

IOT

## CHANGE THE WAY MAINTENANCE IS DONE IN INDUSTRY!

RELIABILITY | SUSTAINABILITY | SAVINGS | PEACE OF MIND



Eliminate  
Unplanned  
Breakdown



Save 30% Or  
More In Engine  
Maintenance



Reduce Emission  
By Identifying  
Root Fuel  
Combustion  
Inefficiencies



Reduce Dry  
Dock Period  
And Enable  
Revenue



Prolong Life  
Of Lube Oil  
And  
Spares



Increase  
MTBO  
With  
Confidence



Optimize Spare  
Part List And  
Make Advance  
Procurement

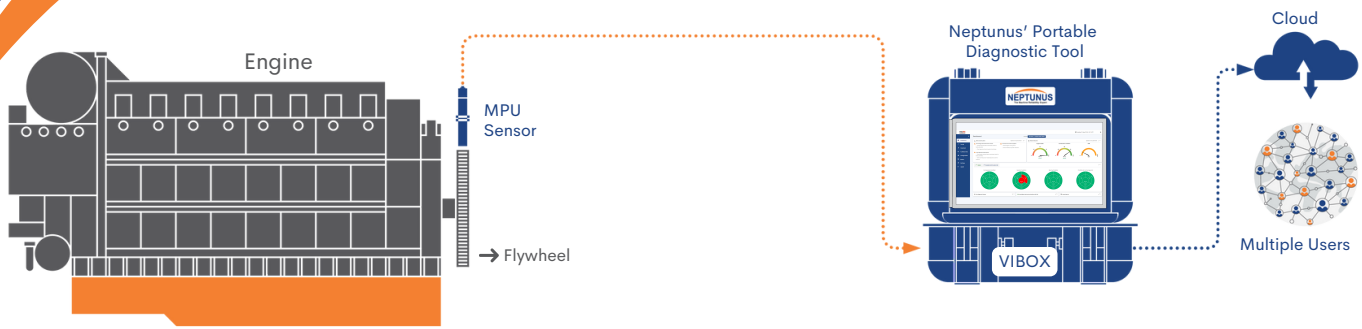


Remotely  
Monitor The  
Health Of All  
Engines



Scan/ Click To  
Register And

Get  
Complimentary  
Remote Support  
And Engine Health Inspection



## THE MOST HOLISTIC ENGINE MAINTENANCE SOLUTION

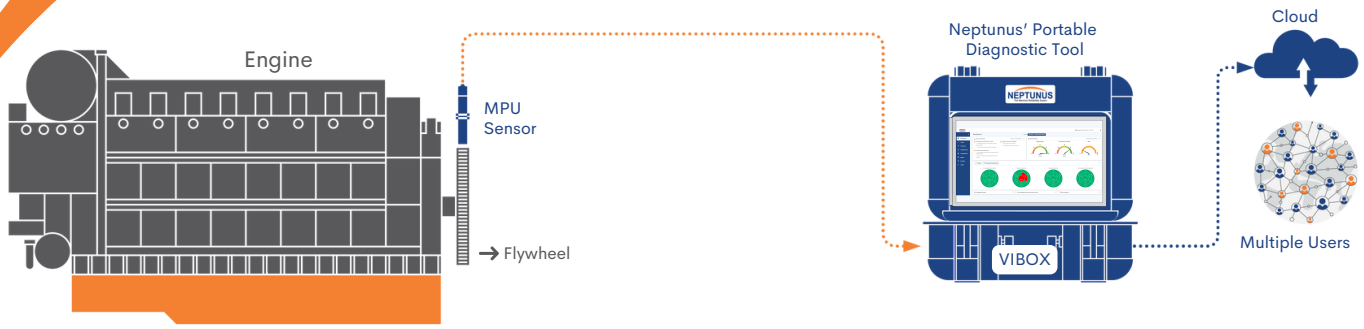
### ENGINE CONDITION MONITORING SYSTEM (ECMS)

Torsional Vibration FFT based real-time engine condition monitoring system that helps identify faults in engines months before any of the conventional systems today.

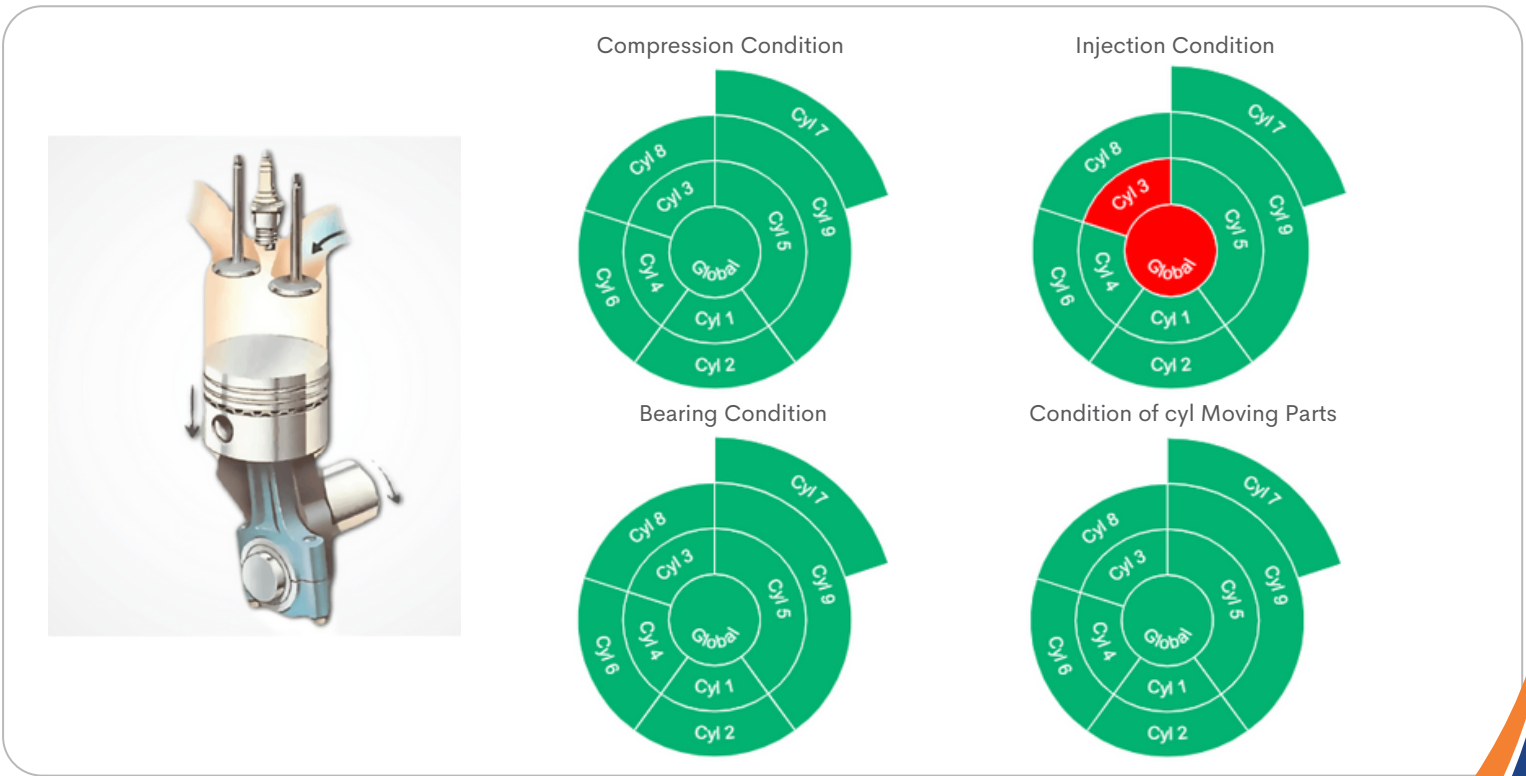
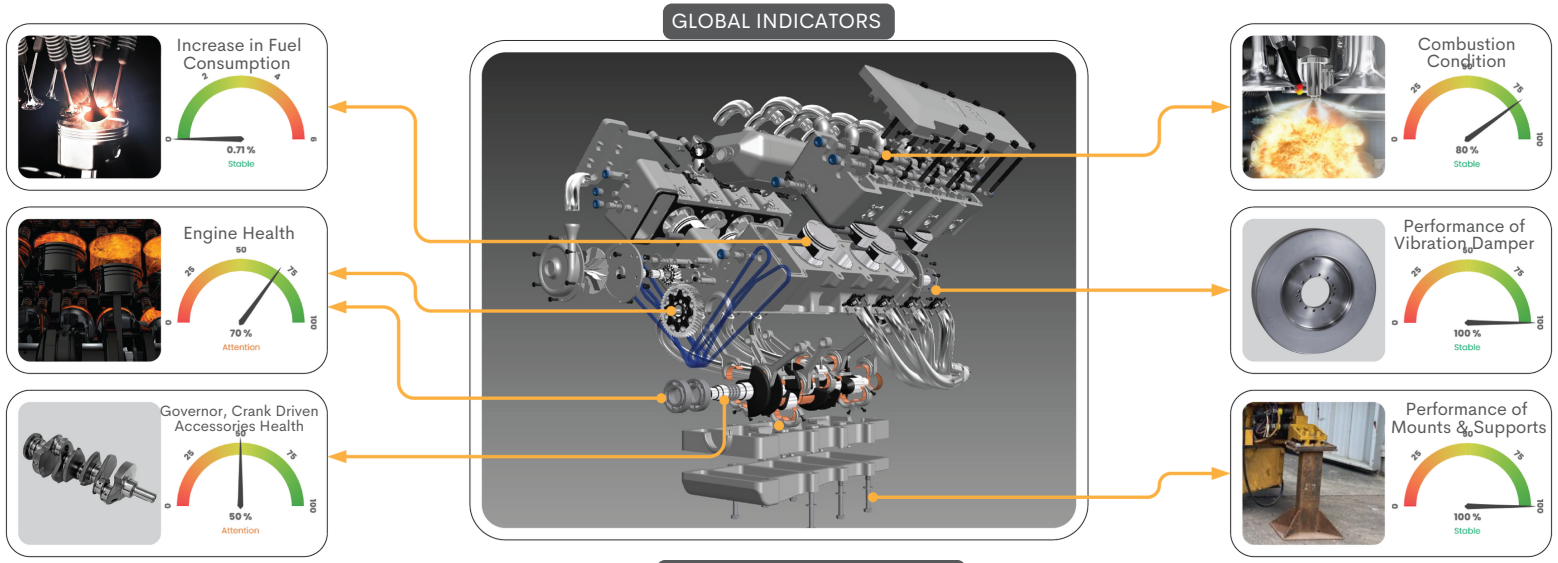


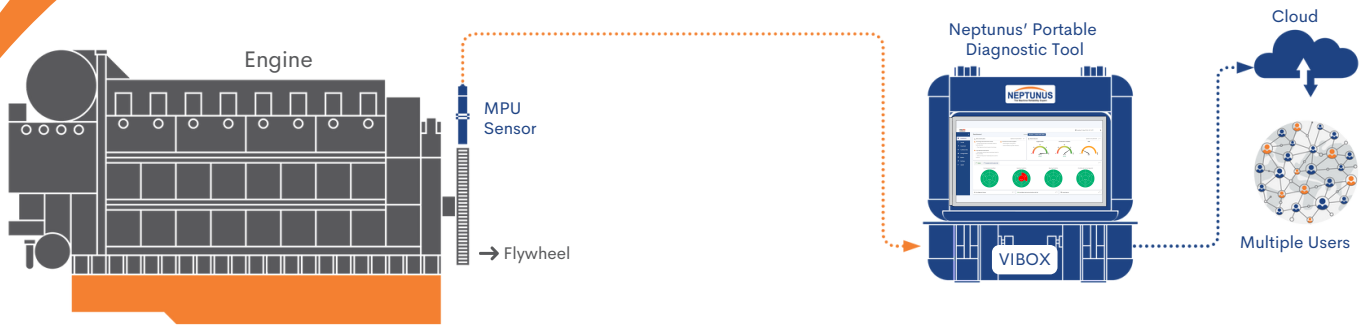
### Highlights:

- One solution for a diverse fleet- compatible with all engines
- Single non-invasive sensor for the complete health of engine
- Pinpoint faults at cylinder-specific level
- Remote and In-situ options
- IR Class type-approved (world's only type-approved condition monitoring system)

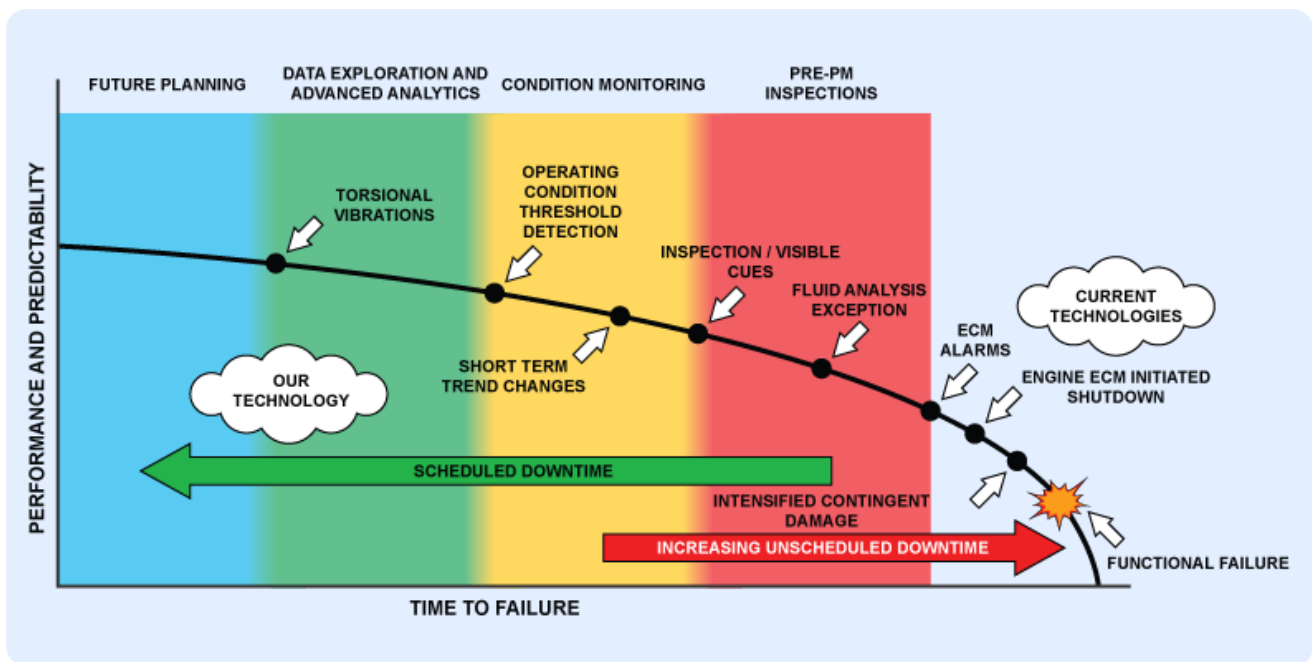


# THE MOST HOLISTIC ENGINE MAINTENANCE SOLUTION





## THE MOST HOLISTIC ENGINE MAINTENANCE SOLUTION



*TORSIONAL VIBRATION IS THE EARLEST SYMPTON OF ENGINE FAILURE IN COMPARISON TO OTHER FORMS OF SYMPTON / DATA.*

### Applications:



#### Engine (100+ INSTALLATIONS)

Combustion engine diagnostics (type of diesel, natural gas, and petrol engine, 2/4 stroke, inline/Vtype, up to 30 cylinders)



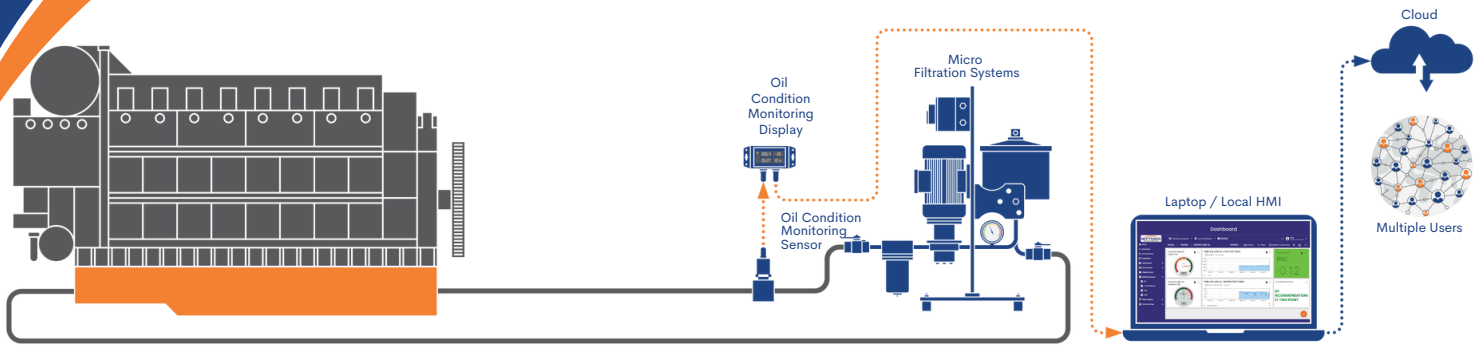
#### Shaft Power (ADOPTED WIDELY BY SHAPOLI USERS)

Torque and power measurement system



#### Turbine (50+ INSTALLATIONS)

Steam and Gas Turbine Diagnostics



## THE MOST HOLISTIC ENGINE MAINTENANCE SOLUTION

### OIL QUALITY MANAGEMENT SOLUTION (OQMS)

Oil quality management solution to enhance oil and engine performance through continuous oil cleaning with depth filtration. Monitoring oil quality changes in real-time based on 22 parameters.



#### Highlights:

- Simple 1200 to 0 Scale to know Oil Health
- Continuous Oil Cleaning With Depth Filtration
- Removes Oil Contamination and Water
- Senses Oil Quality Changes Basis 22 parameter
- Absolute Filtration Till  $3\mu$  with  $>930$  Beta Ratio
- Alarms and Trends Oil Life & Suggests Change Interval

# THE CASE STUDIES THAT MIGHT INTEREST YOU

1.



**73% Savings on MOH Spares & 1 Complete TOH Eliminated With Real-Time Engine Health Monitoring**



Engine:  
Niigata Engines



Vessel:  
Supply Vessel



Solution:  
Engine Condition  
Monitoring System



Customer:  
Offshore Supply Vessel  
Operator Un Qatar

CLICK TO READ FULL  
CASE STUDY



2.



**Early Fault Detection Extended Major Overhaul Which Otherwise Costs ~\$2,50,000 For 7 Vessels**



Engine:  
Niigata Engines



Vessel:  
Harbour Tug



Solution:  
Engine Condition  
Monitoring System



Customer:  
Harbour Tug  
Operator In India

CLICK TO READ FULL  
CASE STUDY



3.



**Unlocking \$233k Potential Savings, Enhancing Reliability, and Advancing Green Initiatives**



Engine:  
CAT Engines



Vessel:  
Offshore Jack-  
Up Rig



Solution:  
Oil Quality  
Management Solution



Customer:  
Biggest Oil PSU  
In India

CLICK TO READ FULL  
CASE STUDY



4.



**~\$54,000 Saved & Enabled A Revenue Of ~\$750,000 Over One Month By Enabling On-Time Deputation Of Rig**



Engine:  
Niigata Engines



Vessel:  
Offshore Jack-  
Up Rig



Solution:  
Engine Condition  
Monitoring System



Customer:  
Jack Up Rig  
Operator In India

CLICK TO READ FULL  
CASE STUDY



5.



**~\$52,000 By Optimizing The Scope Of One Overhaul With Our Engine Condition Monitoring System**



Engine:  
CAT Engines



Vessel:  
Offshore Jack-  
Up Rig



Solution:  
Engine Condition  
Monitoring System



Customer:  
Jack Up Rig  
Operator In India

CLICK TO READ FULL  
CASE STUDY



6.



**~\$936,000 Of Savings Unlocked On 21 Rig Assets Over Three-Year Contract Period**



Engine:  
CAT Engines



Vessel:  
Land Rig



Solution:  
Oil Quality  
Management Solution



Customer:  
Land Rig Operator  
In Oman

CLICK TO READ FULL  
CASE STUDY



7.



**Early Fault Detection And Fuel Loss Management Enabled for 12 Cylinder - 2 Stroke Doosan Sulzer Cargo Engine**



Engine:  
Doosan Sulzer



Vessel:  
Cargo Ship



Solution:  
Engine Condition  
Monitoring System  
& TorqueSense



Customer:  
Cargo Ship  
Operator

CLICK TO READ FULL  
CASE STUDY



ALL CASE STUDIES



MARINE



OIL & GAS



DEFENCE



## ABOUT NEPTUNUS

Neptunus Power Plant Services Pvt. Ltd (founded on 24 June 1996) has 25+ years of experience in maintenance and reliability solutions for oil & gas, marine, industrial, and defence asset users across South Asia, the Middle East, Africa, and Europe.

## MAINTENANCE SERVICES

Niigata (OEM authorised) | EMD (OEM authorised) | CAT | MAN | Wartsila | Yanmar  
Kawasaki | Nakashima | Berg

## ASSETS

Engines, Gensets, Auxiliary Engines, and Propulsion Systems (CPP/FPP-  
Propellers, Clutch, Gearbox, Bow-Thrusters )

## INDUSTRY WE SERVE



Marine



Oil & Gas



Industrial



Defence

## OFFICES



India



UAE



France

## GLOBAL TECHNOLOGY PARTNERS



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