# Workshop on

"Time Signal Accurate
Acquiring and Its
Importance in
Fault Analysis"
1-Day Online Session

# **About Us**

We are the training providers and deals in Technical, HSEQ, Management and Soft Skills Training.

We have highly knowledgeable and experienced local & foreign subject matter experts. Our team is highly focused and provides the best support as per your requirements and needs.

We provide a platform from where you can add value in you teams. We are highly fascinated on the development of your Technical and Management Teams.

We can provide on-site and classroom training.

# **About Trainer**

Mr. Mina is an International Vibration Consultant with Level IV Certification from Vibration Institute – USA. He has done his Engineering in Mechatronics. He is also a member of Vibration Institute Certification Committee. He has a vast experience in the field of Condition Monitoring.

He has conducted more than 500 sessions in Vibration Analysis (Level I, II, III and IV), NDT (PT, RT, MT, UT and VT) and Thermography.

He has Certifications in Vibration Analysis – Level IV, Dye Penetrating Testing –Level II, Magnetic Particle Inspection – Level II, Radiographic Inspection – Level II, Ultrasonic Inspection – Level II, Visual Inspection – Level II and Thermography – Level I.

He has more than 15 years of industrial experience in the same field. Currently he is working as an International Consultant and Proctor of Vibration Exams. He has been associated in commissioning, startup, check and review pre-commission for all types of rotating and static equipment with contractor according to manufacturing specifications of equipment. He has excellent knowledge of rotating and statics machineries.

# **Training Content:**

#### 1- Digitized waveform construction

- Acquiring digitized Time plot
- Digital Sampling
- Fmax and no of lines effect on time domain

### 2-Eye ball sampling Rule

- Sampling noise
- Eye sampling rule VS Nyquist sampling Rule

## 3-Reasons of not acquiring an accurate time domain signal

- Location of vibration sensor (Bad transducer mounting)
- Ski Slope
- Glitch (Runout) and Slow Roll compensation

#### 4- Impacting in time signal

- Sources of impacting in time signal
- Effect of Impacting signal on Peak values, RMS values &FFT spectrum
- Monitoring the impacting interval in time signal
- Envelope construction

#### 5-Beating and Amplitude modulation in time signal

- Sources of beating and amplitude modulation in time signal
- Analyzing the amplitude modulation in time signal

## 6-Spectrum Clipping

- How Time signal can guide analyst to Re-adjust FFT spectrum configuration

# 7-Using time signal to detect gear broken/cracked tooth

- How you can do health assessment and Count gear teeth from Time signal



**Contact Us** 

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