



(1093652-W)  
**Ascendent Technology Sdn. Bhd.**  
*(Rated as 5 Star Training Provider by PSMB)*



Applicable



SBL-Khas

Measurement Systems Analysis  
(MSA)



## MEASUREMENT SYSTEM ANALYSIS (MSA)

### **PROGRAMME OVERVIEW:**

Measurement System Analysis is a two-days course. Conducted in both theory and workshops. It develops understanding of the MSA-4 Reference Manual through group activities and individual participation that meeting IATF 16949 clause 7.1.5 requirements. In general, the participants will gain an understanding of the MSA-4 Reference Manual, its impact on quality systems and able to apply the knowledge in the implementation of IATF 16949 QMS.

### **TARGET GROUP:**

Quality managers / Quality team leaders, IATF 16949 1st, 2nd, 3rd party auditors, anyone involved in developing MSA, Anyone involved in the implementation of IATF 16949

### **OBJECTIVES:**

At the end of the course, participants are expected to:

- 1) Understand the MSA-4 Reference Manual and its impact on quality systems.
- 2) Comprehend the elements of the MSA and the relationship of MSA to a quality System
- 3) Look into organizational applications, categories of measurement system variation
- 4) Under take Gage Repeatability and Reproducibility
- 5) Direct application to IATF 16949 and the TE Supplement.

**CONTENT:**

- 1) Categories of measurement error
- 2) Measurements systems and the measurement process
- 3) Measurement system study and planning
- 4) Bias, Linearity, Stability, Repeatability, Reproducibility
- 5) Measurement system analysis and studies – Graphical & Numerical Analysis
- 6) Examples of MSA
- 7) Measurement studies for attributes
- 8) Workshop

**METHODOLOGY :**

Lectures, discussion, exercise and group workshop.

## REGISTRATION FORM (QT04):

### PUBLIC TRAINING

**Course Fee** : RM 2,100 Per Pax  
**Date** : Refer to Training Calendar  
**Duration** : 2 Days  
**Time** : 9:00 AM - 5:00 PM  
**Venue** : Ascendent Technology Sdn Bhd  
**HRDF** : SBL-Khas

Participant : Mr / Ms .....  
 Designation : .....  
 Department : .....  
 Email : .....  
 Mobile No : .....

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 Designation : .....  
 Department : .....  
 Email : .....  
 Mobile No : .....

### IN-HOUSE TRAINING

**Course Fee** : RM 6,000 Per Day  
**Date** : To be advised  
**Duration** : 2 Days  
**Time** : 9:00 AM - 5:00 PM  
**Venue** : Customer's premises / Hotel  
**HRDF** : SBL-Khas  
**Max. No.** : 5 - 25 pax

Mr / Ms

Participant : .....  
 Designation : .....  
 Department : .....  
 Email : .....  
 Mobile No : .....

Mr / Ms

### CANCELLATION / POSTPONEMENT POLICY

1. Ascendent Technology Sdn.Bhd. reserves the right to cancel, postpone or make any changes to the venue and training dates due to unavoidable circumstances.
2. Reservation can be made by telephone or email, but will only be confirmed upon the received of completed registration form and payment.
3. Please do not make any travel arrangements until you have received written confirmation for your registration from us.
4. No cancellation is allowed but a candidate replacement can be arranged.
5. For confirm cancellation: 7 days notice prior to commencement will subjected to RM250 service charge. If less than 7 days notice, there will be no refund.
6. Confirm postponement for in-house training less than 14 days notice prior to commencement will subjected to 50% service charge on total invoice.

Participant : .....  
 Designation : .....  
 Department : .....  
 Email : .....  
 Mobile No : .....

### PAYMENT DETAILS

All cheques should be crossed and made payable to: **ASCENDENT TECHNOLOGY SDN BHD** Bank A/C No. **Maybank** 5127-6360-6820.

Admittance will be permitted upon receipt of full payment 2 weeks before the course is conducted.

Training certificate will be awarded upon received of full payment

### FOR HR DEPARTMENT

Company Name:		Contact Person: Mr / Ms:	
Address:		Designation:	
		Department:	
		Email:	
		Mobile No :	
Training Date:		Signature:	Company Stamp:
Telephone:	Fax:		
Type of Industry:			