

HSE

**Full manual handling risk assessment:
Examples of assessment checklists**

Section B – More detailed checklist:

- 1. A suitable job specific risk assessment is required when assessing manual handling tasks where the risk of injury and/or damage to health may arise from the way in which work is performed. This includes the potential for adverse effects on the musculoskeletal system, the potential for increased risk of developing musculoskeletal disorders and the potential for increased risk of developing other health conditions.
- 2. Using the checklist for lifting and pushing will assist the preparer of a job specific risk assessment to highlight the importance of up-to-date risk assessments. The checklist can also help to identify areas of risk and potential for improvement and can assist in assessing the remaining areas. The preparer of the risk assessment should use the checklist to help inform your own risk assessment procedure. They are not intended to replace your own risk assessment procedure.
- 3. Risk assessments are there to assist, not to prescribe.

Section A – Preliminary:

- 1. Describe the work you are assessing. You must also take into account relevant legislation and codes of practice.

1.1 Job as being risk assessed: [Risk assessment checklist](#)



This pushing task is performed at a UK Pork Production Factory. The footage was filmed in 2018.

The task involves a single person push of a heavy trolley of meat a distance of around 5-10 metres into a Maurer Smoker Unit (up to 10 metres if it is pushed to the back of the Smoker Unit). The exact weight of the trolley and meat is unknown, however it was over 400kg. The operative performed this task around 20 times per 8 hour shift. This included handling the trolley (with the meat loaded) from the production hall. This handling distance was not asked at the time of filming but could have been up to 30 metres.

Due to the width of these trolleys and that the handles are level with the pork product, these factors make for more strain on the shoulders and neck, as the upper body will be enforced to generate pushing and pulling forces. Perhaps a safer way for the musculoskeletal system would be having a high rising pallet truck that raises the trolley up and is used to push the trolley into the Smoker Unit, then removed after the trolley is lowered. This would add a heavier load but would allow for a more ergonomic grip with the pallet truck handle.

As shown in the video at 25 seconds, the factory operative performs a hazardous push with the rear leg straight (placing considerable strain on the rear calf muscles), front leg bent (placing considerable strain on the knee) and arms extended using body weight (placing considerable strain on the neck and shoulders). Of course, this is a heavy, awkward load but this is avoidable with adjustments to technique and body position.

There is a potential risk of musculoskeletal injury therefore a Manual Handling & Ergonomic Risk Assessment is needed. The following assessment uses the Health & Safety Executive's Manual Handling Checklists which can be downloaded on this website page www.osteopathsolutions-manualhandling.co.uk/hse-risk-assessment-tools

Section A: Preliminary

| | |
|--|-------------|
| Overall assessment of the risk of injury? | High |
|--|-------------|

Section B: Pushing and Pulling – More detailed assessment, where necessary

| Questions to consider | Low | Med | High | N/A | Problems occurring from the task |
|---|-----|-----|------|-----|---|
| Do the tasks involve: | | | | | |
| High initial forces to get the load moving? | | | ✓ | | For the initial push of the trolley in the hallway to the entrance of the Maurer Smoker Unit, the initial forces to get the load moving are reasonable, however once the trolley is pushed over the floor threshold/ boundary of the Smoker Unit there are considerable initial forces to get the load moving again |
| High forces to keep the load in motion? | | ✓ | | | The loaded trolley is heavy (over 400kg) and needs significant force and strength to keep it in motion |
| Sudden movements to start, stop or manoeuvre the load? | ✓ | | | | |
| Twisting/manoeuvring of the load into position or around obstacles? | | ✓ | | | There is sufficient space in the hallway in front of the Maurer Smoker, however the loaded trolley needs to be repositioned (which involves spinal twisting and side bending) so that the handles are aligned in order to push |
| One-handed operations? | ✓ | | | | |
| The hands below the waist or above shoulder height? | | ✓ | | | When the trolley is pushed over the floor threshold/ boundary of the Smoker Unit, as the factory operative uses significant bodyweight to push the trolley, in a forward bent spinal position, his hands are above shoulder height relative to his spinal position |
| Movement at high speed? | ✓ | | | | |
| Movement over long distances? | | | ✓ | | In the video clip the trolley is only pushed around 5-10 metres, however before that the same operative has pushed it a distance of around 3 metres from the processing hall |
| Repetitive pushing/pulling? | ✓ | | | | |
| The load or object to be moved: | | | | | |
| Does it lack good handholds? | | | ✓ | | The 2 handholds are at the perfect ergonomic height (at elbow level), however they do NOT project |

| | | | | | |
|--|---|---|---|---|--|
| | | | | | away from the frame of the trolley, which with the heaviness of the loaded trolley, will enforce more use of bodyweight and forward bending of the spine i.e. a hazardous manual handling practice |
| Is it unstable/unpredictable? | ✓ | | | | |
| Is it sharp/hot? | ✓ | | | | |
| Is vision over/around it restricted? | | | ✓ | | In this short push of around 5-10 metres, the restriction on vision from the hung meat (loaded on the trolley) isn't a major issue, although the factory operative does have to look over the top stack of meat (involving a backward bend of his neck whilst pushing the loaded trolley). The restriction on vision will cause significant spinal strain when he has to push it from the processing hall as he will constantly have to check the environment is clear of people and other hazards |
| If on wheels/castors, are they: | | | | | |
| Unsuitable for the type of load? | ✓ | | | | |
| Unsuitable for the floor surface/work environment? | ✓ | | | | |
| Difficult to steer? | | ✓ | | | With the heavy load weight and the instability of the hung meat, this creates some difficulty in steering |
| Easily damaged or defective? | ✓ | | | | |
| Without brakes or difficult to stop? | ✓ | | | | Without brakes. Not overly difficult to stop |
| With brakes, but the brakes are poor/ineffective? | | | | ✓ | |
| Without a planned inspection and maintenance regime based on a frequency that keeps them in working order? | | ✓ | | | Engineering/ Maintenance department more reactive to equipment defects than a proactive maintenance regime. Also reliant on factory operatives reporting equipment defects |

| Questions to consider | Low | Med | High | N/A | Problems occurring from the task |
|--|-----|-----|------|-----|---|
| Consider the working environment Are there: | | | | | |
| Constraints on body posture/ positioning? | | ✓ | | | On the day the clip was taken there were only 2 trolleys in the hall in front of the Smoker and there could be more on a given day |
| Confined spaces/narrow doorways? | | ✓ | | | As above concerning confined space |
| Surfaces or edges to cause cuts/ abrasions/burns to hands or body? | ✓ | | | | |
| Rutted/damaged/slippery floors? | | | ✓ | | Slippery floors, making grip of the feet hard when pushing the trolley |
| Ramps/slopes/uneven surfaces? | | | ✓ | | The floor threshold/ boundary of the Smoker Unit significantly increases the pushing force needed, imparting shock onto the musculoskeletal system due to the high physical forces needed |
| Trapping or tripping hazards? | ✓ | | | | |

| | | | | | |
|--|-------------------------------------|-------------------------------------|--|--|--|
| Poor lighting conditions? | <input checked="" type="checkbox"/> | | | | |
| Hot/cold/humid conditions? | | <input checked="" type="checkbox"/> | | | As the factory processes meat, the temperature is chilled, which will stiffen the musculoskeletal system |
| Strong air movements? | <input checked="" type="checkbox"/> | | | | |
| Consider individual capability Does the job: | | | | | |
| Require unusual capability? | | <input checked="" type="checkbox"/> | | | Operatives need to be physically strong to push the trolley, especially over the floor threshold/boundary of the Smoker Unit |
| Pose a risk to those with a health problem or a physical or learning difficulty? | | <input checked="" type="checkbox"/> | | | To operatives with an acute or chronic musculoskeletal injury or a hernia. Operatives with cardiac issues should not be performing the task due to the high physical forces needed |
| Pose a risk to those who are pregnant? | | <input checked="" type="checkbox"/> | | | Males operatives should only be assigned to this task |
| Pose a risk to new workers/young people? | | <input checked="" type="checkbox"/> | | | Operatives under 20 years old, with developing musculoskeletal disorders |
| Require special information/training? | <input checked="" type="checkbox"/> | | | | |
| Equipment | | | | | |
| Is movement or posture hindered by clothing or personal protective equipment? | | No | | | |
| Is there an absence of the correct/suitable PPE being worn? | | No | | | |
| Are trolleys/carts/floor surfaces poorly maintained/cleaned/repaired? | | No | | | |
| Is there a lack of regular maintenance procedures for the equipment? | | Yes | | | Engineering/ Maintenance department more reactive to equipment defects than a proactive maintenance regime. Also reliant on factory operatives reporting equipment defects |
| Work organisation (psychosocial factors) | | | | | |
| Do workers feel that there has been a lack of consideration given to the planning and scheduling of tasks/rest breaks? | | No | | | |
| Do workers feel that there is poor communication between users of equipment and others (eg managers, purchasers etc)? | | No | | | |
| Are there sudden changes in workload, or seasonal changes in volume without mechanisms for dealing with the change? | | Yes | | | This was not discussed or informed, but there would be a significant increase in production in the months leading up to the Christmas period |
| Do workers feel they have not been given enough training and information to carry out the task successfully? | | No | | | |

Section C: Pushing and Pulling – Remedial action to be taken

| Remedial steps that should be taken, in order of priority: | Person responsible for implementing controls | Target implementation date | Completed Y/N |
|---|---|----------------------------|---------------|
| 1. Floor threshold/ boundary of the Smoker Unit to be removed or improved | <ul style="list-style-type: none"> • Health & Safety Manager • Engineering Manager | Immediate | |
| 2. Floor surface to be cleaned and dried throughout the day | <ul style="list-style-type: none"> • Health & Safety Manager • Production Manager • Hygiene Manager | Immediate & indefinite | |
| 3. Fixed job rotation employee structure | <ul style="list-style-type: none"> • Health & Safety Manager • HR Manager • Production Manager | 1 month | |
| 4. All trolley wheels assessed and fixed if necessary. Fixed trolley inspection regime | <ul style="list-style-type: none"> • Health & Safety Manager • Engineering Manager | 2 months | |
| 5. Reengineer/ redesign trolley with handle (coupling) that projects away from the main trolley frame enabling safer pushing posture | <ul style="list-style-type: none"> • Health & Safety Manager • Engineering Manager | 2 months | |
| 6. Provision of onsite Manual Handling Training for all Factory Employees including 2 Hour Practical Skills Course on the factory floor & Online Programme OR DVD Training (preferably Bespoke DVD filmed onsite) | <ul style="list-style-type: none"> • Health & Safety Manager • Procurement Manager • Production Manager • HR & Training | 2-3 months | |
| <p>Please view</p> <p>www.osteopathicsolutions-manualhandling.co.uk/manual-handling-training-onsite</p> | | | |

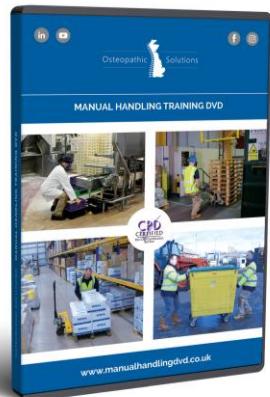
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| www.osteopathicsolutions-manualhandling.co.uk/online-manual-handling-training | Manager | | |
| www.osteopathicsolutions-manualhandling.co.uk/bespoke-manual-handling-dvd | | | |
| 7. Purchase of electric load mover | <ul style="list-style-type: none"> • Health & Safety Manager • Procurement Manager • Production Manager • Engineering Manager | 6-12 months | |

We hope you have found this Risk Assessment Linkedin post useful.

To read the Case Study of the Manual Handling Instructor Assessor Course that this task was filmed at click on
www.osteopathicsolutions-manualhandling.co.uk/manualhandlinginstructordanishcrown

If you have any thoughts or questions feel free to email me at garethmilner@osteopathicsolutions.co.uk

For comprehensive coverage of Safer Manual Handling Techniques and Practices check out Osteopathic Solutions 'Setting UK Standards' Manual Handling Training DVD on www.osteopathicsolutions-manualhandling.co.uk/manual-handling-training-dvd



Also, check out our Train Manual Handling Instructors USB on www.osteopathicsolutions-manualhandling.co.uk/train-instructors-usb



Thanks for reading.



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