

Webinar Title: Vibration Monitoring & Analysis

Expert Speaker (Name/ Designation) - Dr.S.K.Chakravorty, Ex DDG (TS), NPC

Webinar Date: 30<sup>th</sup> September 2020 | Duration: 1 Hr 30 min

**Participation Fees:433** 

About Webinar (Brief One Para): - Vibration monitoring is the most common, versatile & powerful condition monitoring technique adopted for rotating machineries in an industry. Vibration Monitoring and analysis of equipment in industry can enhance safety, help protect the environment, lower maintenance cost, increase production and lower operating costs. Product quality is maintained and operating efficiency is maximized by reducing equipment abnormality and unforeseen stoppages and breakdowns. This technique shifts maintenance strategy from reactive to proactive predictive maintenance. Instead of inspecting or maintaining machines at specific time intervals, maintenance activities are scheduled in accordance with the machine's actual operating condition. Such analysis increases the level of knowledge about a machine and allows maintenance to be performed faster as the problems are known before the machine breaks down. It leads to not only more machine hours between failures but also reduces planned shut- down hours for carrying out corrective maintenance. The investment on most vibration monitoring and analysis systems can be paid back by saving just a few hours of production down time.

**Webinar Coverage: -** The objective of this programme is to discuss the principles of vibration measurement, monitoring and analysis and its role in increasing the reliability of plant & machinery. Vibration instruments/transducers, vibration data collection, recording, and trend analysis will be discussed. Vibration threshold limits and various standards will be covered. Various causes for high vibration and the remedial measures to be taken will be elaborated. Finally some important real life case studies from industry will be discussed.

Speaker Profile (Brief One Para & Photograph):- PhD (Production Engineering) from Jadavpur University, M.Tech (Chemical Engineering) from IIT Kanpur. Specialised in: Advanced Maintenance Management Systems & Techniques from Sweden; Industrial Tribology & Lubrication Management from National Tribology Centre, UK; Total Productive Maintenance from JIPM, Tokyo; Condition Monitoring Systems from IIT Madras & IRD Mechanalysis, UK; Hazop/Hazan & OHSAS from University of Manchester, UK & DNV India. Have 40 years of experience in consultancy & training in various subjects of Maintenance Management including Vibration Monitoring & Analysis. Retired as Deputy Director General (Technical Service) from National Productivity Council of India. Presently working as consultant for industry associations, like-Alkali Manufacturers Association of India (AMAI), Federation of Indian Chamber of Commerce & Industry (FICCI), National Productivity Council (NPC), etc.



## Register to learn (Key Learnings' in bullet points):

- Advantages of vibration measurement and monitoring.
- Forces that causes vibration.
- Characteristics of vibration
- Vibration meters/analyzers & transducers
- Vibration warning & severity limits
- Vibration data acquisition & trend monitoring
- Spike energy & Shock pulse monitoring
- Vibration signature analysis
- Diagnosis of machine problems
- Case studies on vibration analysis

Date: - 30th September 2020

Time: - From: 15:00 To 16:30 Hrs.

Register in advance for this webinar

Thanks & Regards

**National Productivity Council** 

**Regional Directorate** 

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