# Manual Handling in a Restricted workspace





## What is Manual handling in a Restricted or Confined space

"Manual handling in a Restricted or Confined Space" refers to the act of physically lifting, pushing, pulling, or carrying objects within a small, enclosed area, which presents additional safety risks due to limited space, potential awkward postures, and restricted movement, requiring extra precautions and proper techniques to prevent injuries.

Working with items by hand, such as lifting, moving, or carrying them, within a Restricted or Confined area presents unique challenges and significantly increases the likelihood of injury. These enclosed spaces, characterized by their limited size, often force individuals into uncomfortable and awkward body positions. This lack of freedom of movement makes it more difficult to handle objects safely. The restricted environment, combined with potential visibility issues, makes assessing the weight and balance of items more difficult, further escalating the risk of accidents. Moreover, confined spaces often contain additional dangers such as toxic fumes, inadequate air circulation, or slick surfaces, adding another layer of complexity to manual tasks.



# Potential Risks and Hazards of Manual Handling in a Restricted or Confined space:

#### Increased risk of injury:

Working in restricted and confined spaces frequently necessitates that personnel adopt uncomfortable postures. These areas, due to their limited dimensions, typically require employees to contort their bodies into unnatural positions, making it easier to strain muscles, especially the back, neck and joint areas when lifting or manipulating objects.

#### Limited visibility:

Poor visibility within the confined space can make it harder to manoeuvre and assess the weight distribution of objects.

#### **Potential for hazards:**

The necessity for specialized Personal Protective Equipment (PPE), such as ropes, harnesses, and lanyards, coupled with potentially bulky gear like breathing apparatus and ventilation fans, can significantly complicate movement and task execution. Furthermore, the terrain within these spaces may be uneven or require workers to navigate through cramped areas, sometimes necessitating crawling.



Fig 1 Difficult working condition



Fig 2 Work area in a Wind Turbine

### Safe manual handling practices in Restricted or Confined spaces:

#### Risk assessment:

Always conduct a thorough risk assessment before undertaking any manual handling task in a confined space, identifying potential hazards and implementing appropriate control measures.

• Plan the lift:

Carefully assess the weight and size of the object, plan the lifting path, and ensure a stable footing.

• Maintain good posture:

Keep the back straight, bend the knees, and lift with the leg muscles to minimize strain on the lower back.

• Keep the load close to the body:

Hold the object as close to your body as possible to reduce leverage and strain.

• Avoid twisting:

Minimize twisting motions while lifting or carrying the object to avoid back injuries.

• Lift smoothly:

Lift the object gradually, avoiding jerky movements.



#### • Proper training:

Workers must be adequately trained in safe manual handling techniques, with specific emphasis on working in confined spaces.

#### • Use of mechanical aids:

Whenever possible, utilize mechanical lifting devices or other tools to minimize manual handling requirements within a confined space.

#### • Entry procedures:

Follow established confined space entry procedures, including atmospheric monitoring, ventilation, and designated entry/exit points.

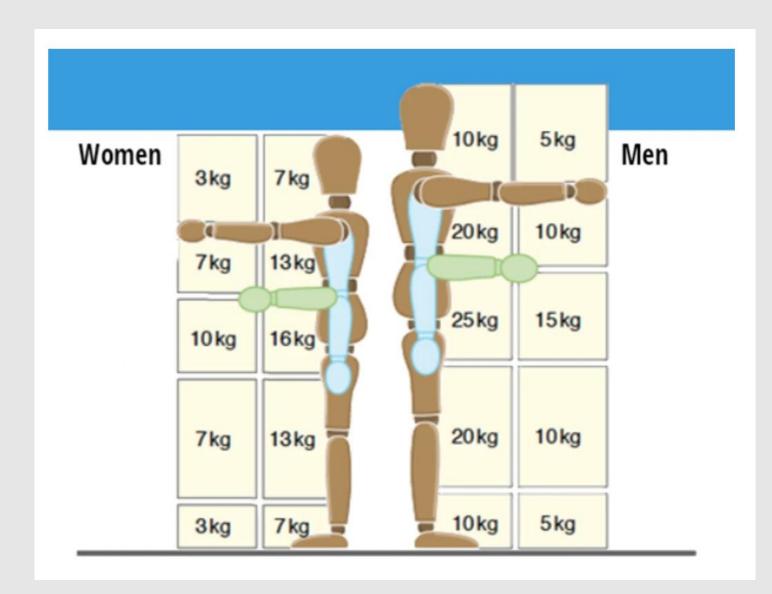
#### • Communication and teamwork:

Maintain clear communication with other workers outside the confined space, and ensure a buddy system is in place for assistance if needed.



Fig.3 Use of Mechanical device





## Manual Handling in Non-confined spaces guidelines

These weights dramatically decrease within a Restricted or Confined space when lifting is done in awkward positions.



#### Q&A

- Are we all comfortable with what are the Restricted or Confined Spaces on our site?
- Do we have the necessary PPE? What are we missing?
- Any other advice or tips that anyone wants to share?
- Does anyone have any concerns when it comes to this work on our site?

