



# Behaviour-Based MHE

(FORKLIFT . REACH TRUCK . REACH STACKER)

## SAFETY OPERATIONS TRAINING PROGRAM

### OVERVIEW

The Behavior-Based (BBS) Material Handling Equipment (MHE) Safety Operations Training adopted by In-Source Options Sdn Bhd is an international approach to safety that focuses on safe and unsafe behaviors of staff in the workplace. Its aim is to identify, influence, and change the unsafe behaviors that exist in the workplace, or reinforces the safe behaviors already established.

From the influence on the behavior change of the taskforce, the training is able to up-skill Warehouse Personnel and MHE (Forklift Truck, Reach Truck, Reach Stacker / Empty Container Lifter) Operators to Fleet Supervisors in terms of its roles and responsibilities from the aspect of characteristics and behavior thus improving the productivity of the warehouse and logistics operations.

Further to that, the training is to enhance, improve and up-skill the knowledge of Safety and Health Officers and Logistics Supervisors or Managers to efficiently supervise and manage their team i.e. Warehouse Personnel and MHE (Forklift Truck, Reach Truck, Reach Stacker / Empty Container Lifter) Operators the correct methodology in managing and utilizing their MHE assets thus indirectly protecting the assets of the organization (i.e. Material Handling Equipment, Raw Goods, Finished Goods, Machineries and Human Capital) which will eliminate downtime and increasing productivity of the organization.

This up-skilling program will focus on the 3 major Material Handling Equipment (MHE) machines as described under the Factory and Machinery Act 1967, Malaysia and OSHA Standard 29 CFR 1910.178 – Powered Industrial Trucks of USA.

### COURSE OBJECTIVE

- ✓ SAFETY & HEALTH MANAGEMENT - This module introduces trainees to the key aspects of the governing legislation pertaining to the area of Material Handling Equipment.
- ✓ UNDERSTANDING OF MHE TRUCKS - In this module, trainees will be introduced to the Material Handling Equipment especially the history and evolvement of how MHEs came into play.
- ✓ MHE SAFETY OPERATIONS - They will also be given the definition and understanding of the functions of the MHE by sharing the types of MHE in the market, the type of attachments being used and more importantly the correct selection and usage of each type of MHE and the relevant attachments.
- ✓ MHE SAFETY MAINTENANCE - In this module, trainees will have an opportunity to understand the importance of conducting shift-ly/ daily/ weekly/ monthly and periodical maintenance check of the MHE. This is to ensure the importance of maintaining an efficient and safe-use of the MHE.
- ✓ MHE HEALTH STUDY - This overview will give trainees a general understanding of Health Ergonomics in the sitting, operating, maintaining of the MHE.
- ✓ PROJECT PRESENTATION - This module will give a summary of the studies and understanding from Module 1 to 5 to the trainees.
- ✓ THEORY ASSESSMENT - This assessment will give an overview of the theoretical knowledge of MHE.
- ✓ PRACTICAL ASSESSMENT - This assessment will give an overview of the practical knowledge of MHE.
- ✓ FEEDBACK & GRADUATION - To obtain and provide assessment outcomes.



## LEARNING OUTCOME

### 1. SAFETY & HEALTH MANAGEMENT:-

- It will give and general overview and understanding of the USA OSHA Standard 29 CFR 1910.178 – Powered Industrial Trucks
- This is then further enhanced by streamlining localized regulations i.e. Malaysia where it will cover the Factory and Machinery Act 1967 and the Occupational Safety and Health Act 1994 and giving a general understanding in the areas of Material Handling Equipment.
- Further to that, it will cover Best Practices from the industry whom have implemented strong OSH practices with the focus on Powered Industrial Trucks
- The trainees will also have a first-hand approach in understanding the Behavioral Based Safety theory as a safety approach in maneuvering the MHE with the introduction of the 'tool' that can help influence, modify and change the behavior at the workplace
- This will thus give a guided approach in helping the trainees to answer the question of, "How do we reduce the number of unsafe acts and hence reduce the number of resulting accidents, injuries and illnesses?"

### 2. UNDERSTANDING OF MHE TRUCKS:-

- They will also be given the definition and understanding of the functions of the MHE by sharing the types of MHE in the market, the type of attachments being used and more importantly the correct selection and usage of each type of MHE and the relevant attachments.

### 3. MHE SAFETY OPERATIONS:-

- The 2 key areas will be as follows:
  - i) Maneuvering the MHE in tight spots/ areas in tandem with Module 2
  - ii) Safe and proper handling of loads during loading and unloading of goods in tandem with Module 2
- By combining the above 2, the trainees will then be given an understanding on their day-to-day task of transporting loads and goods from one location to another and one height to another in tight confined spaces using our Patented I-Ray Eyes Technique
- During this, they will also be exposed to the understanding of the Stability of MHE with focus on the following:
  - i) Fulcrum Point
  - ii) Load Centre
  - iii) Centre of Gravity and Combined Centre of Gravity
  - iv) Load Capacity Chart and its variances due to differing attachments
- This will give the trainees an aligned understanding with their employers on why floor spaces has to be maximized for increasing ROI whilst not compromising safety

### 4. MHE SAFETY MAINTENANCE:-

- During this module, the trainees will be exposed to the following checks in tandem with the abovementioned point:
  - i) Pre-use Safety Maintenance Check
  - ii) Post-use Safety Maintenance Check
- The trainees will also understand the correct procedure in either Refueling or Recharging of the MHE to avoid potential hazards and accidents relating to Refueling and Recharging
- With that, they will have a guided behavior based understanding on how to maximize ROI from the elimination of the following:
  - i) Downtime, Accident and Fatalities
  - ii) High Repair Expenses and Replacement of MHE Parts
  - iii) Damage to Raw Materials, WIP and Finished Goods & Environments

### 5. MHE HEALTH STUDY:-

- It will cover an understanding of the common health issues deriving from the use of Combustible and Non-Combustible type of MHEs.

### 6. PROJECT PRESENTATION:-

- This module will then summarize the entire training from Module 1 to 5 where trainees will be given a guided Generic MHE Case Study for their understanding where they will break in groups to prepare and present their findings
- This will then be followed by a Customized MHE Case Study from the past Safety and Health records from the organization where the trainees will present in groups and the findings shared with the Safety and Health Committee or management

### 7. THEORY ASSESSMENT:-

- To identify the key strengths and weaknesses of the staff on their understanding of the MHEs

### 8. PRACTICAL ASSESSMENT:-

- The staff will be able to complete the following upon completion of the practical assessment
  - i) Pre-Ignition Maintenance Check of the MHE (26 points to check)
  - ii) Post-Ignition Maintenance Check of the MHE (14 points to check)
  - iii) Proper Ignition Method (5 warranted safety steps)
  - iv) Maneuvering in tight environments (6 warranted safety steps)
  - v) Approaching loading / unloading areas (6 warranted safety steps)
  - vi) Driving up and down Ramps (7 warranted safety steps)
  - vii) Loading using international 2 steps method (stacking, racking, onto lorries)
  - viii) Unloading using international 2 steps method (stacking, racking, onto lorries)
  - ix) Parking (5 warranted safety steps)
  - x) Shut Down (3 warranted safety steps)
  - xi) Safe Method of Removal & Installing of Battery into Battery Operated MHE Truck
  - xii) Alighting and Descending from MHE (3 point contact)

### 9. FEEDBACK & GRADUATION:-

- Able to assist staff to identify their strengths and weaknesses upon the completion of the training.

## METHODOLOGY

- ✓ Lectures with Q&A, Handout Notes, Foreign Language Translator (Optional)
- ✓ Accident Pictures Video shows with discussion
- ✓ HIRARC Activity - Case studies discussion
- ✓ Pre / Post Theory Test
- ✓ Pre-operation Inspection
- ✓ Practical Operations Demonstration Assessment
- ✓ Use of our International Award Winning Patented **5 I-Ray Eyes** perfect system

## TARGET PARTICIPANTS

- ✓ New and Experienced Forklift Operators
- ✓ Supervisor / Fleet Manager
- ✓ Logistics / Warehouse Manager
- ✓ Safety Officer
- ✓ Maintenance Personnel

## DURATION

- ✓ 4 days - 28 hours
- ✓ Weekday or Weekend Classes Available

## TRAINING DATES

- ✓ From \_\_\_\_\_ to \_\_\_\_\_

## COURSE FEE

- ✓ RM 5,200.00 per pax
- ✓ HRDF - SME Contributors 100% sponsorship by HRDF
- ✓ HRDF - Non-SME Contributors 50% Sponsored by HRDF, Balance Course Fee will be Deducted from Employer's HRD Levy

## AWARD CERTIFICATION

- ✓ Certificate of Competency for Behavior Based Material Handling Equipment Safety Operations from American Petroleum Institute, USA

### Some of our satisfied clients in Material Handling Equipment (MHE), Mobile Elevating Work Platform (MEWP), Rigger/ Slinger/ Signaller/ Tagline, Crane Lifting Supervisor & Planner, Defensive Driving and Inspections Trainings include the following:

Aerodarat, Agility, Air Products, Airod, Aker Solutions, Akzo Nobel, Amsteel, Ancom, Ann Joo, APM, Armstrong, Avery Dennison, BBraun, Bahr Stainless, Baker Hughes, BAT, BNM, Bauer, Blue Scope, Boston Scientific, Bradken, British High Comm., BSG, Carsem, China Const. Co., CCM, Celestica, Cement Industries, Cenviro, Citylink, Daikin, Dell, DHL, Dialog, Digi, DRB-Hicom, Dutch Lady, EEW, Elektrisola, Entegris, ETOPS, Eurocare, Federal Fujikura, Federal Express Services, FELDA, Fibertex, Flextronics, Fonterra, Gardenia, Gas Malaysia, GD Express, GE, Genesis Curis, German Automotive Lighting, Giant, Gold Coin, Govt. Hospitals, Halliburton, Hartalega, Hitachi, Hume Cement, IJUM, IJM, IKEA, IOI, Istana Budaya, Isuzu, JB Cocoa, Johnson, Johor Port, Keller, Kertih Airport, KLCC, Kobe, Kontena Nasional, K&N, Lafarge-Holcim, Laubros, Liebherr, Linocraft, Lotte-Titan, Macfood, Malakoff, Malaya Glass, MAB, MML, Mamoet, MAPA Gloves, MAskargo, Maxis, MBF Printers, MISC, MMC-Gamuda, MMHE, Mondri, Monier, Motorola, MRCEB, Muda Paper, Mudajaya, Mydin, Nestle, Nilai Medical, NITTSU, Northport, NPK Fertilizer, Orica, Panasonic, Percetakan Nasional, Perodua, PETRONAS, Philip Morris, PLUS, PROTON, PTP, Red Crescent, Samsung, Sapura, Sarawak Timber, Segi, Senai Airport, SGL, Shell, Shimano, Shin-Etsu, Shoepee, Sime Darby, St John, Sumitomo, SunPower, Sunway, TCIM, Technip-FMC, Teleflex, TNB, TNT Express, TESCO, TNLS, Top Glove, Trans Elite, Tune Insurance, Tung Shin, UAC, UKM, UMP, Unisteel, UPB, UPM, V.S., Venture, Vesuvius, Volvo, Vopak, Watson, WCT, WD, World Kitchen

### ★ Winner of 7 International & Local Awards

MOF Registration #357-02124992  
5 I-Ray Eyes Technique Patent Owner  
5 Star Rating Training Provider of HRDF  
Training Provider: PETRONAS/ FELDA/ NESTLE  
Training Partner: ABM, HRDF (M), FedUni (Aust), API (USA)  
Training, Curriculum & Content Developer: HRDF, DSD, CIDB  
The Malaysia Book of Records 2019 Winner (with APM)

### ★ Behavior-Based Safety (BBS) Operations Training

Forklift / Reach Truck / PP Stacker / VNA  
Reach Stacker / ECL / Excavator Crawler / Telehandler  
MEWP (Scissors Lift / Boom Lift / Vertical Lift / Sky Lift)  
OTC, Lorry Crane, Rigger, Signaller, Lifting Supervisor & Planner  
Defensive Driving: Ambulance / Fire Eng. / Car / Bus / Van / Lorry  
Crane & Plant Inspection, LOLER, PUWER, LOTO, 5S+



## THE ISO GROUP (operated by In-Source Options Sdn Bhd)

35, Jalan Serendah 26/39, Kawasan Perindustrian Hicom, Seksyen 26, 40400 Shah Alam, Selangor, Malaysia.  
Tel: 03-5103 4687 Fax: 03-9235 1167  
Email: frank@isogroup.com.my / franktan88@gmail.com  
Website: www.isogroup.com.my FB: The ISO Group

## CONTACT US:

**Major Frank Tan**  
**018-7719266**