

Design Supply and Safety of Materials Handling Equipment

# **Pallet Racking Safety and Inspection Course**

### **Purpose and Benefit of the Course**

The Pallet Racking Safety and Inspection course serves to provide attending delegates with insights into the need for rack safety inspections, how to conduct risk assessments of the storage equipment and which actions should be taken upon completion.

Participants will gain the necessary skills and knowledge based on International standards and the OHS Act which will allow them to evaluate damage identified during racking inspections and required to carry out risk assessments within warehouse facilities.

Delegates will be able to identify compromised racking and racking components before failure thereof, and understand the need for safe, well maintained equipment within a facility. This in turn will mitigate risk to personnel, equipment, goods and operations within the facility.

The course is based on the well-known SEMA and EN codes of practice (course may be adapted for RMI if required at additional cost), the Occupational Health and Safety Act (RSA) and BMH Rackengineers' standards, as well as other relevant international standards pertaining to safety of storage equipment and personnel within warehousing facilities.

The Occupational Health and Safety Act, Act 85 of 1993 (OHS Act) states that 'a working environment that is safe and without risk to the health of his employees' must be maintained by an employer and goes on to include that the employer should provide 'such information, instructions, training and supervision as may be necessary to ensure... the health and safety at work of his employees'.

#### **Course Content**

The course consists of a number of theoretical concepts and practical tasks that are to be mastered by the delegates.

#### **Theoretical Outcomes**

On completion of the theoretical part of the course delegates will be able to:



- Name and understand components that comprise a racking system.
- Understand the legal responsibilities and why racking needs to be inspected and risk assessed.
- Understand different types of inspection checks and how often to carry out inspections.
- Demonstrate an awareness of personal risks involved in conducting racking inspections.
- Understand common causes of racking collapses and how they can be prevented.
- Identify hazards that may adversely affect the safety of a racking structure.
- Understand inspection survey and risk assessment documentation.
- Understand the recording of inspections and repairs required, and
- Understand how load configuration can affect the use of racking and how safe working load data can be displayed on the rack.

#### **Practical Outcomes**

On completion of the practical aspect of the course delegates will be able to:

- Conduct an efficient risk assessment survey of racking to identify real risks, and
- Be able to make use of equipment necessary for the undertaking of surveys

#### On the day

The morning session is classroom based, covers racking theory, and includes a series of individual and group oriented activities.

The afternoon session includes a multiple choice question paper and a practical assessment in the warehouse.

On successful completion of the course delegates will receive a certificate indicating they have demonstrated a sufficient knowledge of racking systems and are capable of conducting base level risk assessments of warehouse facilities.

The course medium is English.

### **Venue Requirements**

In order to sufficiently present the course the following is required on site:



- Classroom sufficient for number of delegates plus two.
- Projector and Screen.
- · Warehousing facility for practical assessment, and
- Kitchenette Facility with hot beverage supplies (or equipment set up in classroom)

## Course Fee (Johannesburg, South Africa only, other areas will be quoted for)

R3337.00 per delegate excluding VAT (limited to a minimum order for R13349-00 or 4 delegates and a maximum of 8 delegates per course) – excluding travel costs to centres outside of Johannesburg, South Africa. Please contact us for a formal quotation for larger or multiple groups or areas outside of Gauteng need to be quoted for.

The fee is payable in advance to ensure your course date.

The course is inclusive of: Presenter and Course Materials, Lunch and Refreshments (water, finger lunch and biscuits – when presented in an SADC country)

Registration forms attached.

Please contact BMH Rackengineers for available dates:

BMH Rackengieers Cell: +27822635367 Cell: +27823300578

VOIP: +27871470187

Email: <a href="mailto:bassonetmh@gmail.com">bassonetmh@gmail.com</a>



## **Registration - Pallet Racking Safety and Inspection Course**

To be completed for each delegate or a list may be compiled with information below

# Please email completed Registrations to

bassonetmh@gmail.com

Name as known	
Name on Certificate	
Surname	
ID Number	
Landline	
Cell Number	
Email address	
Highest Qualification	
Company	
Position in company	
Date of course	
Total Number of Delegates	
Medical Conditions	

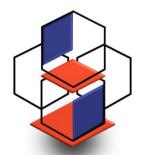
Note: Cell numbers and email addresses will be used for emergency communication and reminders only

Banking Detail: African Trip CC 2002/098175/23 T/A BMH Rackengineers,

First National Bank, Br 252645, Account 62202052099

VAT 4250282243

Thank you for the opportunity!

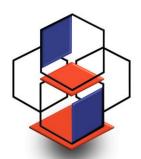


# **Contents Outline**

Preface	Error! Bookmark not defined
Purpose of this Course	
Course Outcomes	
Course Framework	
Conclusion	
Introduction to Warehouse Storage Systems	
Identification of Racking Components	
Frames	
Uprights	
Bracing	
Splices	
Fastening Components	
Base Plates	
Row Ties	
Frame Protection Devices	
Beams	
Beam Connector	
Beam Locks	
Racking and Storage Systems and Methods	
Block Stacking	
Static Racking	
Pallet Flow Racking Systems	
Push Back Racking	
Drive-In and Drive-Through Racking Systems	
Mole Systems	
Mobile Base Systems	
Rack Supported Mezzanine (Pick Modules)	
Legal Regulations	



Occupational Health and Safety Act Introduction
Section 8: General Duties of Employers to their Employees
Section 14: General Duties of Employees at Work
General Safety Regulation 8 – Good Stacking and Storage Practice
General Safety Regulation 14 – Offences and Penalties
Racking Inspections
Necessity for Rack Inspections
Legislative Requirement
SEMA and EN Requirements
End User Responsibilities Include
Inspections
Recording of Inspections
Damage Investigations
Identification of Common Racking Defects
Frame Erection Tolerance Defects
Upright Damage
Bracing Damage
Fastening Component Defects
Base Plates Defects
Row Ties Defects
Frame Protector Defects
Beam Defects
Beam Connector Defects
Splice Defects
Block Stacking
Pallets, Pallet Clearances, and Pallet Loads
Safe Working Load (SWL) Signs and Correct Bay and Level Loads
Damage Classification System
Green Level – Requiring Surveillance only



Amber Level – Hazardous Damage requiring Action ASAP
Red Level – Very Serious Damage requiring immediate Action
Compounding Failures
General Conditions and Dangers
Appendix A –
A.1 - Damage Classification Flowchart
A.2 – Mini-HIRA and Defects Inspection List Template
A.2 – Mini-HIRA and Defects Inspection List Template (Continued)
A.2 – Mini-HIRA and Defects Inspection List Template (Continued)
A.2 – Mini-HIRA and Defects Inspection List Template (Continued)
Appendix B
Individual Course Assessment
Individual Course Assessment