RAMP I (Version 1.00, 2014) English version

Checklist for screening physical risks for manual handling

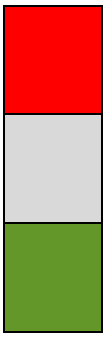
RAMP - Risk Management tool for manual handling Proactively

Introduction

This checklist (RAMP I) is intended for identifying (screening) and assessing physical ergonomics risk factors when working with manual handling which may increase the risk of developing musculoskeletal disorders (MSDs). Manual handling involves for example manual lifting, holding, pushing or pulling of loads. At high or sustained exposure to the risk factors the risk of developing or worsening MSDs increases.

Use this tool to assess a work, work task, or a work station during an average work day. In some cases also rarely occurring extreme cases may warrant assessment. Assess the work of an employee who is representative for the group of employees who carry out this kind of work, or, alternatively two people so that the variation among employees is somewhat taken into account. This employee/these employees should be experienced in how the work should be carried out in an appropriate way. Those performing the assessment should be familiar with how the work is carried out. Otherwise, the assessment should be carried out in co-operation with someone with such knowledge. The person who carries out the assessment should have participated in a basic physical ergonomics course, an introduction in the RAMP-method and should have read the RAMP manual. During the assessment, choose the alternative which best matches the situation and mark the "Yes" or "No" box corresponding to the question/statement.

The results from the analysis show whether any risk factor has been identified or not. If no risk factor has been identified, the risk to develop MSD problems is assessed to be low for people with normal physical capacity. If one or more risk factors have been identified this implies that either there is a high risk to develop MSDs, or that a refined analysis is needed to assess whether the risk is low, moderate or high. A refined analysis can be carried out with the RAMP II module in most cases. The result of the RAMP I assessment is presented as a risk assessment at three levels:



High risk. The loading situation has such a magnitude and characteristics that many employees are at an increased risk of developing musculoskeletal disorders. Improvement measures should be given high priority.

Investigate further. An in more in depth analysis is required to assess the risk level. A refined analysis can be carried out for example with the RAMP II module.

Low risk. The loading situation has such a magnitude and characteristics that most employees are at a low risk of developing musculoskeletal disorders. However, individuals with reduced physical capacity may be at risk. Individually tailored improvement measures may be needed.

The result is intended to form a part of the decision making basis when prioritizing and choosing actions in order to reduce the risk for MSDs.

Date:_____ Assessment of: ☐ Work/ work task ☐ Employee load

Work/work task: _____

Assessment ordered by: _____ Position_____

Assessment completed by: _____ Position_____

Company representative: _____ Position_____

Safety/work environment officer/employee:_____ Position_____

Other:_____ Position_____

_____

Department:_____

Other information:_____

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Mark the "Yes" or "No" boxes for the statements corresponding to the questions.	Yes	No	Comment:
1. Postures			
1.1 Does work occur <u>often or for a long time</u>* in any of the following unfavourable postures?			
** often = about 100 times per work day or more*			
** a long time = about 30 minutes per work day or more*			
head bent backwards			
back/upper body bent or twisted - forwards, backwards or towards the side			
arm almost or fully streched forwards (the hand more than about 45 cm from the spine)			
hand above shoulder height or below knee height			
hand/arm brought outwards to the side (to the right or to the left)			
1.2 Does work occur in any of the following unfavourable postures about 1 hour per work day or more?			
head clearly twisted or bent - forwards or towards a side			
hand clearly bent upwards, downwards or towards a side			
legs or feet have insufficient space, or the surface is unstable or with a slope			
2. Work movements and repetitive work			
2.1 Does work occur in any of the following ways?			
the work cycle is shorter than 30 seconds			
the work cycle is between 30 seconds and 5 minutes			
similar work movements are repeated more than 1/10 up to half of the work cycle time			
similar work movements are repeated more than half of the work cycle time			
If "No" on all in 2.1, go to 3. **If "Yes"** on any in 2.1, answer 2.2 below.			
2.2 How long time of the working day does such work occur? Choose one alternative.			
the work or similar work tasks are carried out between 1 and 4 hours of the work day			
the work or similar work tasks are carried out for more than 4 hours of the work day			
3. Lifting work			
3.1 Does lifting of loads occur? **If "No"**, go to 4.			
3.2 How heavy are the loads and how often are they lifted?			
less than 3 kg			
- more than 100 times per work day			
3-7 kg			
- more than 40 times per work day			
more than 7 kg - 14 kg			
- more than 20 times per work day			
more than 14 kg - 25 kg			
- more than 5 times per work day			
more than 25 kg			
3.3 Do the lifts generally occur in any of the following unfavourable postures?			
back/upper body clearly bent			
back/upper clearly twisted			
hand above shoulder height			
hand below knee height			
hand outside forearm distance			
arm clearly brought outward (to the right or to the left)			
lifting/holding with overhand grip (palm facing downward)			
one-hand lift where the load exceeds 6 kg			
lifting while seated where the load exceeds 7 kg			
4. Pushing and pulling work			
4.1 Does pushing and pulling work occur? **If "No"**, go to 5.			
4.2 How large is the exerted force in the pushing or pulling work?			
the starting force (the force to start the object moving) exceeds 150 Newton			
the starting force (the force to start the object moving) exceeds 300 Newton			
the continuous force (the force to keep the object moving) exceeds 100 Newton			
the continuous force (the force to keep the object moving) exceeds 200 Newton			

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Continued RAMP I - Checklist for screening physical risks for manual handling	Yes	No	Comment:
4.3 Does the pushing and pulling work generally occur in any of the following unfavourable conditions?			
the gripping height clearly deviates from elbow height			
the work is carried out with the back/upper body clearly twisted			
the force is exerted towards the side or upwards (i.e. not straight forwards or backwards)			
the force is exerted with one hand			
the pushing or pulling is carried out often (approx. more than 100 times per work day)			
the pushing or pulling distance exceeds 30 meters			
4.4 Are load carriers with 1-2 wheels (e.g. two-wheel cart) or similar used, under the following condition?			
the employee bares the whole or part of the load, and the load weight exceeds 100 kg			
5. Influencing factors			
5.1 Influencing physical factors hand/arm - do the following occur? The times refer to "per work day".			
the employee is exposed to hand-arm vibrations more than 20 minutes (10 for strongly vib)			
the employee is exposed to hand-arm vibrations more than 90 minutes (60 for strongly vib)			
warm or cold objects are handled manually			
the hand is used as an impact tool often or a long time*			
holding hand tools weighing more than 2.3 kg for more than 30 minutes			
holding precision tools weighing more than 0.4 kg for more than 30 minutes			
5.2 Other physical factors - do the following occur? The times refer to "per work day".			
the employee is exposed to whole-body vibrations more than 1 hour			
the employee is exposed to whole-body vibrations more than 6 hours			
the visual conditions are insufficient for the task			
the work is carried out in hot or cold temperatures or in draughty environments			
standing or walking on a hard surface more than half of the work day			
prolonged sedentary work without possibility to change to do the work standing up			
prolonged standing work without possibility to change to do the work sitting down			
kneeling/squatting more than 30 times or more than 30 minutes			
5.3 Work organisational and psychosocial factors - do the following occur?			
there is no possibility to influence at what pace the work is performed			
there is no possibility to influence the work setting or how the work shall be carried out			
it is often difficult to keep up with the work tasks			
the employees often work rapidly in order to be able to take a longer break			
there is no possibility for recovery time during the work (other than formal breaks)			
6. Reports on physically strenuous work			
6.1 Do documented reports exist on physically strenuous tasks (near misses, incident reports, journal notes, or other) when carrying out the work task?			
6.2 **If "Yes"** on 6.1 , what type of work that has led to this? **If "No"**, go to 7.			
lifting			
holding/carrying			
pushing/pulling			
pushing with hand or fingers			
other (please note) _____			
7. Perceived physical discomfort Ask five people who perform this work task			
7.1 Are there parts of the work which lead to physical discomfort (e.g. in muscles or joints) during the work day? Answer "Yes" if any employee experiences such discomfort.			
7.2 **If "Yes"** on question 7.1, which is the worst task?			
Person 1: _____			
Person 2: _____			
Person 3: _____			
Person 4: _____			
Person 5: _____			

Comment: