



Safety of Material Handling Products

Mobile Elevating Work Platforms

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MEWP Safety

Aspects which effect safe operation

- Design
- Inspection
- Use
- Training



Design

Fundamental requirement

CE Marked

2006/42/EC Machinery Directive



Design

Listed in Annex IV

Comply fully with harmonised standard

Or

If not possible, type examination path



Design

Other compliance requirements

2004/108/EC

Electromagnetic Compatibility

2006/95/EC

Low voltage



Design

Other compliance requirements

Safety?

2000/14/EC

Outdoor Noise

98/37/EC

Engine Emissions



Design

Challenges!

Import control into EU, “weak”?

Market surveillance, or lack of

Without support, why CE mark?

Legislative burden



Inspection

Machines are used!

Use can vary

They are also ABUSED

Daily checks prescribed by manufacturer

Not enough



Inspection

Legal basis for in service inspection

95/63/EC Use of Work Equipment

Employer has a duty to ensure MEWPs are not used unless they have a current inspection report.



Inspection

What's the nature of In-service Inspection

Visual inspection and examination

Functional testing

Measurements as necessary

It is not the same as daily checks/weekly inspections
or maintenance inspections



Inspection

Purpose of inspection

- Verify -machine is operating as intended
- Establish -that any previous defects have been rectified
- Check -warning notices are correctly fixed and legible
- Assess -correct function of all safety devices
- Identify -defects that could compromise the safe use
- Specify -time scales within which defects must be rectified
-specify limitations on use



Inspection

Competent person

- appropriate experience & knowledge to make judgements on safe conditions and remedial actions
- necessary qualifications and training to carry out inspections
- demonstrate impartiality, integrity and independence from other related functions



Inspection

How often?

Set by

National requirements

Manufactures advice

Operating conditions

Frequency of use



Use

Prime function of MEWPs

To safely enable work at height

BUT

If you are at height

You can come down

Gravity takes precedence!

Gravity is no respecter of EU directives



Use

What can contribute to accidents?

Most frequent causes are

Overturns

Uncontrolled descents

Struck by other vehicle/machinery

Platform levelling failure

Crushing/trapping



Use

Overturns

Poor ground conditions

Unfirm

Unstable

Weak

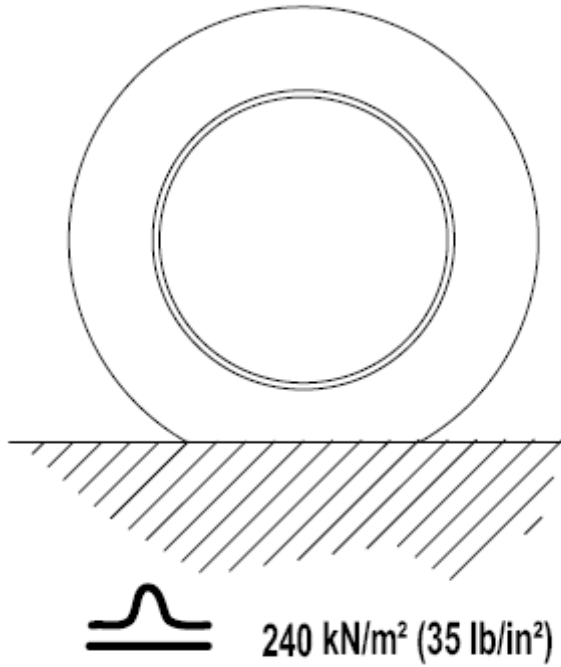
Use



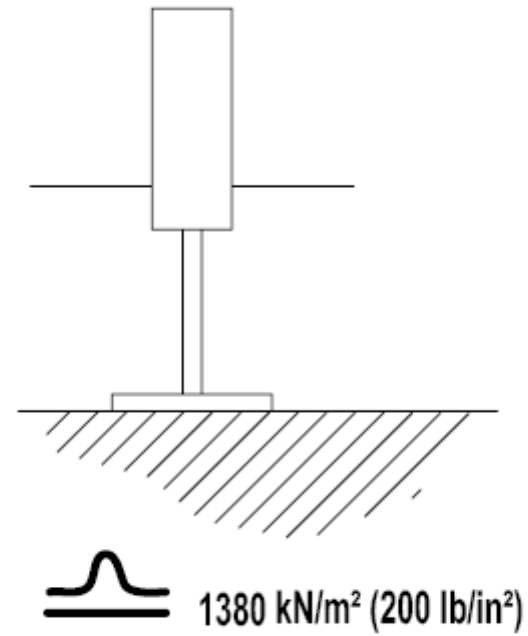


Use

Car Tyre



**Outrigger
Without Spreader Pad**



Use





Use

Crushing and entrapment

Prevention

Minimisation

What happens



Use

What happens

Operator is forced against some object

Pushed against the controls and an involuntary movement of the machine takes place.

Unable to release or reverse a control command



Use

What measures can be taken.

Layout and design of the control console

Control devices “protected” against involuntary movement.

Protection does not need to be physical guarding



Use

Minimisation

How?

Job analysis

Job planning

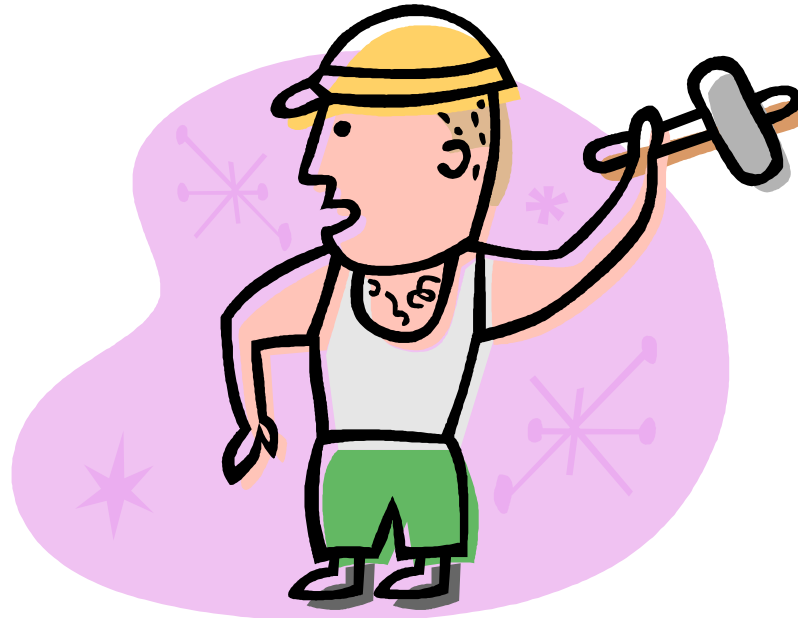
Machine selection

Site conditions

Housekeeping

Training

There is no harmonized standard for this element.





Training

Having designed a safe machine

Regularly inspected it

Considered some of the possible dangers

If it is placed in the hands of someone who does not understand it

Training





Training

Operators need to be trained in:

Basic understanding of what MEWPs are

Types of machines they will operate

Industry schemes well adopted cover this



Training

Just the operator?

Absolutely not!

Hire desk

Site managers

Supervisors

Operators

Rescuers



Conclusion

Do MEWPs contribute to safer working conditions?

YES!

If all parties involved fulfill their obligations



Conclusion

Manufacturers

Inspectors

Users

Operators



Conclusion

Who's responsibility is it to ensure this safety

EVERYBODY!



End

Thank You