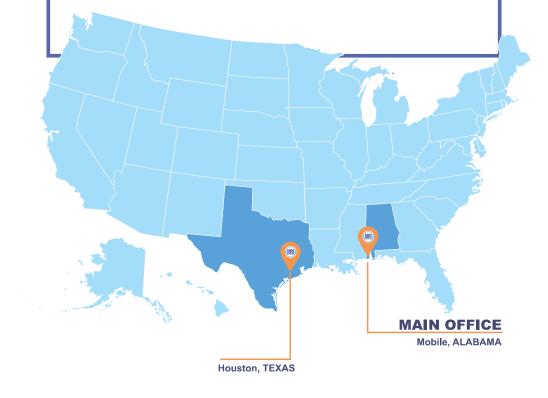




We are an organization specialized in the provi-sion of Consulting and Engineering services for industry and training that promotes and provides experiences, guides, practices, techniques, tools, models and methodologies for Asset and Risk Management, Reliability Engineering, Maintenance and Rotating Machinery, for the universe of professionals of engineering and industry worldwide through programs of Training, Research, and Development.

Our organization is made up of engineers professionals with more than 20 years of experience international, responsible and consistent that guarantees a Premier Service of Total Asset Management, Engineering Solutions and Consulting Services, from the conceptual engineering of new projects, going through the operation and maintenance of facilities during its useful life.





# **Main Objective**

Investigate, develop and promote practices, strategies, techniques, tools, models and methodologies to Machinery and Reliability management, for professional engineers of industries in America and worldwide, through training programs and development of Procedures, Guide, Manual, Book, Recommended Practice and Mentoring programs.

# **Mission**

The "Machinery & Reliability Institute" is an institution committed to develop science, without lose of sight of cumulative knowledge in communities, within a framework of autonomy expressed in freedom of thought and ideological pluralism, freedom of teaching, learning, research, services, and professorship.

## **Vision**

Private Institute dotted with scientifictechnical, human, and financial resources to research and develop science in the area of "Machinery & Reliability" Management. research, services, and professorship.





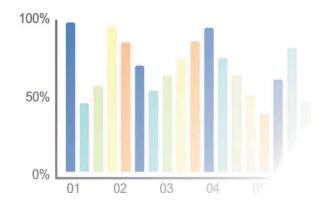
# **Servicies**

Knowledge Center that promotes and provides experiences, guides, practices, techniques, tools, models and methodologies for the Management of Assets and Risks, Reliability Engineering, Maintenance and Rotating Machinery, for the universe of engineering professionals and global industry through of Training, Training, Research, and Development programs in the areas of:



# **Rotating Equipment**

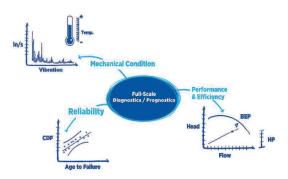
- · Rotating Equipment Selection and Application.
- Rotating Equipment Systems Circuit Simulations.
- · Rotating Equipment Performance Analysis
- Reliability Operational Windows Development
- Energy Management Levels 1, 2 and 3 Assessment & Audit.
- ISO 50001 Energy Management System Evaluation.



#### Reliability Engineering

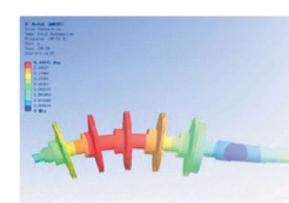
- Reliability Availability and Maintainability (RAM)
- Reliability Centered maintenance (RCM)
- Failure Mode Effect and Criticality Analysis (FMECA)
- Criticality Analysis (CA)
- Failure Reporting Analysis and Corrective Action System (FRACAS)
- Root Causa Failure Analysis (RCFA)
- Failure Mode Effect Analysis (FMEA)
- Risk-Based Spare Part (RBS)
- Life Cycle Cost Analysis (LCCA)
- Benchmarking and KPI & Balance Scorecard
- Lean Manufacturing
- Kaizen
- Six Sigma





## **Condition Monitoring**

- Data Acquisition: Condition Based Monitoring / Integrated Condition monitoring / Automated Monitoring Systems / Online Condition Monitoring Systems / Offline Condition Monitoring Systems
- Condition Monitoring Data Analysis. (Predictive Maintenance)
- Vibration Analysis
- Lubricant Analysis & Tribology.
- Thermal Imaging (Infrared Thermography)
- Ultrasound



## **Advanced Engineering Analysis**

- Theoretical Modal Analysis / Operating Deflection Shape (ODS)
- Computational Fluid Dynamic (CFD)
- Finite Element Analysis (FEA)
- Rotodynamic Studies: Torsional and Lateral Analysis

Scope of Services



