

# **Manual Handling Guidelines for the Australian Paint Manufacturing Industry 2019**

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## Disclaimer:

The information presented in the Manual Handling Guidelines for the Australian Paint Manufacturing Industry is intended for general use only. The contents of this Guideline should not be used as a definitive guide and should be read in conjunction with relevant Workplace Health & Safety legislation in Australia. The content of these Guidelines has been developed in collaboration with the industry partners. Whilst every effort has been made to ensure the accuracy of this Guide, the advice that is contained may not applied to every circumstance.

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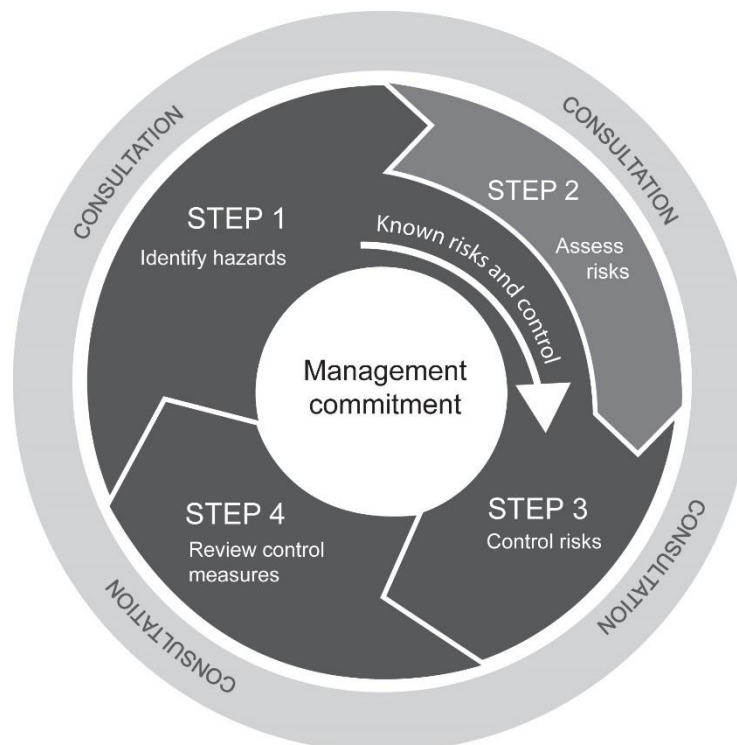
The Australian Paint Manufacturers Federation is a not-for-profit employer association in Australia.

## Introduction

The Australian Paint Manufacturers Federation (AMPF) has developed this Guideline on manual handling to assist employers and employees within this industry sector who are at risk of injury as a result of undertaking manual tasks.

The Guide has been structured to provide ideas and examples of risk controls that have been introduced within the paint manufacturing sector. The illustrations that are provided in this Guideline have been taken at small, medium, and large company worksites across Australia.

A risk management approach has been taken to identify, assess, and control manual handling risks within the workplace. This process has been summarised by Safe Work Australia in the following illustration (Fig 1).



*Figure 1: The Risk Management Process to address manual handling risks*

The content of this Guide has been developed to:

- Assist in the identification of tasks that require manual handling which may lead to injury or illness.
- Identify the work areas and work processes involving manual tasks.
- Provide practical risk control options that will eliminate or reduce risks at their source.

In accordance with the Work Health & Safety Act and Regulations in Australia (as of 2016), the risk control process requires the consideration of the hierarchy of control. This is described in the Hazardous Manual Tasks Code of Practice (as at Oct 2018) with relevant examples and is detailed over page (Table 1).

Hierarchy of control measures		Examples of control measures
<b>Level 1</b>	Elimination	<ul style="list-style-type: none"> <li>– Automate the manual task, for example by using robotics.</li> <li>– Deliver goods directly to the point of use to eliminate multiple handling.</li> </ul>
<b>Level 2</b>	Substitution	<ul style="list-style-type: none"> <li>– Replace heavy items with lighter, smaller or easier to handle items; be aware of the risk of increased repetition.</li> <li>– Replace hand tools with power tools to reduce the level of force required to do the task.</li> <li>– Coordinate with suppliers to replace packaging with packaging designed to allow goods to be handled using powered plant.</li> <li>– Handle items mechanically to reduce the risk to the worker.</li> </ul>
	Isolation	<ul style="list-style-type: none"> <li>– Isolate vibrating machinery from the user.</li> <li>– Enclose the machinery or the personnel, creating an isolating barrier between the hazard and the person at risk.</li> <li>– Redesign the workplace to minimise distractions from the task performed.</li> </ul>
	Engineering	<ul style="list-style-type: none"> <li>– Use mechanical lifting aids and trolleys.</li> <li>– Design the workplace to minimise the need to lift and move things.</li> <li>– Provide workstations that are height adjustable.</li> </ul>
<b>Level 3</b>	Administrative	<ul style="list-style-type: none"> <li>– Rotate workers between different tasks.</li> <li>– Develop lifting procedures including what devices should be used, how many workers are required to operate them and what training those workers need.</li> </ul>
<b>Level 4</b>	Personal protective equipment	<ul style="list-style-type: none"> <li>– Heat-resistant gloves for handling hot items.</li> <li>– Shock-absorbent shoes for work on hard concrete floors.</li> </ul>

*Table 1: The hierarchy of risk control*

Whilst there are many innovative ideas that should be considered in addressing manual handling risks at source, the risk controls in this Guide have been selected to stimulate discussion within the workplace.

## Purpose of Guidelines

These Guidelines have been developed through a collaborative project involving representatives from the Australian Paint Manufacturers sector. Each has contributed examples of manual handling engineering controls that have been implemented to reduce the risk of injury to their employees.

The Guidelines were developed as an opportunity to share knowledge and practice with the ultimate objective for the industry sector as a whole to address manual handling risks. Through such improvements across the sector, there would be associated decreases in the industry rate used for the calculation of workers' compensation premiums. Such an achievement would be a business benefit to all paint manufacturers in Australia. The reduction of manual handling injuries to staff would have the primary benefit in reducing pain and suffering for employees working in this sector. The industry is proud of the skills and commitment of their staff and the prevention of illness and injury is fundamentally their primary goal within this area of occupational health and safety.

There are many uses that could be made for these Guidelines such as the discussion on how manual handling is conducted within tool box meetings, safety committees and in work groups.

The suggestions provided in this document have been selected from paint manufacturing companies across Australia. They represent the work methods from small, as well as large paint manufacturing plants and retail stores.

The Guidelines are not necessarily what will work in each workplace, but are developed to provide options for consideration by workers and managers to reflect on their current work methods and to potentially develop safer systems of work. They have been developed by the industry, for the industry to use.

The APMF will continually review and update the contents of these Guidelines utilising their website. This will ensure that they remain a "living document".

Feel free to contact the APMF with your ideas and further suggestions to increase the diversity of information that is provided.

# Manual Handling Injuries in the Australian Paint Manufacturing Sector

Data obtained from Workers Compensation claims from July 2016 until June 2018 indicate that manual handling is the major injury reported in the paint manufacturing sector.

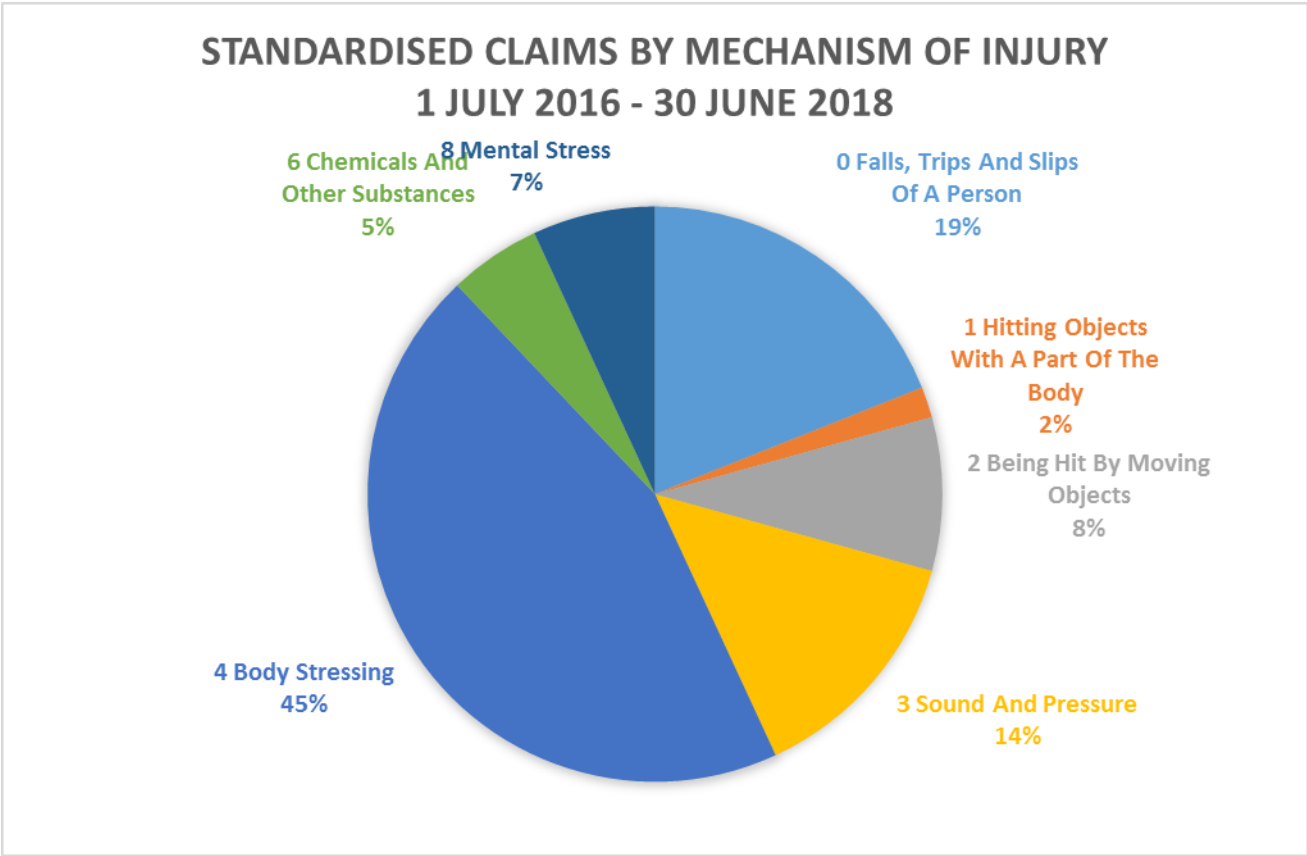


Figure 2: Standardised claims reported to WorkSafe Victoria for industry sector C19160 – paint and coatings manufacturing

When considering the types of injury that result from manual tasks, it is evident that musculoskeletal disorders (MSD) form the majority of the types of injury.

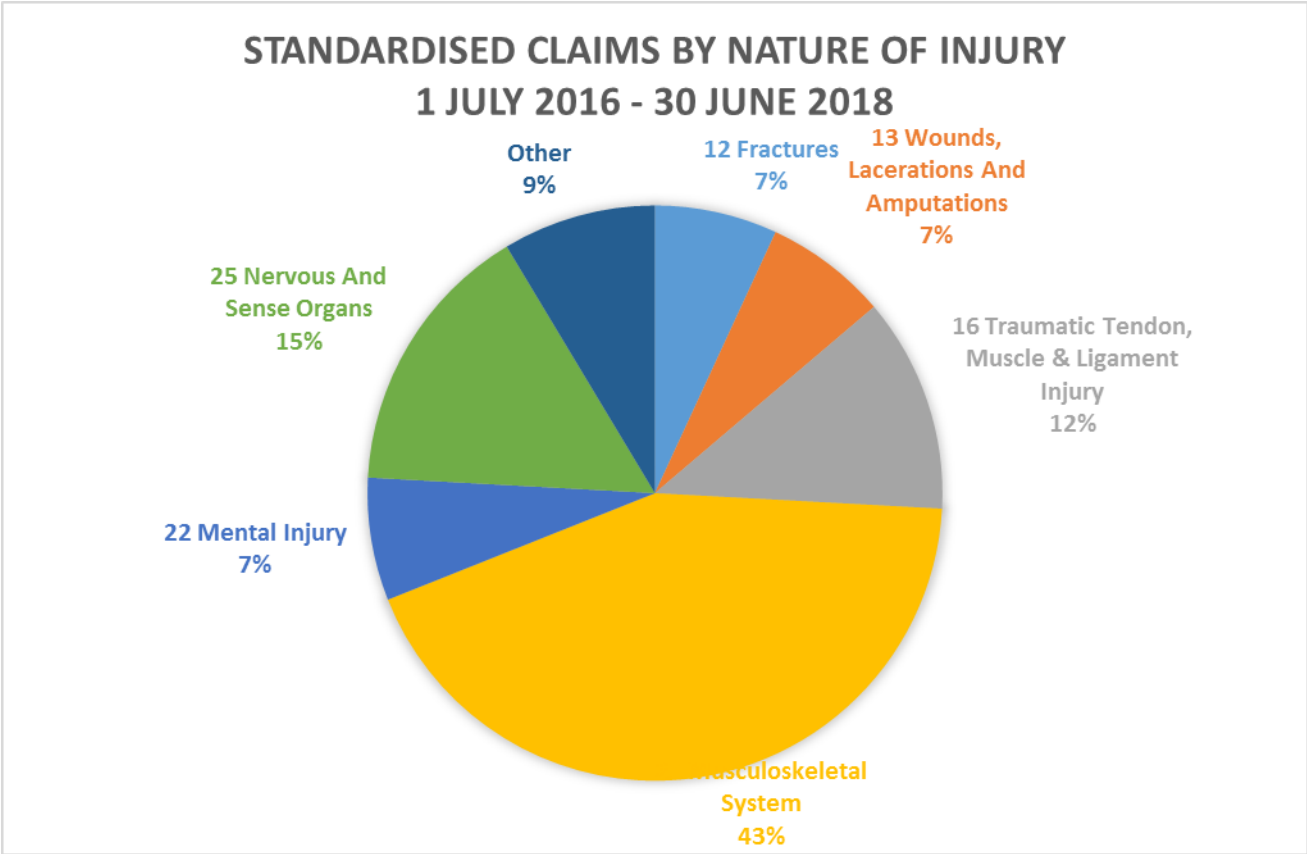


Figure 3: Nature of injury / disease for the paint and coatings manufacturing sector.

The objective of this Guide is to address the inherent risks associated with manual handling tasks and to reduce the incidence of musculoskeletal disorders in the Australian Paint Manufacturing Sector.

## Structure of this Guide

The structure of this Guide is based on common tasks and includes examples of risk controls from the least to the most sophisticated observed in the sector. These tasks have been identified in the end to end review of the paint manufacturing process. This includes the receipt and processing of raw materials through the manufacturing steps, filling of product into containers, distribution and warehousing and finally the retailing of the product to consumers.

Within the manufacturing, distribution and retail process, there are a range of tasks that would be defined as manual handling.

The Safe Work Australia on Hazardous Manual Tasks Code of Practice, October 2018 identifies the following risk factors associated with manual handling. These are:

- Repetitive or sustained force.
- High or sudden force.
- Repetitive movement.
- Sustained and/or awkward postures.
- Exposure to vibration.

These tasks are defined as hazardous when these characteristics are present.

The identification of manual handling risks also includes:

- Any changes that have resulted in new manual tasks or a changed work environment.
- Task involving tools, machinery, or equipment that do not work properly, or are difficult to use, and
- If workers have made improvisations to tasks to avoid discomfort.

Consultation with the workers is a fundamental requirement to provide information about discomfort, muscular aches and pains that could be a signal of potential hazards. This consultation process encourages workers to identify tasks that:

- Are difficult to do (or appear harder than they should be).
- A very tiring (muscle fatigue reduces work capacity).
- Are awkward or dangerous to do (for example, difficulty in controlling loads).
- Causes discomfort.



The examples that are provided within this Guide have been selected through consultation with employers and workers within each of the paint manufacturing sectors. Using the requirements of “reasonably practicable” as described in Clause 18 of the Work Health & Safety Act (as at 2016) a variety of suggested risk controls have been selected for this publication. This is to enable workplaces from the:

- Small
- Medium
- Large employers, to find risk controls that are applicable to their systems of work.

Within this industry sector, it is evident that the smaller processors operate on a simple batch manufacturing process using small volume ingredients. As the scale of operation increases, so does the potential for using bulk or semi-bulk containers and more automated technology. This guide is providing examples through the variety of industry sectors to stimulate practical options to eliminate or reduce the manual handling risk factors.

It is evident that some of these risks result from the supply chain context of the industry processes. For example, the product of an early stage of the process will subsequently be handled in the next stage of the manufacturing process. Risks associated with the outcomes of the first process then become a manual handling problem for subsequent users. Consequently, the Guide is endeavouring to address risks at the supply chain level to eliminate the continuation of risks through subsequent stages of the manufacturing process.

# Manual Handling Principles

The risk controls outlined in this Guideline relate to the elimination or control of manual handling risks as far as is reasonably practicable. These are presented to represent the hierarchy of controls as required under the OHS laws in Australia. This requires any identified risks to be eliminated and if not reasonably practicable to use engineering controls to reduce the risk. If engineering controls are not reasonably practicable then safe manual handling methods are to be used.

The main principles included in the selection of the risk controls include the following hazards.

1. Working at floor level or lifting below knee height. This places strain on the lower back. This is due to the body leaning forwards and the task requires lifting the torso against gravity with the back bent.

*The principle is to work above knee height and avoid lifting from the floor.*

2. Extended forward reaching in front or to the side of the body. The further the hands are in front of the body the less load that can be safely lifted. Think of the body like a crane. The further the load is from a crane the less it can lift.

*The principle is to handle objects close to the body.*

3. Twisting the back when working to the side or bending down low. The ankles, hips and shoulders should be in the one alignment. If the hands and shoulders twist to work to the side of the torso there is strain placed on the lower back from the twisting.

*The principle is to work with the ankles, hips and shoulders aligned in the same direction when lifting.*

4. Lifting and reaching above shoulder height. When the hands lift an object above shoulder height the body is unable to use the strength of the thighs. The entire load is taken on the shoulders and arms. This places strain on the shoulders.

*The principle is to lift and handle objects below shoulder height.*

5. Repetitive handling of loads accumulates fatigue in muscles with an increasing risk of injury. Whilst single lifts may be done safely, the injury risk can get higher if the same action is repeated over time.

*The principle is to reduce repetition by varying the load on the body by changing activities to reduce accumulation of fatigue in particular muscle groups.*

6. Lowering objects from a higher to lower surface is safer than lifting between the same heights.

*The principle is that working with gravity is less strain on the body than lifting against gravity.*

7. Carrying an object with the hands within the shoulder width is safer than handling large or awkward objects.

*The principle is that the arms and shoulders can exert maximum strength when the hands are gripping an object about shoulder width apart.*

# Manual Handling Task Sheets

## (1) Using four or more wheeled trolleys to move tools and equipment

### Description of task:

Maintenance and manufacturing tools and equipment can be moved around the manufacturing environment.



1. Fixed Height Trolley  
Good for moving larger pieces of equipment, such as this pump over short to medium distances. Trolley can be used to support pump during operation without unloading pump.



2. Height Adjustable Trolleys  
Good matching for height of load with height of workstation. Can be used to support tools and equipment and to act as a temporary workbench.

### **Manual Handling Alerts**

- Avoid back and arm injuries when manually lifting and carrying heavy equipment.
- Avoid repetitive and sustained bending to low level

## (2) Using two wheeled trolleys to move paint cans

### Description of task:

Stacks of paint cans are moved around the retail environment.



1. Purpose built trolley  
Can move 4 cans at one time



2. Easylift Trolleys  
Easy tilt back when loaded.  
Easy to push on level floor and small slopes.  
Easy to slide stack of cans on and off trolley

### **Manual Handling Alerts**

- Avoid carrying heavy cans and pails
- Preferable to push trolleys rather than pull

### (3) Using four or more wheeled trolleys to move small quantities of raw materials or finished goods

#### Description of task:

Stacks of paint cans, boxes of materials and finished product are moved around the retail and manufacturing environment.



1. Fixed height trolley  
Good for moving small quantities over short to medium distances.  
Need to match trolley height with shelf heights or workstation height



2. Height Adjustable Trolleys  
Good for matching height of load with height of work station.



#### **Manual Handling Alerts**

- Avoid carrying raw materials and finished products over short to medium distances
- Avoid lifting containers from low level



#### (4) Moving palletised materials

##### Description of task:

Raw materials are often supplied on pallets and finished goods are often dispatched to customers on pallets. Palletised materials are also moved around manufacturing sites and retail stores.



1. Manual pallet jack.  
Good for short distances on smooth level surfaces.



2. Powered pallet jack  
Good for medium distances and small slopes.



3. Ride on powered pallet jack.  
Good for longer distances on smooth surfaces and small slopes

## Australian Paint Manufacturers' Federation Manual Handling Task Sheet Series



### 4. Powered walkie-stacker

Good for medium distances and for loading and unloading racks, trucks and stacks. Requires operator training for use.



### 5. Forklift Truck

Good for long distances and for loading and unloading trucks, racks and stacks. Requires licensed driver and segregated from pedestrians

## Manual Handling Alerts

- Avoid carrying materials over medium to long distances
- Preferable to push rather than pull



## (5) Raising working heights in retail area

### Description of task:

Displaying cans of paint and other items in the retail area on platforms above floor level to minimise bending to low level.



1. Raised Display Platforms  
Easy for customers to select products.



2. Raised Display Platforms  
Trolley can be matched to platform to enable sliding of cans.



3. Display bins  
False base to raise height of products for easier selection by customers.

### **Manual Handling Alerts**

- Avoid bending to low level

## (6) Raising working heights in tinting area

### Description of task:

Cans of paint are moved to the tinting area from trolleys or pallets. Conveyors help minimise bending whilst supporting or moving the cans through the tinting process.



#### 1. Conveyor under tinting machinery

Can match height of trolley when delivering or removing cans or pails



#### 2. Height adjustable conveyor

Can adjust for height of cans.  
Good for longer runs of tinting similar sized cans

## Australian Paint Manufacturers' Federation Manual Handling Task Sheet Series



### 3. Spring loaded self-leveling pallet raiser with turntable

Good match of product height and conveyor system.

Turntable enables easy access to all sides of pallet from the one workstation



### 4. Powered pallet leveler with turntable

Good match of product height and conveyor system or tinting support plates.

Turntable enables easy access to all sides of pallet without excessive reach

## Manual Handling Alerts

- Avoid bending to low level when working in tinting area
- Avoid reaching to back of pallet when picking up product



## (7) Raising work heights in manufacturing.

### Description of task:

Workstations and equipment can be designed to minimise bending throughout the manufacturing process.



#### 1. Trolley as work bench

Easy to move to different locations.

Can support materials.



#### 2. Scales on raised support table

Easy to read raised display.

No bending to load and unload scales.

## Australian Paint Manufacturers' Federation Manual Handling Task Sheet Series



### 3. Scales in line with conveyor

Good for sliding cans directly on and off scales without lifting



### 4. Support trolley for emptying bags of raw materials.

Easy to move into position.  
Supports heavy bag whilst emptying.

## Manual Handling Alerts

- Avoid bending to low level when handling raw materials
- Avoid holding on to materials when they can be supported

## (8) Raising work heights in manufacturing.

### Description of task:

Workstations and equipment can be designed to minimise bending throughout the manufacturing process.



#### 1. Height adjustable trolley as work bench

Easy to move to different locations.

Can support materials.



#### 2. Scales on raised support

Easy to match with adjustable trolley.

Easier to read scales when raised.



#### 3. Turntable for bins of raw material.

Easy access from one work position.

Bins angled forward for better access.

## Australian Paint Manufacturers' Federation Manual Handling Task Sheet Series



4. Cage for batch mixtures.  
Elevated base for easy access.  
Can be moved over long  
distances by forklift.

### Manual Handling Alerts

- Avoid repetitive bending to low level
- Avoid lifting and carrying materials



## (9) Raising work heights in manufacturing.

### Description of task:

Workstations and equipment can be designed to minimise bending throughout the manufacturing process.



1. Dispensing rack for stretch wrap plastic

Easy to remove from roll.  
Easier to load into rack.



2. Storage rack for bins of powdered materials.

Reduced bending to lower level.  
Can slide bin into height adjustable trolley if required.



3. Spring loaded pallet leveler

Good for loading or unloading bags near waist level.

### **Manual Handling Alerts**

- Avoid bending to low levels
- Avoid repetitive bending and excessive reach



## (10) Raising work heights when labelling cans

### Description of task:

Self adhesive labels are manually removed from a roll and stuck onto the side of every paint can. Some paint products may require two labels to be added.



#### 1. Height adjustable label dispenser

Good when label peels off roll  
Good for multiple rolls of labels  
With wheels easy to move to other locations.  
Good for short to medium duration.

#### 2. Powered walkie stacker.

Good to raise height of cans to comfortable working height.  
Good to adjust as pallet empties or fills.



### **Manual Handling Alerts**

- Avoid repetitive bending
- Avoid bending to low levels
- Avoid long duration repetitive tasks

## (11) Raising work heights in warehouse racking

### Description of task:

Pallets of raw materials are often stored in racking. Individual containers are lifted from the pallet to be taken for mixing.



#### 1. Raise bottom rack

Good for access to materials at front of pallet.



#### 2. Raised and banded rack.

Bund captures spillage

### **Manual Handling Alerts**

- Avoid bending to low level at rack storage
- Avoid reaching to back of pallets

**(12) Raising work heights when loading or unloading pallets.**

**Description of task:**

When unloading materials from pallets the pallet can be raised to minimise bending.



1. Pallet stacked on empty pallets.

Good for low material height on pallet.

Good when full access around pallet.



2. Bottom rail on racking above floor Level.

Good for infrequent lifting.

Requires pallet removal to access back of pallet.

Good access for walkie stacker.



3. Spring loaded pallet leveler with turntable

Good for repetitive work.

Good for maintaining work height.



## Australian Paint Manufacturers' Federation Manual Handling Task Sheet Series



### 4. Powered pallet leveler with turntable

Good match of product height and conveyor system or tinting support plates. Turntable enables easy access to all sides of pallet without excessive reach



### 5. Walkie stacker.

Good for picking up pallet of material.  
Good for moving pallet over medium distances.  
Good for matching height of product on pallet with comfortable unloading height.

### Manual Handling Alerts

- Avoid repetitive bending to low level
- Avoid bending and excessive reach

## (13) Handling empty pallets in receiving and despatch

### Description of task:

Timber pallets are used for delivery of raw materials and for dispatch of finished products. Empty pallets need to be moved to various locations and are often stacked. They can weigh in excess of 40kg



#### 1. Semi-automated empty pallet dispenser.

Can access single pallet from stack with pallet jack.



#### 2. Manual pallet jack.

Good for short distance on smooth level surface.



#### 3. Forklift truck.

Good for fast movement of pallet stacks over long distances.  
Good for lifting and lowering individual pallets and stacks of pallets  
Consider traffic management particularly where there is pedestrian exposure

### **Manual Handling Alerts**

- Avoid manually handling heavy and awkward pallets
- Preferable to push pallet jack than pull

## (14) Moving mixing hoppers

### Description of task:

Mixing hoppers need to be moved to various locations around the manufacturing area.



#### 1. Manual movement of hoppers

Broad handles enable good grip and control.

Good for low forces, on level and smooth floor, over short distances.



#### 2. Powered tugs

Good for heavy loads.

Can handle small slopes and slightly uneven surfaces.

Good for longer distances.



#### 3. On pallet by forklift

Good for heavy loads.

Good for long distances.

### **Manual Handling Alerts**

- Avoid manually moving heavy and awkward hoppers requiring high force



## (15) Lifting cans, pails, bags and boxes

### Description of task:

Cans, pails, bags and boxes of material and product are frequently lifted to and from pallets and trolleys.



#### 1. Vacuum lift for bagged material

Good for repetitive lifting.  
Good for heavy bags.



#### 2. Vacuum lift for cans or pails

Uses special vacuum head to fit pails and cans

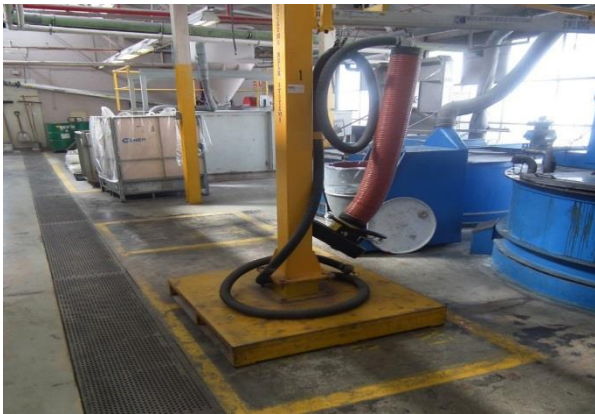
## Australian Paint Manufacturers' Federation Manual Handling Task Sheet Series



### 3. Vacuum lift for cartons or boxes.

Good for repetitive lifting

Good for heavy boxes



### 4. Mobile vacuum lift.

Good for different locations.

Can be moved by forklift.



### 5. Mechanical lifters/balance arms

Devices that can hook onto can or pail and take most of the load to assist in moving

## Manual Handling Alerts

- Avoid repetitive lifting of raw materials and finished products
- Avoid lifting materials and products from low level



## (16) Drum handling

### **Brief Task Description:**

Liquids and powders are supplied in drums that are awkward and heavy to manually handle. They need to be moved around manufacturing and retail sites and sometimes decanted.



1. Drum trolley  
Good when drum remains fixed in trolley for multiple uses.



2. Drum dolly.  
Good for moving drums over short distances on level surfaces.

## Australian Paint Manufacturers' Federation Manual Handling Task Sheet Series



### 3. Vertical drum trolley.

Good for picking up drum and moving over distances on level ground.



### 4. Drum stand trolley with hand lever

Good for decanting.  
Better control than handling drum.  
Significant forces for lowering and lifting.

### 5. Hoist attachments

Attachments for overhead hoists that can lift drums from vertical or horizontal

## Manual Handling Alerts

- Avoid moving heavy and awkward drums manually
- Avoid manually tipping large drums over

## (17) Drum handling

### **Brief Task Description:**

Liquids are supplied in drums that are awkward and heavy to manually handle. They need to be moved around manufacturing and retail sites and sometimes decanted.



1. Height adjustable trolley.  
Good for raising 60 litre drums to enable sliding to and from racks, shelves or vehicles.  
Good for moving 60 litre drums over short or medium distances



2. Purpose built 20 and 205litre drum trolleys.  
Good for picking up drum from vertical.  
Good for rotating drum to horizontal for decanting.  
Good for moving drum over short distances on level and smooth surfaces.  
Can be fitted with scales to aid decanting.



### **Manual Handling Alerts**

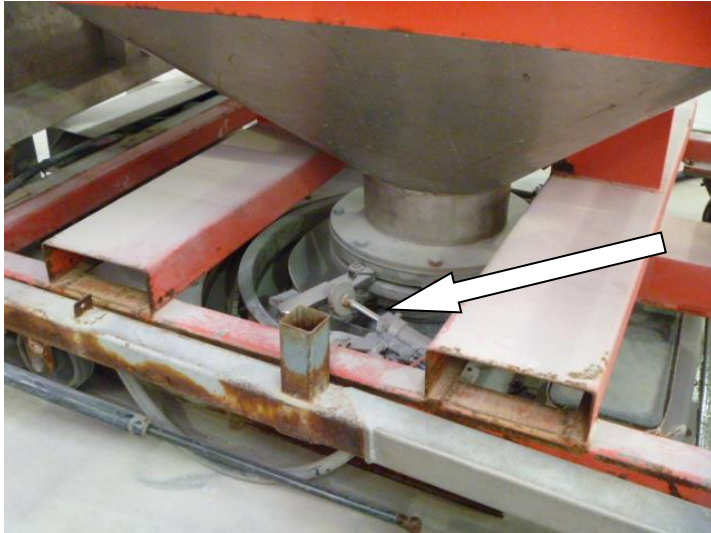
- Avoid moving and handling heavy and awkward drums manually
- Avoid tipping over large drums manually



## (18) Emptying mixing hoppers

### **Brief Task Description:**

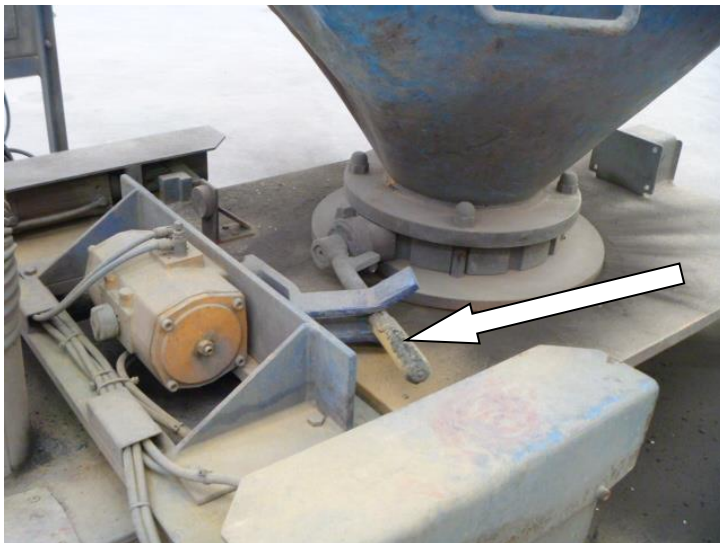
Mixing hoppers usually have a valve at their base which when released allows the material to be unloaded. Access to this valve can be awkward and may involve significant force.



#### 1. Powered valve release mechanism.

Good for posture and force.

May involve mechanical hazards.



### **Manual Handling Alerts**

- Avoid bending to low level to release or close hoppers
- Avoid high forces to release or close hoppers

## (19) Handling bulk bags of raw materials

### **Brief Task Description:**

Bulk bags are often used instead of 25kg bags for frequently used raw materials. These need to be moved and handled with mechanical aids.



#### 1. Powered pallet jack

Good for moving over medium distances

Use intrinsically safe electric pallet jack in hazardous work environment



#### 2. Overhead pneumatic hoist

Cradle or jib can support hoist over mixing vessel.



### **Manual Handling Alerts**

- Avoid repetitive manual handling of small bags of raw material
- Avoid manually moving bulk bags



## (20) Moving and emptying bulk containers

### **Brief Task Description:**

Some bulk materials are provided in solid sided box containers. These need to be emptied into mixing vessels



### **Risk controls**

#### 1. Powered walkie stacker.

Good for moving heavy and large containers.

Good over short and medium distances on level ground.



#### 2. Emptying bulk liquid

Can be chocked before placing container on pallet to help emptying.

Better to use chock that cannot move easily.



#### 3. Pneumatic cylinder for tipping bulk bins.

Good for bulk bins.

Additional safety requirements for machinery.

### **Manual Handling Alerts**

- Avoid high manual force to empty or move bulk containers

## (21) Handling empty raw material bags

### Brief Task Description:



1. Fixed bag stand  
Good to reduce bending.  
Good to control dust.  
Good for handling many bags.



2. Mobile bag stand  
Good to reduce bending.  
Good for handling many bags.  
Easy to relocate for different jobs.

### **Manual Handling Alerts**

- Avoid repetitive bending to low level to pick up bags
- Avoid creating dust in work environment

## (22) Assembly and sealing cartons

### **Brief Task Description:**

Cartons are assembled prior to filling with product. The base is taped before filling and the top sealed after filling.



1. Semi-automated taper.  
Good for taping base of carton during assembly.  
Good when connected to conveyor system.



2. Carton closing station  
Good for moving filled carton.  
Good to reduce bending



1. Semi automated taper.  
Good for taping top of carton.  
Conveyor supports carton and moves carton along.

### **Manual Handling Alerts**

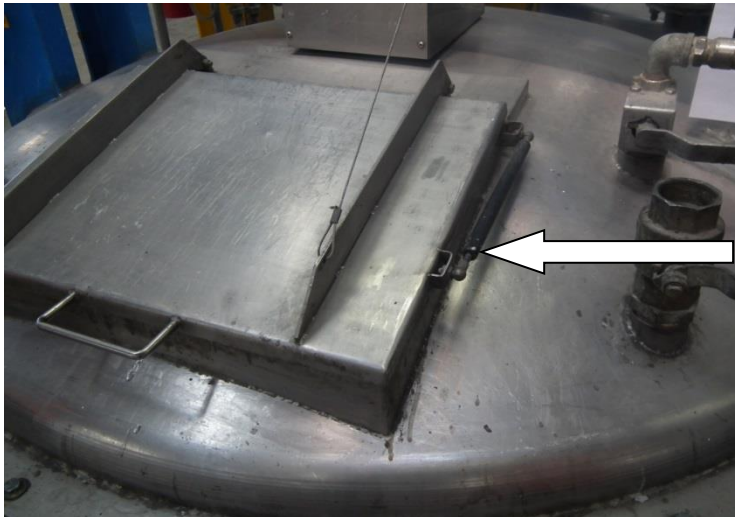
- Avoid bending to low level when packing finished goods
- Avoid repetitive movements when applying tape to cartons



## (23)      Mixing vessel lids

### **Brief Task Description:**

The lids on mixing vessels can be heavy and difficult to open and close when loading materials or inspecting the mixture.



1. Pneumatic strut  
Good for reducing forces  
Good for controlling rate of closing

### **Manual Handling Alerts**

- Avoid lifting and holding heavy lids on mixing vessels
- Avoid dropping lids on mixing vessels

## (24) Support for raw material bags at mixing vessels

### **Brief Task Description:**

Bags of raw material are frequently emptied into mixing vessels. Holding on to the 25kg bag may involve high forces.



#### 1. Support stand at mixing vessel.

Good for reducing static muscle load from holding bag.  
Good for control of dusts.



#### 2. Mobile support stand

Good for use on multiple vessels

### **Manual Handling Alerts**

- Avoid holding bags of raw material when emptying'
- Avoid spillage of raw material when emptying

## (25) Accessing high storage

### **Brief Task Description:**

Cans and other materials are sometimes stored above shoulder height in racks and shelves. When retrieving items from these it is important to have safe access.



### 1. Platform ladders.

Good for accessing storage above shoulder height.

Items can be placed on platform before alighting from ladder.



### **Manual Handling Alerts**

- Avoid reaching above shoulder height to retrieve items from storage
- Avoid climbing down or up ladders whilst carrying items in hands

## (26) Handles on cans and pails

### **Brief Task Description:**

A variety of handles are provided on cans and pails to aid lifting and handling.



1. Handles on cans and pails.  
Broad handles distribute the load across the hand.  
Two handles are good for providing secure grip and enabling pail to be carried close to front of body.



### **Manual Handling Alerts**

- Avoid carrying heavy cans with narrow wire handles
- Avoid carrying heavy cans and pails with one hand
- Avoid carrying heavy cans and pails away from the body

## (27) Tinting machine lid punch

### **Brief Task Description:**

Lids of cans are removed before tinting and replaced after tinting involving repetitive movements and forces.



### 1. Machine hole punch.

A semi-automated hole punch is incorporated in the tinting machine which is used on metal lids to enable tinting without the lid removal. This reduces repetitive and forceful movements.

### **Manual Handling Alerts**

- Avoid repetitive movements for removal and refitting of lids during tinting.
- Avoid repetitive force application when refitting lids



## (28) Warning labels on cans

### **Brief Task Description:**

Warning labels can be provided on products to alert customers and staff of the relative weights of the products. Decisions can then be made about suitable handling methods.

#### 1. "Traffic light" warning labels



Green labels can be attached to products that present a low risk for manual handling.



Orange labels can be attached to products that present a moderate risk for manual handling.



Red labels can be attached to products that present a significant risk for manual handling.

### **Manual Handling Alerts**

- Avoid manually handling products with red warning labels.
- Avoid repetitive handling of products with orange warning labels