



## **MATERIAL HANDLING PROGRAM (Section 10)**

### OVERVIEW (WMI Facility)

- (1) Only certified personnel will operate powered industrial lifts.
- (2) Training will be provided to those who require to be certified or anyone wanting to be certified.

### OVERVIEW (Job Sites)

- (1) Only certified personnel will operate powered industrial lifts at job sites.
- (2) Certified personnel must get permission from appropriate source at the job site to operate their equipment.

### **PURPOSE:**

It is the policy of Wagner-Meinert, Inc. to permit only trained and authorized personnel to operate powered industrial trucks. This policy is applicable to both daily operators and those who occasionally use a powered industrial truck at the WMI facility. WMI employees will not use customer equipment unless certified operators are given permission from the appropriate personnel.

### **SCOPE:**

It is the company's intent to comply with the regulations governing use of industrial lifts, also known as fork trucks and powered industrial trucks, found in the Powered Industrial Trucks standard at 29 CFR 1910.178 and 1926.602 for construction. These regulations have general requirements for forklift driver training (specified as "operator training") and very specific requirements for

forklift operations (specified as "truck operations").

FORMS:

**APPENDIX 10A** FORK TRUCK DAILY PRE-OPERATIONAL CHECKLIST  
(PROPANE)

**APPENDIX 10B** FORK TRUCK DAILY PRE-OPERATIONAL CHECKLIST  
(ELECTRIC)

**REFERENCES:**

Requirements and regulations pertaining to powered material handling equipment are found in the following publication:

Occupational Safety and Health Standards for General Industry (29 CFR 1910.178).

Occupational Safety and Health Standards for General Industry (29 CFR 1910.180).

Occupational Safety and Health Standards for Construction (29 CFR 1926.602).

Occupational Safety and Health Standards for Construction (29 CFR 1910.333(c)(3))

**PROCEDURES:**

These written forklift operation procedures establish guidelines to be followed, whenever any employee works with industrial lifts at this company. The rules established are to be followed to:

Provide a safe working environment,  
Govern operator use of industrial lifts, and  
Ensure proper care and maintenance of industrial lifts.

- 1.0 OBJECTIVES**
- 2.0 RESPONSIBILITIES**
- 3.0 TRAINING**
- 4.0 TRAINING PROGRAM CONTENT**
- 5.0 CERTIFICATION**
- 6.0 RIGGING**
- 7.0 ERGONOMICS AND BACK SAFETY**
- 8.0 BACK LIFTING SAFETY**
- 9.0 ERGONOMIC RISK FACTORS**

## **1.0 OBJECTIVES**

The objectives of the Material Handling Program include:

- 1.1 To ensure that operators understand the limitations and safe operations of the equipment.
- 1.2 To ensure that all equipment is properly maintained and is kept good working order.
- 1.3 To ensure that equipment malfunctions are noted before accidents occur.
- 1.4 To ensure that non-qualified employees do not operate material handling equipment.
- 1.5 To ensure that operators receive refresher training as necessary.
- 1.6 To ensure that qualified trainers are available to certify new operators and conduct refresher training.

## **2.0 RESPONSIBILITIES**

### **2.1 Safety Director:**

- 2.1.1 Is responsible for developing and revising the written powered material handling program. In addition, the Safety Director will be responsible for the training requirements and maintain documentation training certifications.

### **2.2 Shop Foreman**

- 2.2.1 The Shop Foreman or his designee are responsible for maintaining checklist and scheduling routine maintenance on our fork trucks.
- 2.2.2 Whenever our industrial lifts are at customer job sites, the shop foreman is responsible to send enough daily safety check sheets (Appendix 10A) to cover the time the industrial lift will be at that site.

### **2.3 Job Site Foreman**

- 2.3.1 The foreman on the job site is responsible for seeing that the daily safety check sheets (Appendix 10A) for industrial trucks are completed daily. All check sheets will be returned to Shop Foreman

when the equipment comes back to the shop.

## 2.4 Safety Committee

2.4.1 Safety Committee is responsible for auditing the entire material handling program and providing training assistance/materials to the department utilizing material handling equipment.

## 2.5 All Employees

2.5.1 Employees are responsible for operating the material handling equipment according to safe and proper techniques outlined in training classes. In addition, employees are responsible for notifying the foreman of any unsafe conditions related to the powered material handling equipment.

2.5.2 Employees are responsible to verify trailer chocks, supports, and dock plates prior to loading/unloading?

## 2.6 Project Manager

2.6.1 Are responsible for assuring that field personnel have the required training and the check sheets at the job site.

## 3.0 TRAINING

### 3.1 Training Frequency and Materials

3.1.1 Employees will be trained and evaluated on proper and safe operation of powered material handling equipment upon initial hire, and at least once every 3 years thereafter. More frequent refresher training will be conducted if the following problems are observed:

3.1.1.1 The operator is operating the material handling equipment in an unsafe manner.

3.1.1.2 The operator is involved in an accident or near miss

3.1.1.3 The employees foreman or safety director has determined that the operator is not operating the equipment in a safe and proper manner.

3.1.1.4 When conditions in the workplace change in a manner that could affect safe operation of the equipment.

3.1.1.5 Or when the operator is required to use new equipment.

#### **4.0 TRAINING PROGRAM CONTENT**

- 4.1 Operating instructions, warnings, and precautions for the types of material handling equipment the operator will be authorized to use.
- 4.2 Controls and instrumentation: location, what they do and how they work
- 4.3 Similarities to and differences from the automobile
- 4.4 Steering and maneuvering.
- 4.5 Visibility and restrictions due to loading.
- 4.6 Vehicle capacity and stability.
- 4.7 Pedestrian traffic.
- 4.8 Fork and/or attachment adaption, operation and limitations of their utilization.
- 4.9 Vehicle capacity.
- 4.10 Vehicle stability.
- 4.11 Vehicle inspection and maintenance.
- 4.12 Refueling or charging, recharging batteries
- 4.13 Operating limitations.
- 4.14 The operating environment
- 4.15 Floor surfaces and/or ground conditions where the vehicle will be operated.
- 4.16 Composition of probable loads and load stability.
- 4.17 Load manipulation, stacking, unstacking.
- 4.18 Pedestrian traffic.

- 4.19 Narrow aisle and restricted place operation.
- 4.20 Operating in classified hazardous locations.
- 4.21 Operating the truck on ramps and other sloped surfaces which would affect the stability of the vehicle.
- 4.22 Other unique or potentially hazardous environmental conditions which exist or may exist in the workplace.
- 4.23 Operating the vehicle in closed environments and other areas where insufficient ventilation could cause a buildup of carbon monoxide or diesel exhaust.

## **5.0 CERTIFICATION**

- 5.1 Only designated personnel shall be allowed to operate this equipment? No employee will be allowed to operate powered material handling equipment without having a certified operating license issued from the Safety Director. Certifications will be issued after completion of material handling training and evaluation. Employees will be re-certified every three years by OSHA standard. A list of certified employees will be maintained by the Safety Director.

## **6.0 RIGGING**

- 6.1 Rigging is essential for moving construction materials and equipment and, at the same time, keeping them under control.
- 6.2 Never swing loads over the heads of workers in the area. Must keep all personnel clear of all suspended loads and loads ready to be lifted.
- 6.3 Only trained flagmen and signalmen are to direct rigging operations, using established hand signals that are standard for the industry.
- 6.4 Tag lines must be used to control rigged loads.
- 6.5 Do not overload any part of your rigging. Check loads just off the ground for balance and stability before hoisting.
- 6.6 Never leave a suspended load unattended.
- 6.7 All rigging equipment, when not in use, shall be removed from the immediate work area and stored appropriately.

- 6.8 Never allow loads, booms or rigging to approach within 10 feet of energized electrical lines rated 50KV or lower unless the lines are de-energized. For lines rated greater than 50 KV, follow OSHA regulations.
- 6.9 Always operate cranes on firm, level ground or use mats, particularly for near-capacity lifts.
- 6.10 Rope off or barricade a space equivalent to the swing radius of the rear of the rotating structure 360 degrees around all cranes operating on your jobsite.
- 6.11 All hoist chains, slings and hooks are visually inspected before each use, monthly and every three months all hoist chains, slings and hooks will be inspected and documented by a certified outside contractor. Any rigging that does not pass inspection will be removed from service immediately.
- 6.12 All rigging hooks shall be of a type that can be closed and locked, eliminating the hook throat opening. Alternatively, an alloy anchor type shackle with a bolt, nut and retaining pin may be used.

## **7.0 ERGONOMICS AND BACK SAFETY**

### **7.1 Computer Ergonomics**

- 7.1.1 **SCREEN** – Keep the top of the screen at or just below eye level, approximately 16 to 22 inches away.
- 7.1.2 **CHAIR** – Learn the adjustments on your chair. Keep your back supported, feet flat on floor or use a foot rest, if needed. Keep knees at approximately 90 degrees when seated, with lower legs perpendicular to the floor.
- 7.1.3 **KEYBOARD** – Place keyboard at a height so wrists are straight and elbows are approximately 90 degrees. A wrist rest may provide additional support. Maintain a light touch on the key board.
- 7.1.4 **DOCUMENT HOLDERS** – Place holder and screen at the same height and distance.
- 7.1.5 **EYE COMFORT** – Reduce glare by controlling light from uncovered windows. If possible, set computer at a right angle to a window or glare screens may help.

- 7.1.6 ORGANIZE WORK AREA – Keep most frequently used items such as telephone and calculator within easy reach. Avoid cradling the telephone on your shoulder.
- 7.1.7 EXERCISE – Warm-up before work by doing simple exercises. Micro breaks throughout the day can help energize the body and relieve muscle tension. Frequently refocus eyes on objects far away.
- 7.1.8 COMMUNICATION – Talk to your Supervisor before issues become injuries.

## **8.0 BACK LIFTING SAFETY**

- 8.1 Lifting is very much a part of our every day jobs. And, because it is something we do so often, we tend to do it without thinking, or until we strain a muscle, or worse, hurt our backs.
  - 8.1.1 Plan the lift by looking at the object to be lifted and the surrounding area.
  - 8.1.2 If the object is too heavy or too awkward for you get help or use a mechanical lifting device.
  - 8.1.3 Clear the area of any items that may interfere with the lifting.
  - 8.1.4 Plant your feet and lift with your legs. **DO NOT TWIST YOUR BACK!**

## **9.0 ERGONOMIC RISK FACTORS**

- 9.1 There are three main risk factors associated with ergonomics related injuries. Minimizing these risk factors or changing how we approach them can reduce the chance of injury.
  - 9.1.1 FORCE – Tasks that require a high level of physical exertion such as heavy lifting are at risk for causing injury.
  - 9.1.2 REPETITION – Task that require performing the same motion or series of motions continually for an extended period of time are at risk of causing injury.
  - 9.1.3 AWKWARD POSTURES – Tasks that require us to assuming positions that place stress on the body, such as reaching above the shoulder, squatting, leaning over a counter, or twisting the body while lifting are at risk for

## **DOCUMENT MANAGEMENT:**

The Safety Director is responsible for developing and maintaining the program.

If after reading this program, you find that improvements can be made, please contact the Safety Director. We encourage all suggestions because we are committed to the success of our written Material Handling Program. We strive for clear understanding, safe behavior, and involvement from every level of the company.

## **CHANGE CONTROL:**

All management system changes are reviewed, approved or disapproved by the Safety Committee.

This program was initially developed on April 14, 2001, replacing the former Material Handling Program entirely.

Revision No. 1 (April 14, 2001)  
Revision or Review No. 2 (January 10, 2002)  
Revision or Review No. 3 (January 11, 2003)  
Revision or Review No. 4 (September 10, 2003)  
Revision or Review No. 5 (January 15, 2004)  
Revision or Review No. 6 (January 10, 2005)  
Revision or Review No. 7 (January 3, 2006)  
Revision or Review No. 8 (June 26, 2006)  
Revision or Review No. 9 (August 18, 2006)  
Revision or Review No. 10 (September 6, 2007)  
Revision or Review No. 11 (February 24, 2010)

## **PERSONNEL:**

The Owners of Wagner-Meinert have the ultimate responsibility for the Material Handling Program. They have designated the Safety Director to manage the Material Handling Program.



**Propane Fork-Lift Daily Inspection Checklist  
(Appendix 10A)**

**Daily Inspection Checklist: LPG Sit-Down Truck ID #:** \_\_\_\_\_

Date: \_\_\_\_\_ Shift: \_\_\_\_\_

Operators Name: \_\_\_\_\_

Operators Signature: \_\_\_\_\_

**KEY OFF Procedures:**

- |                               |   |
|-------------------------------|---|
| _____ Overhead Guard          | _____ LPG Tank Locator Pin                          |
| _____ Hydraulic Cylinders     | _____ Gas Gauge                                     |
| _____ Hydraulic Hoses         | _____ Check the Engine Oil Level                    |
| _____ Mast Assembly           | _____ Examine the Battery Condition and Fluid Level |
| _____ Lift Chains and Rollers | _____ Check the Hydraulic Fluid Level               |
| _____ LPG Tank Hose           | _____ Check the Engine Coolant Level                |

**KEY ON Procedures**

- |   |  |
|---|--|
| _____ Test Front, Tail and Brake Lights | _____ Check the Ammeter Indicator Lamp |
| _____ Check Oil Pressure Indicator Lamp | _____                                  |

**ENGINE RUNNING Procedures**

- |                        |                                     |
|------------------------|-------------------------------------|
| _____ Check the Gauges | _____ Check Water Temperature Gauge |
| _____ Check Hour Meter | _____                               |

**Test the Standard Equipment**

- |                                   |  |
|-----------------------------------|--|
| _____ Steering                    | _____ Safety Seat (if equipped)                        |
| _____ Brakes                      | _____ Check the Operation of Load-Handling Attachments |
| _____ Horn                        | _____ Check the Transmission Fluid Level               |
| _____ Back-up Alarm (if equipped) | _____  |

***IF LIFT TRUCK FAILS ANY PART OF THIS INSPECTION, REMOVE THE KEY AND REPORT THE PROBLEM TO YOUR SUPERVISOR:***

**Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Electric Fork-Lift Daily Inspection Checklist  
(Appendix 10B)**

**Daily Inspection Checklist: LPG Sit-Down Truck ID #:** \_\_\_\_\_

Date: \_\_\_\_\_ Shift: \_\_\_\_\_

Operators Name: \_\_\_\_\_ Operators Signature: \_\_\_\_\_

**KEY OFF Procedures:**

- |                                       |   |
|---------------------------------------|---|
| _____ Overhead Guard                  | _____ Check for leaks around lift                   |
| _____ Hydraulic Cylinders             | _____ Mast Assembly                                 |
| _____ Hydraulic Hoses                 | _____ Forks   |
| _____ Mast Assembly                   | _____ Examine the Battery Condition and Fluid Level |
| _____ Lift Chains and Rollers         | _____ Check the Hydraulic Fluid Level               |
| _____ Condition of Seat and Seat Belt | _____ Tires   |

**KEY ON Procedures**

- |   |                                   |
|---|-----------------------------------|
| _____ Test Front, Tail and Brake Lights | _____ Hour Meter                  |
| _____ Check the Gauges                  | _____ Battery Discharge Indicator |

**Test the Standard Equipment**

- |                                   |  |
|-----------------------------------|--|
| _____ Steering                    | _____ Safety Seat (if equipped)                        |
| _____ Brakes                      | _____ Check the Operation of Load-Handling Attachments |
| _____ Horn                        |  |
| _____ Back-up Alarm (if equipped) |  |

**IF LIFT TRUCK FAILS ANY PART OF THIS INSPECTION, REMOVE THE KEY AND REPORT THE PROBLEM TO YOUR SUPERVISOR:**

**Comments:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_