



Neptunus' Engine Condition Monitoring System helped customer to extend major overhaul and saved **\$100,000** without any risk with real-time monitoring

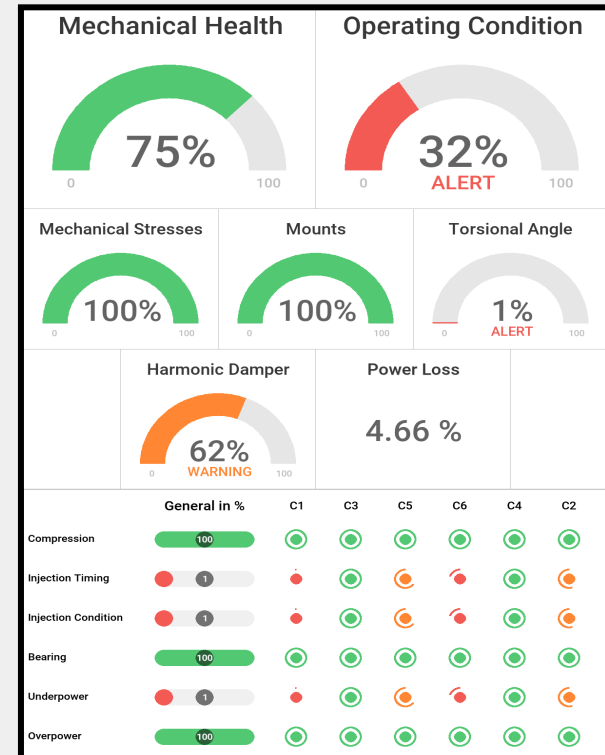
INDUSTRY SEGMENT:	Marine
CUSTOMER:	Harbour Tug operator in India
EQUIPMENT:	Niigata make diesel engines
ARM SOLUTION:	Engine Condition Monitoring

CHALLENGE

- This vessel was due for a major overhaul as per OEM's maintenance cycle at 24,000 running hours which would have cost the customer above \$100,000
- The life-cycle of this vessel is around 20 years, approximately 65,000 running hours, meaning 2 MOH have to be performed for this vessel before it's scrapped. This results in huge expenditure for the customer on overhauls
- The customer has a target of keeping the vessel **uptime above 98%**

SOLUTION

- After the 1st health checkup, there were some concerning areas on the injection front. We proposed customers do continuous engine monitoring so that they have real-time engine condition data and without any risk, they can extend the overhaul with the **replacement of 2 injectors costing just \$5,000**
- The customer's onboard team, as well as their office team, **can view the engine condition on a real-time basis and have full control over their engines**
- With the real-time condition monitoring **we propose to do only bare minimum scope required (In this case injectors) based on the real-time engine condition monitoring and push the MOH further** and still retain the reliability of the engine



BENEFITS

- **Customer is able to see real-time engine condition, cylinder-specific and take a data-backed decision**
- With the extension of the major overhaul, the customer is able **to eliminate the whole 2nd MOH in the life-cycle of this vessel**



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- They were able **to save 20 days downtime on MOH service which would generate them a revenue of \$30,000 along with meeting their target of above 98% uptime**