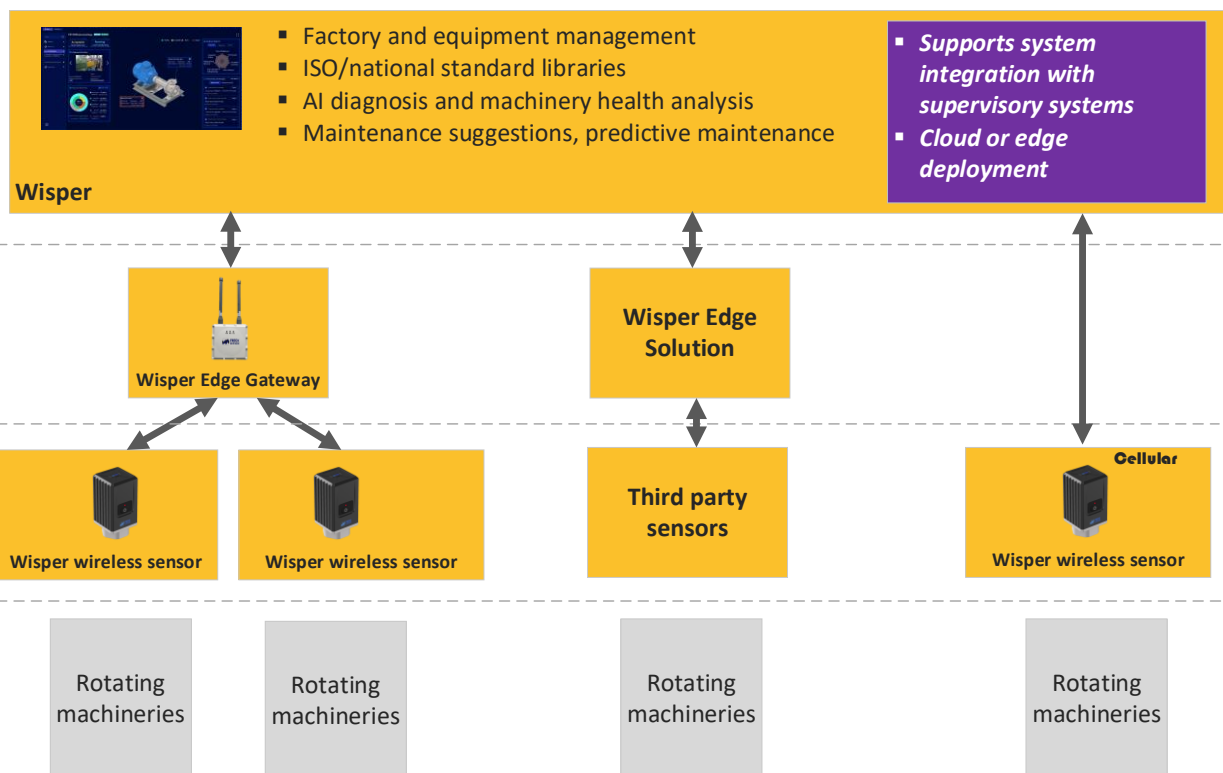


Wisper Lite
portable inspection system



System Architecture

Application layer
/algorithm layer
/interaction layer



Supported Equipment and Fault Types to Monitor

Rotor	Rolling Bearing	Sliding Bearing	Gear	Blade	Motors	Installation	Operating Conditions
Imbalance	Raceway pitting	Oil whirl	Tooth root crack	Blade cracks	Eccentric air gap	Loose casing	Lack of water
Misalignment	Raceway flaking	Oil whip	Tooth surface pitting	Blade fracture	Three-phase imbalance	Unstable foundation	Blockage
Rubbing	Roller pitting	Poor lubrication	Tooth surface wear	Blade corrosion	Loose core and coil	Loose parts	Cavitation
Loosening	Cage worn out	Bearing worn out	Tooth breakage	...	Slot wedge detachment	Resonance	Surge
Cracks	Cage cracking	Improper clearance	Tooth surface deformation		Phase loss	...	Impurities
Shaft breakage	Poor lubrication	...	Tooth surface bonding		...		Deviation from normal operating point

Case Study – Farming Product Producer



Adisseo is one of the leading experts in the global feed additive industry. The company operates 10 research centres worldwide, with production facilities across Europe, the United States, and China, designing, producing, and promoting sustainable nutritional solutions for the animal feed sector.

- **Solution:** The condition monitoring system provided covers 52 pieces of equipment, including 4 pumps, 19 fans, 9 refrigeration units/complete sets of equipment, as well as filters, mixers, turbines, and other devices, with a total of 131 monitoring points.



52

Pieces of equipment



131

Monitoring points

- **Outcome:** Over the past year, **126** diagnostic reports have been issued, identifying **34** potential equipment failure cases, with a prediction accuracy exceeding **95%**.



34

Potential downtimes turned into planned maintenance



6 months

Payback period purely based on reduced maintenance cost

Case Study – Chemical Industry



Bluestar Elkem develops silicones, silicon products and carbon solutions by combining natural raw materials, and other materials.

- **Solution:** Wisper condition monitoring solution is deployed in two of the silicone manufacturing facilities of Bluestar Elkem. The condition monitoring system provided covers combined 53 pieces of equipment, including 10 refrigeration units, 11 piston compressors, 3 screw compressors, 5 centrifugal compressors, as well as pump fans, mixers, grinders, and other devices, with a total of 304 monitoring points.



53

Pieces of equipment



304

Monitoring points

- **Outcome:** Over the 2 and half years, **166** diagnostic reports have been issued, identifying **32** potential equipment failure cases, with a prediction accuracy exceeding **95%**.



32

Potential downtimes turned
into planned maintenance



2.5 years

Payback period purely
based on reduced
maintenance cost

To learn more about **Wisper**, please visit our website or enquire about this product