



# Indian Register of Shipping

CERTIFICATE NO: 2022TAC044

## TYPE APPROVAL CERTIFICATE

*This is to certify that the product is in accordance with the applicable rules/standards/codes as described below.  
The product is considered to be suitable for use in marine applications and is included in the list of approved products.*

<b>MANUFACTURER</b>	<b>Neptunus Power Plant Services Pvt. Ltd.</b>
<b>MANUFACTURING WORKS</b>	A 554/555, TTC Industrial Area, MIDC, Mahape, Mahape, Navi Mumbai, Maharashtra, India
<b>REGISTERED OFFICE</b>	A 554/555, TTC Industrial Area, MIDC, Mahape, Mahape, Navi Mumbai, Maharashtra, India
<b>PRODUCT NAME</b>	<b>Engine Condition Monitoring Software</b>
<b>MODEL NO. / TRADE NAME</b>	Impedance Data VIB 360
<b>PRODUCT DESCRIPTION</b>	Torsional Vibration Based Engine Condition Monitoring System
<b>APPLICABLE RULES/STANDARDS/CODES</b>	- IRS Rules and Regulations for Construction and Classification of Steel Ships - IRS Classification Notes for type approval of electrical equipment used for control, monitoring, alarm and protection system for use in ships
<b>CONDITIONS OF APPROVAL</b>	See Annexure - I
<b>VALIDITY</b>	The Certificate is valid until 22/05/2027

ISSUE DATE: 23/05/2022

PLACE: MUMBAI

Premjit Panigrahi  
Sr. Principal Surveyor

This Certificate is issued upon the following terms and conditions as laid down in the Society's Regulations:-  
Whilst Indian Register of Shipping, a Classification Society, along with its subsidiaries and associates (hereinafter referred to as the Society) and its Board/Committees use their best endeavors to ensure that the functions of the Society are properly carried out, in providing services, information or advice neither the Society nor any of its servants or agents warrants the accuracy of any information or advice supplied. Except as set out herein neither the Society nor any of its servants or agents (on behalf of each of whom the Society has agreed this clause) shall be liable for any loss damage or expense whatever sustained by any person due to any act or omission or error of whatsoever nature and however caused of the Society, its servants or agents or due to any inaccuracy of whatsoever nature and howsoever caused in any information or advice given in any way whatsoever by or on behalf of the Society, even if held to amount to a breach of warranty. Nevertheless, if any person uses services of the Society, or relies on any information or advice given by or on behalf of the Society and suffers loss damage or expenses thereby which is proved to have been due to any negligent act omission or error of the Society, its servants or agents or any negligent inaccuracy in information or advice given by or on behalf of the Society then the Society will pay compensation to such person for his proved loss up to but not exceeding the amount of the fee charged by the Society for that particular service, information or advice.  
Any notice of claim for loss, damage or expense, as referred to above, shall be made in writing to the Society's Head Office within six months of the date when the service, information or advice was first provided, failing which all the rights to any such claim shall be forfeited and the Society shall be relieved and discharged from all liabilities.

**ANNEXURE – I**  
**(TO CERT. NO. 2022TAC044 DATED 23<sup>RD</sup> MAY 2022)**

**TERMS AND CONDITIONS**

This approval is subject to following:

- 1) The manufacturer is to maintain effective quality system complying with the most current version of ISO 9000 series.
- 2) Each system is to be supplied by the manufacturer with:
  - Condition Monitoring System description/ operation & maintenance manual to be provided along with the system
  - Operating instructions in pictorial form, in addition to explanatory text in language understood by the user.
- 3) When installed on vessels assigned with class notation CM, an annual audit of the CM scheme is to be carried out concurrently with the annual class surveys.
- 4) Approval of TAN-DELTA oil monitoring sensor is not included in this certification.
- 5) The Condition Monitoring system is approved to be installed on Four Stroke Marine Engines only.
- 6) The individual main & connecting rod bearings survey/ inspection as part of Planned maintenance System/ OEM recommendations will be subject to: -
  - a. Periodically trended records logged by the Condition Monitoring system.
  - b. Condition Monitoring system highlighting bearing faults in the system generated reports.
- 7) Any revision to the applicable rules/ IACS requirements would necessitate testing and re-approval of the Condition Monitoring System.
- 8) Any change in the system software or system process affecting the approval would require reassessment of the works and retesting for continued approval.
- 9) The system provides useful tool for assessing the condition of the machinery. However, type approval does not eliminate routine maintenance which is to be carried out at shipowner's discretion in accordance with Planned Maintenance System / OEM recommendations

  
**Premjit Panigrahi**  
**Sr. Principal Surveyor**