

**Abstract of the Talk -
"Science of Rolling Contact Fatigue and its effect on Material Behavior"**

Mechanical components fail through many failure modes and fatigue is one of the most predominant mode. Fatigue failures are evidence by Beach marks / striations, wherein each striation represent one step of advancement of the crack. Rolling contact fatigue is of the same family mode of fatigue failures but occur in "rolled" systems. This paper will explain the fundamentals of Rolling contact fatigue and what effect it has on the material properties.

Brief Biodata of the Speaker – Sri Vasanth TS

- Bachelor of Engineering (Metallurgy and Material Science) From National Institute of Technology; Surathkal-2006

Summary

- Broad experience of total 12 years in automotive quality assurance and quality control.
- Conversant with quality assurance role in production organization viz preventive quality, production quality, final quality, central quality etc.
- Ensured implementation of special manufacturing methodology & HT processes at supplier end to meet the final product requirement.
- Expertise in material testing & advanced metallographic analysis.
- Expertise in failure investigation. Active involvement in the failure investigation during R & D & ongoing quality.
- Good understanding of processes involved, like Steel Mill, Foundry, Heat treatment, Surface treatment, welding, etc. in New Product Development. Process validation & it's approval at supplier end.
- Familiar for implementation and certification of TS 16949 & NABL 17025 systems & processes.
- Manpower and Budget planning for lab, based on new upcoming projects & ensure effective utilization of existing equipment.

- Localization of materials which includes develop, analyze and feasibility study for adopting in Indian application.
- SEM (Scanning Electron microscope Make LEO 40 and EVO18) Analysis and EDX Analysis Includes Ordering, Technical Specification Selection, Laboratory set-up for SEM, Put to use.
- On hand experience on Material Testing (Both Mechanical and Metallurgical Testing).
- Knowledge on ASTM, DIN, ISO and IS standards and testing of materials based on these standards.
- Certificated internal Auditor and CQI-9 HTSA auditor.