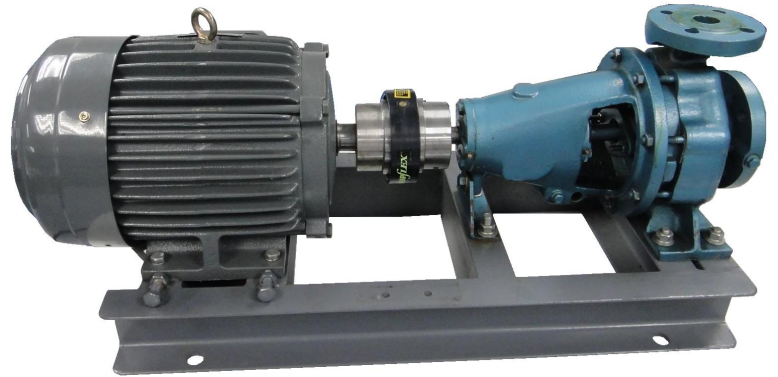


# PRECISION ALIGNMENT PROGRAM – *SHAFT*

## IL04.1

### COURSE OBJECTIVE

Perfect alignment of machinery is crucial to prevent catastrophic failures. Over the past decades, surveys show that as much as 50% of all premature machine breakdowns are attributable to poor alignment. Furthermore, up to 90% of all machines run outside their recommended tolerances. With the latest *state-of-art laser technology*, it provides a more accurate way of detecting and correcting misalignment.



### BENEFITS

- Reduce energy consumption
- Reduce excessive vibration
- Extend service life of seal, coupling and bearing
- Increase productivity hours and product quality

### WHO SHOULD ATTEND

- Maintenance executive
- Reliability staff
- Rotating equipment engineer

### PRE-REQUISITE

No pre-requisite is required

### COURSE MATERIALS

Comprehensive notes and a collection of case studies

### COURSE DURATION

1 DAY

### CANCELLATION POLICY

If notice of withdrawal is given in writing - 14 calendar days before the course date, 80% of the course fee will be refunded. A 50% refund will be made for cancellation received in writing – 7 calendar days before the course date. After which, NO REFUND will be entertained.

***Machines "In Line" stay "On Line"***  
*Premature bearing failures, high vibration levels, hot couplings or leaking seals can all be indications of misaligned machines.*

**MULTI MAINTENANCE SOLUTION**

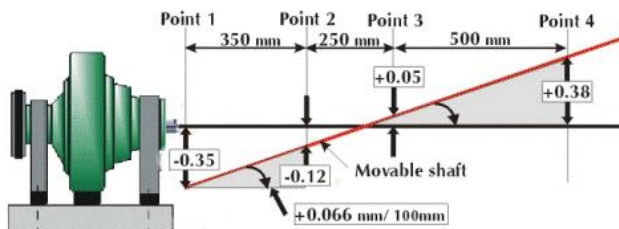
WE DELIVER CUSTOMIZE SOLUTION TO YOU

# COURSE TOPICS

## Lesson 1

### Terminology

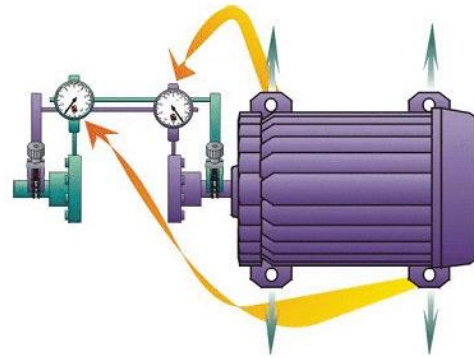
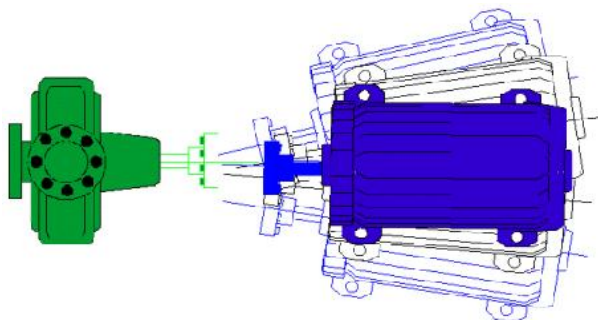
- Definition of Shaft Alignment
- Benefits of Shaft Alignment
- How misalignment is measured?
- How alignment corrections are made?



## Lesson 3

### Alignment Technique

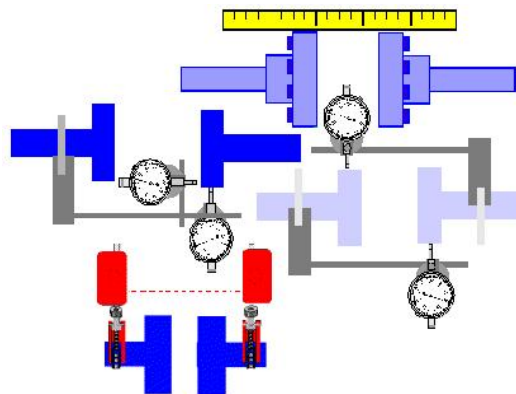
- Straight-edge feeler gauge method
- Dial indicator rim-face method
- Dial indicator reversed rim
- Twin laser systems method



## Lesson 2

### Calculation

- Overview – Dial Indicator Method
- Shaft angularity from readings
- Corrections at movable machine feet
- Alignment limit tolerance chart



## Lesson 4

### Alignment Procedures

- Overview : Laser Shaft Alignment
- Soft foot correction
- Stage 1 - Pre-alignment Procedures
- Stage 2 - Rough alignment Procedures
- Stage 3 - Precision alignment Procedures
- Hands on : Horizontal Shaft Alignment

# REGISTRATION

SIGN UP  
**NOW!**



1<sup>ST</sup> Delegate Name: \_\_\_\_\_  
Job Title / Department: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

2<sup>ND</sup> Delegate Name: \_\_\_\_\_  
Job Title / Department: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

3<sup>RD</sup> Delegate Name: \_\_\_\_\_  
Job Title / Department: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

**APPROVED BY:** \_\_\_\_\_

Job Title / Department: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Email: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_

## 2 easy ways to Register



(603) 4047 3465

Complete and fax this registration form



[info@m2solution.com.my](mailto:info@m2solution.com.my)

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