

CURRICULUM VITAE

NAME: Thomas John Murphy



QUALIFICATION: B.Sc. (Hons) Electroacoustics from the University of Salford (1979)
Member of the Institute of Acoustics
Chartered Engineer registration number 473318
Certified Reliability Leader (2015)

PRESENT POSITIONS: Managing Director and joint owner of Reliability Team Limited, providing reliability improvement consultancy, training and expertise in the application of vibration, ultrasound, infrared thermography, FMEA and Root Cause Analysis.

Corporate Training Manager SDT Ultrasound Solutions, responsible for the development and correct delivery of training material associated with the application of Ultrasound to the field of Asset Condition Management.

MARKETING EXPERIENCE:

The development of sales and marketing strategies, developing advertising and exhibition presence, identifying, negotiating with, visiting, training and supporting prospective representatives throughout the European Community, Scandinavia, Switzerland, South Africa, The Middle East, Asia, Canada and The United States.

TECHNICAL EXPERIENCE:

Application of vibration, infrared and ultrasound measurement to predictive maintenance in the many industries including: Aviation, Power Generation, Nuclear, Steel, Offshore, Petrochemical, Textiles, Mining, Quarrying, Paper, Marine, Food Production, Automotive and Pharmaceuticals.

This work has involved:

- development and implementation of predictive maintenance regimes and strategies for clients using multiple technologies;
- specification of instrumentation, installation, commissioning and fault-finding;
- using portable data collection equipment and spectrum analysers for measurement and diagnostic analysis (vibration and ultrasound);
- development of new measurement and analysis methods for slow-speed machinery analysis;
- maintenance of predictive maintenance hardware systems;
- predictive maintenance software database maintenance and repair;
- provision of on-line help support for operators;
- preparation and presentation of training courses on vibration theory, ultrasound theory, predictive maintenance and Maintenance Best Practice to industry throughout the World
- noise and acoustic intensity analysis;
- laser holography using ESPI;
- member of the ISO TC108 technical committee

Clients past&present: Anglo American Mining, Aston Martin, BHP Billiton, BMW, Bang&Olufsen, British Paper & Board group, British Sugar, Caledonian Paper, Campbells Soups, Cereal Partners Worldwide (General Mills), Chevron, DuPont, EDF, Exxon, GlaxoSmithKlein, GM Georgia Pacific, Germany, Henkel, Hess, Holset Engineering, Howmet Castings (Alcoa), ICI, Iggesund Paperboard, IKO, Inco, InBev, International Paper, Jaguar, Koch Industries, Merck Sharp & Dohme, NASA, Nestlé, Pfizer, Polestar Print, Seagate, Shell International Marine, Spillers, Tarmac, VDO, and Warner Lambert.

ANALYTICAL EXPERIENCE:

Modal Analysis

Operating Deflection Shape Analysis

Run-up and Coast-down transient analysis

AC induction motor rotor bar analysis

Transfer function analysis

Time waveform analysis

Reciprocating compressor condition assessment

Slow-speed bearing analysis

Application of IR thermography to a wide range of condition monitoring and NDT problems.

TRAINING COURSES PROVIDED FROM 1977 TO DATE:

Predictive maintenance principles

Vibration theory

Maintenance Best Practise

Low frequency vibration measurement

Infrared thermography

Ultrasonic Leak Detection

Ultrasonic signal diagnostics

Licensed RCA and Proact trainer for Reliability Center Inc.

ASNT Level 1 Ultrasound (over 1,000 students trained around the world)

ASNT Level 2 Ultrasound

ISO 18436-8 CAT1 Ultrasound

Ultrasound Implementation

Establishing a CBM program using Ultrasound

TECHNICAL PAPERS

A large number of conference papers and presentations have been prepared over the last 3 decades. These papers have been presented at conferences in Europe, South Africa, Canada, and America. Several of these have been reproduced in articles printed in international publications such as Maintworld and Uptime magazine.

Co-author of the book “Hear More A Guide to Using Ultrasound for Leak Detection and Condition Monitoring” which was published in 2010. ISBN 9780982516331