Assessment form
Hand Arm Risk-assessment Method (HARM)

HARM 2.0

Task	Date .....
Department/job	Completed by .....

Step 1. Task duration score

Step 1A:	The total time duration of the task over the course of an 'average working day' (all time periods should be added together). Indicate the time duration only for the days that the task occurs (10 hours maximum).	… hours - 1 = …….
Step 1B:	How many days per week does the task occur?	
	- for 1 or 2 days per week: deduct 1 point from the score:	- 1
	- for 3 or more days, the score remains the same:	- 0
Step 1C:	Is a break of at least 7.5 minutes* taken every 1.5 hours?	
	- Yes; deduct 1 point from the score	-1
	- No; the score remains the same:	-0
* Read the annex for what is meant by a break		
Step 1D: Calculate the task duration score	If the task duration score is less than 1, then the score is 1	……..

Step 2. Most active hand Circle the most active arm/hand during the task: **right / left**

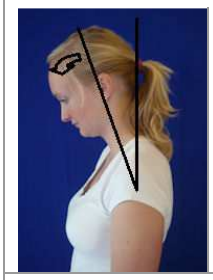
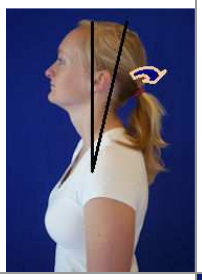
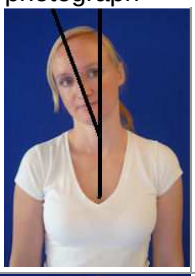
continue with step 3 till 8 for this hand

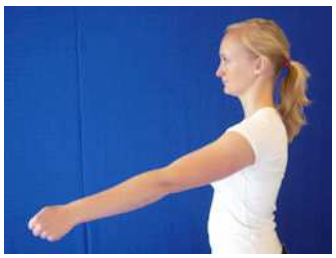
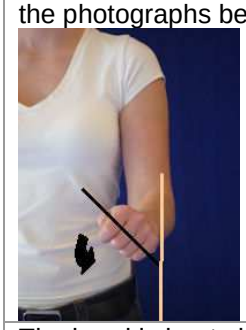
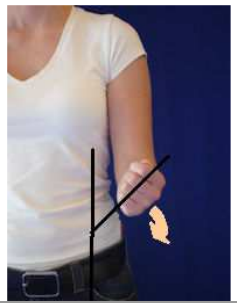
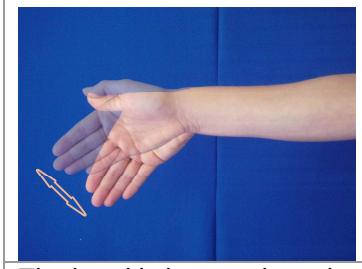
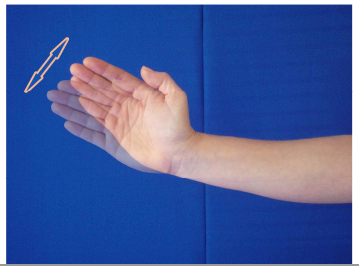
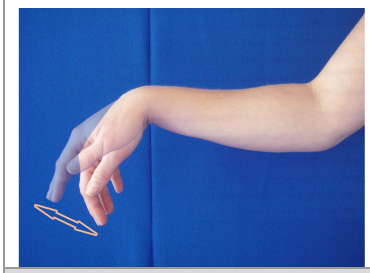
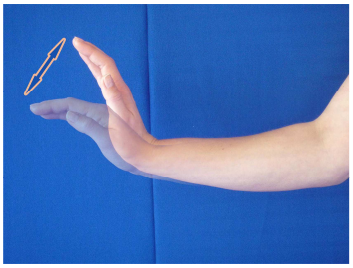
Step 3. Force score

Step 3A		Step 3B			Step 3C		
Indicate which hand is the most active *very similar forces should be assessed as one and the same force*		**Duration of the force exertion in seconds per minute**			**Number of force exertions per minute (frequency)** ***(skip if frequency is smaller than 1x/min)***		
Amount of force	**Description and examples**	**<4**	**4-30**	**>30**	**1- 4**	**4-30**	**≥ 30**
(extremely) low to average: weight < 100 g to 1 kg force < 1 N to 10 N	Light pressure with fingers **to** holding/ grasping. For example: - sorting letters/objects, - pressing with the fingers, - using hand to hold small electric tools - grasping/gripping, holding or attaching parts, pressing firmly	0	2	3,5	1	2,5	4
somewhat high to high: weight: 1-6 kg force: 10-60 N	Holding firmly with hand **to** high force exertion by the arm. For example: - use of a knife/pliers, - using tools, - pushing heavy objects (e.g. cashier operator), - holding heavy tools, operating a stiff lever	0	4	6,5	2	4	6,5
peakforce	Striking with flat hand/fist e.g. hammer	-	-	-	3	5	8

Step 3D Force score = highest score circled = ……

In the event of **high forces**: *Please note!* If the force exertion is more than 6 kg, these must be assessed using a different method (e.g. lifting, or pushing/pulling risk assessment method).

Step 4A **Posture score for the HEAD/NECK and the SHOULDER/UPPER ARM**		**The percentage of the task duration that the posture occurs:**		
		<10%	**10-50%**	**>50%**
The head is tilted further forward than in the first photograph OR further back than in the second photograph  	The head is tilted further sideways than in the first photograph OR the head is turned, as in the second photograph  	0	1,5	3
The head is tilted forward **and turned at the same time**		0	2	4
The head is tilted backward **and turned at the same time**		0	3	4
Head (chin) pushed (extended) forward		0	1,5	3
With the arm **unsupported**, the upper arm is further forward OR sideways of the trunk than in the photographs OR angled behind the trunk	 	0	2,5	3,5
Shoulders raised (high)		0	3	4
Determine 'posture score for neck/shoulder' = highest score =		…….		

Step 4B Posture score for the WRIST/LOWER ARM		The percentage of the task duration that the posture occurs:		
		<10%	10-50%	>50%
Elbow significantly bent or extended 		0	1	2
The lower arm is rotated further (in the direction of the arrows) than in the photographs below 		0	1	2
The hand is bent sideways (in the direction of the little finger and/or thumb) at the wrist so that the position of the wrist is between the positions shown in the photographs. 		0	1,5	3
The hand is bent at the wrist so that the position of the wrist is between the positions shown in the photographs 		0	1,5	3
Determine 'posture score for lower arm/wrist' = highest score =		…….		

Step 5. Vibration score

Are vibrating tools used?

- **No, insert '0' for the vibration score in the grey boxes below and proceed to Step 6**
- **Yes, is the vibration intensity known?**
  - **No, go to Step 5A: the vibration intensity is unknown**
  - **Yes, go to Step 5B: the vibration intensity is known**

Step 5A The vibration intensity is unknown		
Which of the situations applies? Circle the corresponding score and put this in the grey box at the bottom of the table.	**Duration of exposure within the task**	
	0-4 hours	**4-8 hours**
Description	**Score**	
Hardly any vibration, or no vibrations perceived by the user or visible to the assessor	0	0
Vibrations not visible, but perceived by the user (quivering sensation)	2	2
Vibrations just visible on the lower arm/hand, clearly perceived by the user	2	4
The hands, arms or shoulders can be clearly seen to vibrate and vibrations are clearly perceived by the user	4	4
Vibration score: use the circled score:	**……**	**……**

Step 5B The vibration intensity is known		
	Score	
Which of the situations applies? Circle the corresponding score and place this in the grey box at the bottom of the table.	**Duration of exposure for the task**	
Vibration intensity	**0-4 hours**	**4-8 hours**
< 2,5 m/s^2	0	0
≤ 2,5 - 5 m/s^2	2	2
≤ 5 – 10 m/s^2	2	4
≥ 10 m/s^2	4	4
Score for vibration: use the circled score:	**……**	**……**

Step 6. Other factors:

Indicate whether the following situation apply to the task	**Circle the correct answer**
Breaks can only be taken at set break times (as opposed to breaks taken at the employee's discretion)	Yes/no
Work with cold or wet materials is performed without gloves	Yes/no
Disruption to concentration occurs regularly (only if work requires concentration)?	Yes/no
Hand grips are not shaped or are slippery or wet. Stretched fingers or a 2- or 3-finger pinch grip often occur because large or small materials are gripped or held	Yes/no
The work performed is a precision task. It requires precise positioning or moving of fingers or hands, such as assembly of very small pieces or surgical actions	Yes/no
Score for other factors: 0,5 for each 'yes' above:	**……**

Step 7. Calculate total risk score	
Use the scores from steps 1 through 6	**Scores:**
Force score (step 3)	.....
Posture score for the neck/shoulder (Step 4A)	.....
Posture score for the lower arm/wrist (Step 4B)	.....
Vibration score (Step 5)	.....
Other factor score (Step 6)	..... +
Calculate total score (A):	.....
Task duration score (taken from step 1) (T)	 X
Calculate risk score (task duration score (T) X total score (A))	.....

Step 8. Risk assessment:		
Determine the risk of experiencing complaints when performing the task by using the table below:		
Total score	**Risk**	Description
<30	GREEN	**No risk** of arm, neck or shoulder complaints for virtually the entire working population.
30-50	AMBER	**Increased risk** of arm, neck or shoulder complaints for some employees. In order to protect all employees, it is important to take preventative **measures** that lower the risk.
≥50	RED	**High risk** of arm, neck or shoulder complaints. It is important to **take preventative measures immediately.**
Health complains		**If there are complaints that are suspected to be related to the task, it is ALWAYS important to identify the risk factors and take preventative measures!**