



CONSTRUCTION
INDUSTRY
FEDERATION



Irish Human Factors
& Ergonomics Society

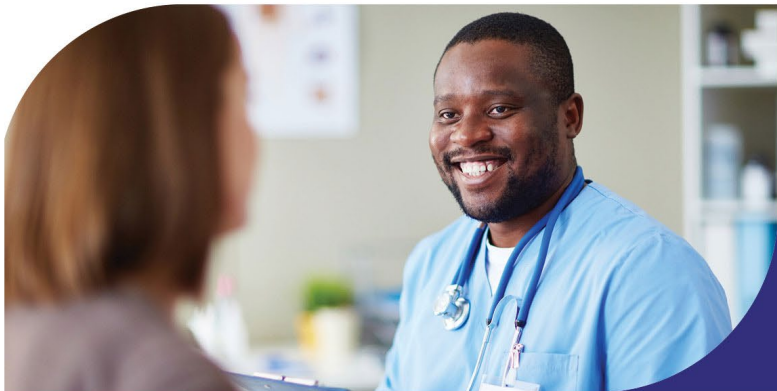
HSA

An tÚdarás Sláinte agus Sábháilteachta
Health and Safety Authority

Assessment of Repetitive Tasks (ART)

Risk Assessment of Pushing and Pulling (RAPP)

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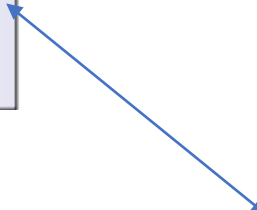
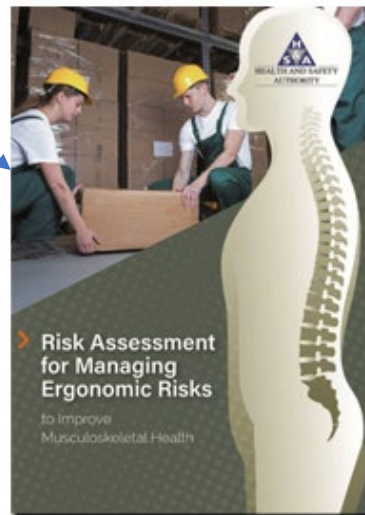
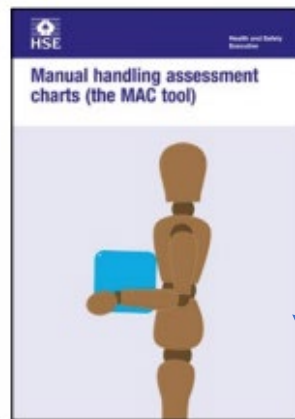


DATE: 23rd November, 2023

Contents

- Introduction to HSA recommended assessment tools
- How to complete a RAPP assessment
- Assessment guide for moving loads on wheeled equipment
- Assessment guide for moving loads on equipment without wheels
- How to complete an ART assessment

MAC, RAPP, ART



HSE RAPP TOOL

- For each type of operation there is the following :
 - A flow chart
 - An assessment guide
 - A score sheet

- The tool is not appropriate for assessing push / pull operations involving :
 - Just the upper limbs
 - Just the lower limbs
 - Powered handling equipment



Score sheet: Pushing or pulling loads without wheels

Assessor name: _____ Date: _____
Company name: _____ Location: _____
Assessed operation: _____

Are there indications that the operation is high risk? Tick appropriate box.

The operation has a history of incidents (eg company accident book records, RIDDOR records) _____
The operation is known to be high or high risk work _____
Exposure along the route suggests that there are loading / unloading / handling tasks, not faced, involving _____
Discussions with employees doing the operation indicate that some aspects are difficult _____

Other indications, if any, what? _____

Sum up the scoring and award the colour band and numerical score for each of the risk levels in the table below.

Features	Green (0-1)	Yellow (2-3)	Orange (4-5)	Red (6-7)	Very Red (8-9)
B1.1 Load weight					
B1.2 Pushion					
B1.3 Hand grip					
B1.4 Work postures					
B1.5 Travel distance					
B1.6 Floor surface					
B1.7 Obstacles on route					
B1.8 Obstacle factors					
Total score					

Note: Individual scoring up to 9, overall score up to 9, maximum score 9.

Risk Filter



Do the tasks being assessed meet the following criteria:

- The pushing and pulling force exerted by the person is applied with the hands
- The torso of the person is largely upright and is not twisted
- The hands are between hip and shoulder height
- The distance moved without a pause or a break is no more than 20 metres
- The tasks being assessed do not require significant forces to complete such as leaning in the direction of travel
- The load can be moved and controlled easily with only one hand
- There are no extra risk factors involved in the assessed tasks such as:
 - Ramps or slopes
 - Uneven floors
 - Constricted spaces
 - Tripping hazards
- There has been no complaints or suspected injury sustained from the tasks being assessed

How to complete an assessment

- Observe
- Consult
- Select appropriate assessment
- Follow the appropriate flow chart and assessment guide to determine the level of risk for each factor

The levels of risk are :

G = GREEN – Low level of risk

Although the risk is low, consider the effect on vulnerable groups such as pregnant women or young workers, where appropriate.

A = AMBER – Medium level of risk

Examine tasks closely.

R = RED – High or very high level of risk

Prompt action needed. This may expose a significant proportion of the working population to risk of injury.

P = PURPLE – Unacceptable

Such operations may represent a serious risk of injury and must be improved.

Section A: Pushing or pulling loads on wheeled equipment



Score Sheet

Assessor name:		Date:	
Company name:		Location:	
Detailed description:			

Are there indications that the operation is high risk? (Tick appropriate box)

<input type="checkbox"/>	The operation has a history of incidents (eg company accident book records, RIDDOR reports).
<input type="checkbox"/>	The operation is known to be hard or high-risk work.
<input type="checkbox"/>	Employees doing the work show signs that they are finding it hard (eg breathing heavily, red-faced, sweating).
<input type="checkbox"/>	Discussions with employees doing the operation indicate that some aspects are difficult.
<input type="checkbox"/>	Other indications, if so, what?

Score Sheet

Identify the type of equipment and insert the colour band and numerical score for each of the risk factors in the boxes below

Factors	Small equipment		Medium equipment		Large equipment	
	Colour band (G, A, R)	Numeric score	Colour band (G, A, R)	Numeric score	Colour band (G, A, R)	Numeric score
A-1 Load weight						
A-2 Posture						
A-3 Hand grip						
A-4 Work pattern						
A-5 Travel distance						
A-6 Condition of equipment						
A-7 Floor surface						
A-8 Obstacles on route						
A-9 Other factors						
Total score						
Note individual capability, eg vulnerable workers, or psychosocial issues						

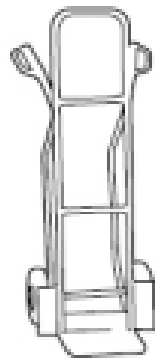
Assessment Guide

A-1 Type of equipment/Load weight (kg)

- Identify the type of equipment used – **small, medium** or **large** (pages 4 and 5). If different types of equipment are used to move loads, do an assessment for each type.
- If more than one piece of loaded equipment is moved at a time (eg two trolleys), assess the total load moved.
- Find out the total load moved (weight of the equipment and weight of loads carried) from labelling, by asking the workers or by weighing.
- If the same equipment is used to move different loads, then assess the equipment with the heaviest load that is likely to be moved.
- The illustrations in each section are only a guide to help you – they are not comprehensive.

A – 1 Small

Small with one or two wheels: eg wheelbarrows, wheelie bins or sack trucks.
With this equipment the worker supports some of the load.



Less than 50 kg	Low G/0
50 kg to 100 kg	Medium A/2
100 kg to 200 kg	High R/4
More than 200 kg	Very high R/8
Load exceeds equipment's rated capacity (manufacturer's recommended maximum weight)	Unacceptable P

Medium

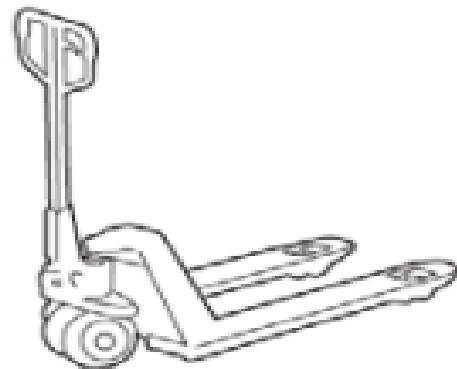
Medium, with three or more fixed wheels and/or castors: eg roll cages, Euro bins.



Less than 250 kg	Low G/0
250 kg to 500 kg	Medium A/2
500 kg to 750 kg	High R/4
More than 750 kg	Very high R/8
Load exceeds equipment's rated capacity (manufacturer's recommended maximum weight)	Unacceptable P

Large

Large, steerable or running on rails: eg pallet truck or overhead rail system.



Less than 600 kg	Low G/0
600 kg to 1000 kg	Medium A/2
1000 kg to 1500 kg	High R/4
More than 1500 kg	Very high R/8
Load exceeds equipment's rated capacity (manufacturer's recommended maximum weight)	Unacceptable P

Note: If the load exceeds the rated capacity of the equipment then this is classified **P – Unacceptable**. In this case, either the weight must be reduced or suitable equipment provided. Do not proceed until this has been improved. There is no score for 'P' on the flow chart or score sheet.

Score sheet



Identify the type of equipment and insert the colour band and numerical score for each of the risk factors in the boxes below

Factors	Small equipment		Medium equipment		Large equipment	
	Colour band (G, A, R)	Numeric score	Colour band (G, A, R)	Numeric score	Colour band (G, A, R)	Numeric score
A-1 Load weight					G	0
A-2 Posture						
A-3 Hand grip						
A-4 Work pattern						
A-5 Travel distance						
A-6 Condition of equipment						
A-7 Floor surface						
A-8 Obstacles on route						
A-9 Other factors						
Total score						
Note individual capability, eg vulnerable workers, or psychosocial issues						

A – 2 Posture


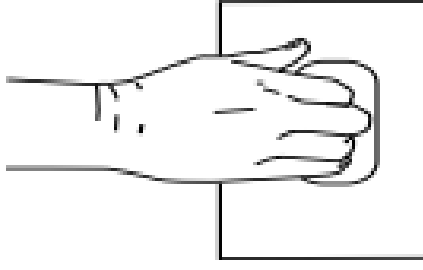
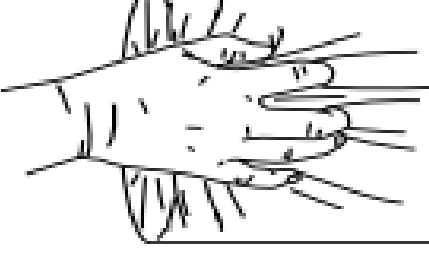
Observe the general positions of the hands and the body during the operation.

Good G/0	Reasonable A/3	Poor R/6
Torso is largely upright, and	Body is inclined in direction of exertion, or	Body is severely inclined, or worker squats, kneels or needs to push with their back against the load, or
Torso is not twisted, and	Torso is noticeably bent or twisted, or	Torso is severely bent or twisted, or
Hands are between hip and shoulder height	Hands are below hip height	Hands are behind or on one side of body or above shoulder height



A – 3 Hand Grip

Observe how the hand(s) grip or contact the equipment during pushing or pulling. If the operation involves both pushing and pulling, assess the hand grip for both actions.

Good G/0	Reasonable A/1	Poor R/2
<p>There are handles or handhold areas which allow a comfortable power grip for pulling or comfortable full-hand contact for pushing</p>	<p>There are handhold areas, but they only allow a partial grip, eg fingers clamped at 90°, or partial hand contact for pushing</p>	<p>There are no handles or the hand contact is uncomfortable</p>
 <p>A line drawing showing a hand gripping a vertical handle. The hand is wrapped around the handle, with the fingers and thumb fully engaged, representing a comfortable power grip.</p>	 <p>A line drawing showing a hand gripping a horizontal handle. The hand is flat against the handle, with the fingers clamped at a 90-degree angle, representing a partial grip.</p>	 <p>A line drawing showing a hand gripping a horizontal handle. The hand is flat against the handle, with the fingers spread out, representing a poor grip with no handles or uncomfortable contact.</p>

A – 4 Work Pattern

Observe the work, noting whether the operation is repetitive (five or more transfers per minute) and whether the worker sets the pace of work. Ask workers about their pattern of breaks and other opportunities to rest or recover from the work.

Good G/0	Reasonable A/1	Poor R/3
The work is not repetitive (fewer than five transfers per minute), and	The work is repetitive, but	The work is repetitive, and
The pace of work is set by the worker	There is opportunity for rest or recovery through formal and informal breaks or job rotation	No formal/informal breaks or job rotation opportunities are provided

A – 5 Travel Distance

Determine the distance from start to finish for a single trip.

- If the operation is not repetitive, do an assessment for the longest trip.
- If the operation is repetitive, determine the average distance for at least five trips.

Short G/0	Medium A/1	Long R/3
10 m or less	Between 10 m and 30 m	More than 30 m

A – 6 Condition of equipment

Enquire about the maintenance programme and observe the general state of repair of the equipment (condition of the wheels, bearings and brakes).

Good G/0	Reasonable A/2	Poor R/4
Maintenance is planned and preventive, and	Maintenance occurs only as problems arise, or	Maintenance is not planned (there is no clear system in place), or
Equipment is in a good state of repair	Equipment is in a reasonable state of repair	Equipment is in a poor state of repair

A – 7 Floor Surface

Identify the condition of the surfaces along the route and determine the level of risk using the following criteria.

Good G/0	Reasonable A/1	Poor R/4
Dry and clean, and	Mostly dry and clean (damp or debris in some areas), or	Contaminated (wet or debris in several areas), or
Level, and	Sloping (gradient is between 3° and 5°), or	Steep slope (gradient is more than 5°), or
Firm, and	Reasonably firm underfoot (eg carpet), or	Soft or unstable underfoot (gravel, sand, mud), or
Good condition (not damaged or uneven)	Poor condition (minor damage)	Very poor condition (severe damage)

A – 8 Obstacles along route

Check the route for obstacles. Note if the equipment is moved over trailing cables, across raised edges, up or down steep ramps (gradient of more than 5°), up or down steps, through closed/narrow doors, screens or confined spaces, around bends and corners or objects. Each type of obstacle should only be counted once no matter how many times it occurs.

Good G/0	Reasonable A/2	Poor R/3
No obstacles	One type of obstacle but no steps or steep ramps	Steps, steep ramps or two or more other types of obstacle

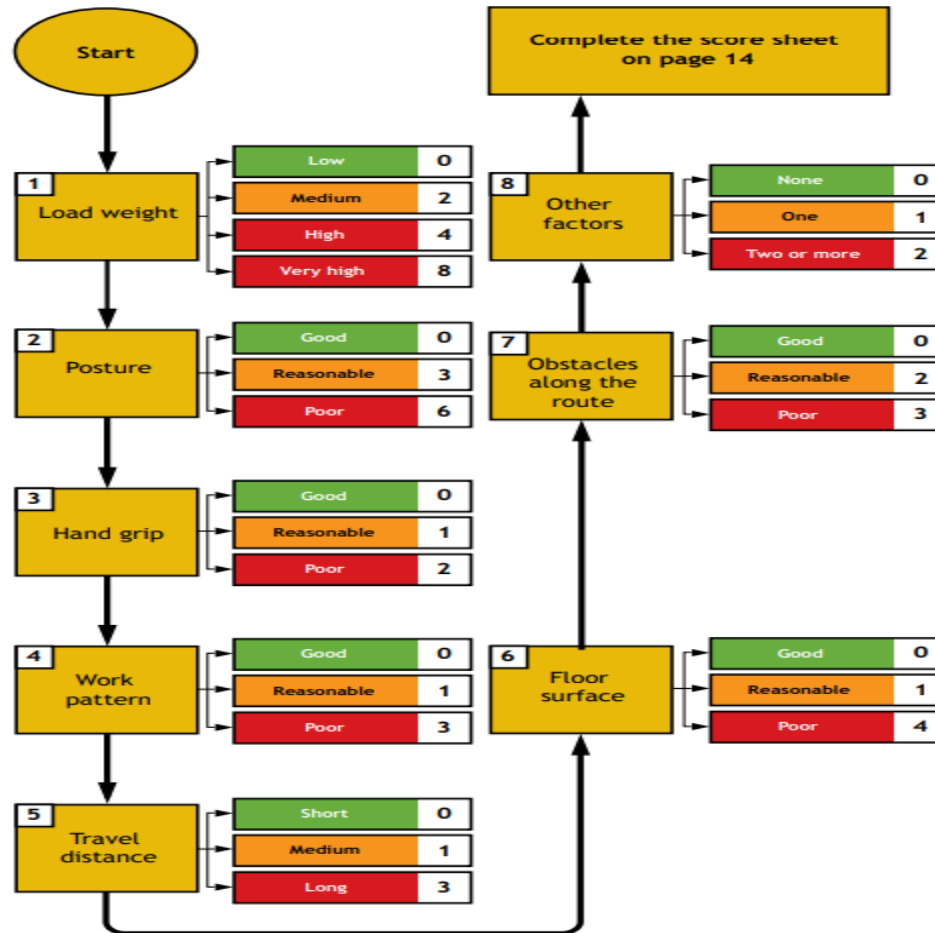
A – 9 Other factors

Identify any other factors, for example:

- the equipment or load is unstable;
- the load is large and obstructs the worker's view of where they are moving;
- the equipment or load is sharp, hot or otherwise potentially damaging to touch;
- there are poor lighting conditions;
- there are extreme hot or cold temperatures or high humidity;
- there are gusts of wind or other strong air movements;
- personal protective equipment or clothing makes using the equipment more difficult.

None G/0	One A/1	Two or more R/2
No other factors present	One factor present	Two or more factors present

Section B

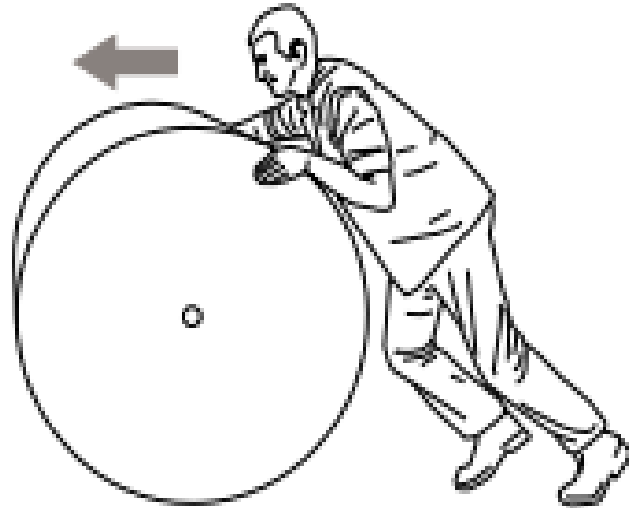


B – 1

Activity / Load Weight (kg)

- Identify the work activity. If two or more activities are performed (eg rolling and churning), do an assessment for each type of activity.
- Find out the weight of the load moved (from any labelling provided, by asking the workers or by weighing).
- If two or more loads are moved at a time, assess the total weight moved.
- If you are moving different loads, assess the heaviest load.
- The illustrations in each section are only a guide to help you – they are not comprehensive.

Rolling



Less than 400 kg	Low G/0
400 kg to 600 kg	Medium A/2
600 kg to 1000 kg	High R/4
More than 1000 kg	Very high R/8

Churning

(loads are moved by pivoting/rolling along the base edges)



Less than 80 kg	Low G/0
80 kg to 120 kg	Medium A/2
120 kg to 150 kg	High R/4
More than 150 kg	Very high R/8

Dragging/hauling or sliding



Less than 25 kg	Low G/0
25 kg to 50 kg	Medium A/2
50 kg to 80 kg	High R/4
More than 80 kg	Very high R/8

Score Sheet



Identify the activity and insert the colour band and numerical score for each of the risk factors in the boxes below

Factors	Rolling		Churning		Dragging	
	Colour band (G, A, R)	Numeric score	Colour band (G, A, R)	Numeric score	Colour band (G, A, R)	Numeric score
B-1 Load weight			A	2		
B-2 Posture						
B-3 Hand grip						
B-4 Work pattern						
B-5 Travel distance						
B-6 Floor surface						
B-7 Obstacles on route						
B-8 Other factors						
Total score						
Note individual capability, eg vulnerable workers, or psychosocial issues						

B – 2 Posture

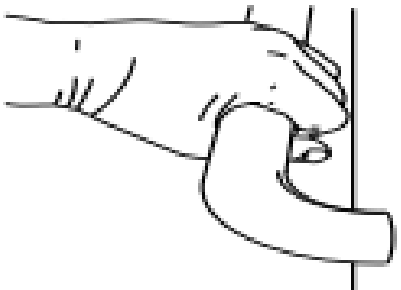

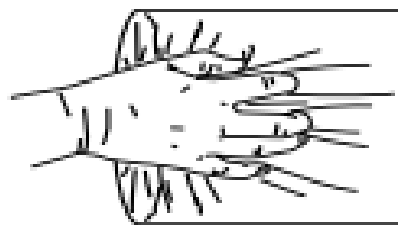
Observe the general positions of the hands and the body during the operation.

Good G/0	Reasonable A/3	Poor R/6
Torso is largely upright, and	Body is inclined in direction of exertion, or	Body is severely inclined, or worker squats, kneels or needs to push with their back against the load, or
Torso is not twisted, and	Torso is noticeably bent or twisted, or	Torso is severely bent or twisted, or
Hands are between hip and shoulder height	Hands are below hip height	Hands are behind or on one side of body or above shoulder height



B – 3 Hand Grip

Observe how the hand(s) grip or contact the load during pushing or pulling. If the operation involves both pushing and pulling, assess the hand grip for both actions.

Good G/0	Reasonable A/1	Poor R/2
<p>There are handles or handhold areas which allow a comfortable power grip for pulling or comfortable full-hand contact for pushing</p>	<p>There are handhold areas, but they only allow a partial grip, eg fingers clamped at 90°, or partial hand contact for pushing</p>	<p>There are no handles or the hand contact is uncomfortable</p>
		

B – 4 Work Pattern

Observe the work, noting whether the operation is repetitive (five or more transfers per minute) and whether the worker sets the pace of work. Ask workers about their pattern of breaks and other opportunities to rest or recover from the work.

Good G/0	Reasonable A/1	Poor R/3
The work is not repetitive (fewer than five transfers per minute), and	The work is repetitive, but	The work is repetitive, and
The pace of work is set by the worker	There is opportunity for rest or recovery through formal and informal breaks or job rotation	No formal/informal breaks or job rotation opportunities are provided

B – 5 Travel Distance

Determine the distance from start to finish for a single trip.

- If the operation is not repetitive, do an assessment for the longest trip.
- If the operation is repetitive, determine the average distance for at least five trips.

Short G/0	Medium A/1	Long R/3
2 m or less	Between 2 m and 10 m	More than 10 m

B – 6 Floor Distance

Identify the condition of the surfaces along the route and determine the level of risk using the following criteria.

Good G/0	Reasonable A/1	Poor R/4
Dry and clean, and	Mostly dry and clean (damp or debris in some areas), or	Contaminated (wet or debris in several areas), or
Level, and	Sloping (gradient is between 3° and 5°), or	Steep slope (gradient is more than 5°), or
Firm, and	Reasonably firm underfoot (eg carpet), or	Soft or unstable underfoot (gravel, sand, mud), or
Good condition (not damaged or uneven)	Poor condition (minor damage)	Very poor condition (severe damage)

B – 7 Obstacles along route

Check the route for obstacles. Note if the load is moved over trailing cables, across raised edges, up or down steep ramps (gradient of more than 5°), up or down steps, through closed/narrow doors, screens or confined spaces, around bends and corners or objects. Each type of obstacle should only be counted once no matter how many times it occurs.

Good G/0	Reasonable A/2	Poor R/3
No obstacles	One type of obstacle but no steps or steep ramps	Steps, steep ramps, or two or more other types of obstacle

B – 8 Other factors

Identify any other factors, for example:

- the load is unstable;
- the load is large and obstructs the worker's view of where they are moving;
- the load is sharp, hot or otherwise potentially damaging to touch;
- there are poor lighting conditions;
- there are extreme hot or cold temperatures or high humidity;
- there are gusts of wind or other strong air movements;
- personal protective equipment or clothing makes pushing and pulling more difficult.

None G/0	One A/1	Two or more R/2
No other factors present	One factor present	Two or more factors present

Your turn



How did you do?

B1 Load Weight	2
B2 Posture	6
B3 Hand Grip	0
B4 Work Pattern	0
B5 Travel Distance	1
B6 Floor Surface	0
B7 Obstacles Along Route	0
B8 Other Factors	0
Total	9

Assessment of Repetitive Taaks - ART

What is the ART Tool ?

- ART : Assessment of Repetitive Tasks
- Risk assess tasks that require repetitive movement of the upper limbs (arms and hands)
 - Assembly
 - Production
 - Processing
 - Packaging
 - Packing
 - Work involving regular use of hand tools

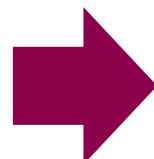
Which tasks should be assessed ?

- Tasks that involve actions of the upper limbs;
 - Tasks that repeat every few minutes, or even more frequently; and
 - Tasks that occur for at least 1–2 hours per day or shift
-
- Not intended for Display Screen Equipment (DSE) assessments



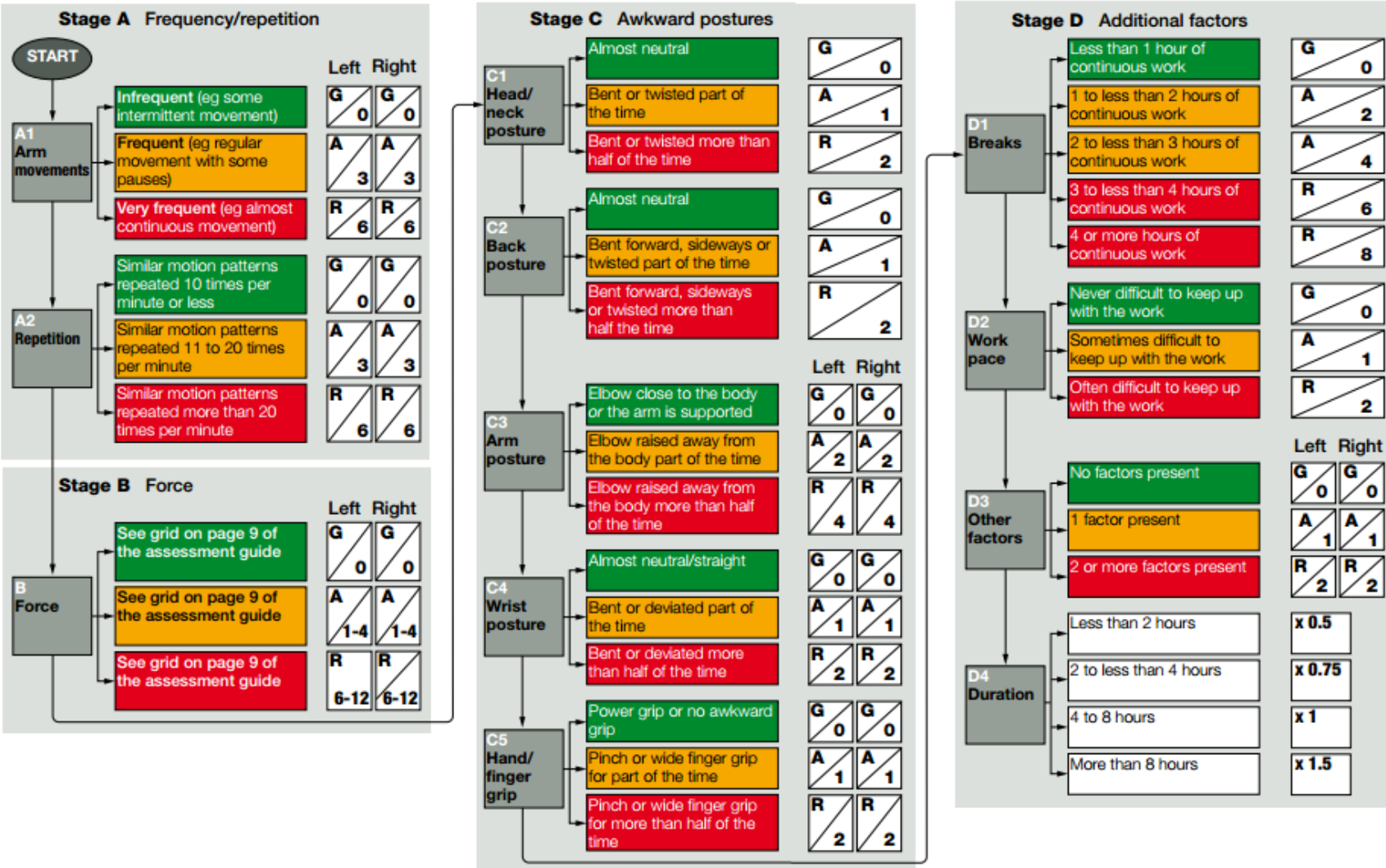
Step 1 : Task description

Assessor name:		Date:																					
Company name:		Location:																					
Name of task:																							
Task description:																							
What is the weight of any items handled?																							
<i>If items weigh more than 8 kg and the task involves manual handling consider using the MAC</i>																							
Which side of the body is primarily involved?	Left	right	both																				
What hand tools are used?																							
Production rate (if available)	units per shift, hour or minute (circle as appropriate)																						
How often is the task repeated?	every	seconds																					
Draw the breaks in the shift																							
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First hour	→																						
How long does a worker perform the task?	...without a break	hours																					
	...in a typical day or shift (excluding breaks)	hours																					
How often does an individual perform the task? (eg daily, weekly, etc)																							
How often is the task carried out within the organisation? (eg daily, etc)																							
Do workers rotate to other tasks? If so, what tasks?																							

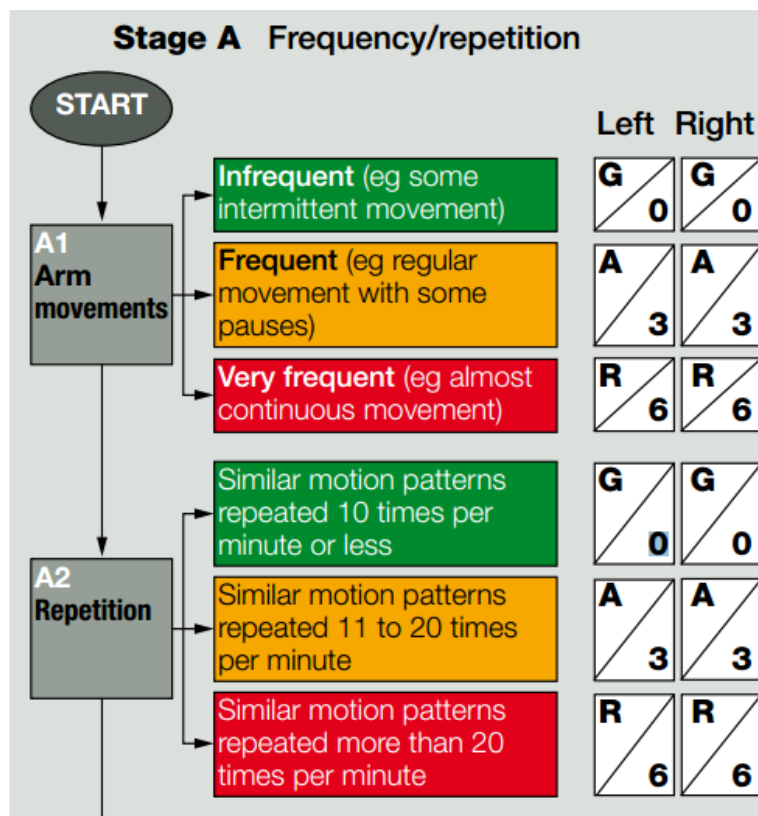


Assessor name:	Mrs X	Date:	18.9.2010																																																																	
Company name:	Company Y	Location:																																																																		
Name of task:	Ironing sheets																																																																			
Task description:	The worker has to pick sheets from a bin, locate the corners and feed them on to attachments for the machine to iron automatically.																																																																			
What is the weight of any items handled?	Less than 1kg																																																																			
<i>If items weigh more than 8 kg and the task involves manual handling consider using the MAC</i>																																																																				
Which side of the body is primarily involved?	Left	right	both <input checked="" type="checkbox"/>																																																																	
What hand tools are used?	None																																																																			
Production rate (if available)	N/A units per shift, hour or minute (circle as appropriate)																																																																			
How often is the task repeated?	every	14	seconds																																																																	
Draw the breaks in the shift																																																																				
<table border="1"> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td colspan="4">6:30 Start</td> <td colspan="16"></td> <td colspan="4">14:00 Finish</td> </tr> <tr> <td></td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>																								6:30 Start																				14:00 Finish					7	8	9	10	11	12	13													
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	7	8	9	10	11	12	13																																																													
First hour	→																																																																			
How long does a worker perform the task?	...without a break	1	hours																																																																	
	...in a typical day or shift (excluding breaks)	3.5	hours																																																																	
How often does an individual perform the task? (eg daily, weekly, etc)	Daily																																																																			
How often is the task carried out within the organisation? (eg daily, etc)	Daily																																																																			
Do workers rotate to other tasks? If so, what tasks?	Placing folded sheets on conveyor																																																																			

Step 2 : Risk factors

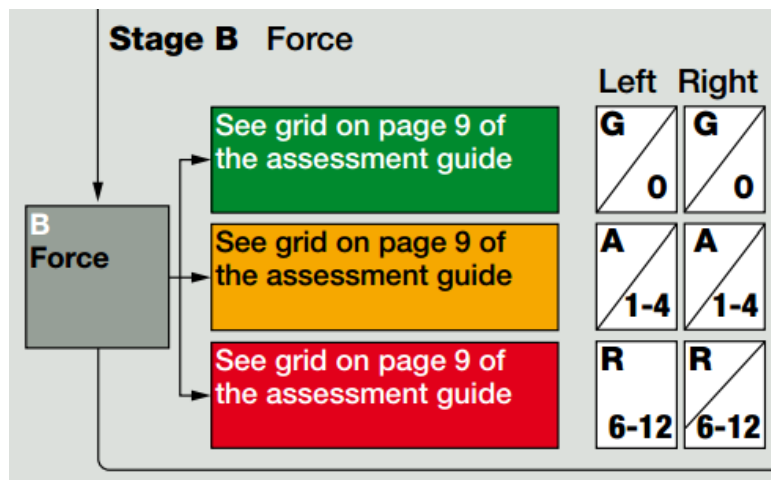


Stage A : Frequency and repetition



- Rapid or prolonged repetition may not allow sufficient time for recovery

Stage B : Force



- Handling heavy objects
- Fast movement or excessive force generated by the muscles of the body
- Local compression and stress from items that come into contact with parts of the upper limb
- Impact or shock

Stage B : Force

	Light	Moderate	Strong	Very strong
Infrequent	G0	A1	R6	Changes required*
Part of the time (15-30%)	G0	A2	R9	Changes required*
About half the time (40-60%)	G0	A4	R12	Changes required*
Almost all the time (80% or more)	G0	R8	Changes required*	Changes required*

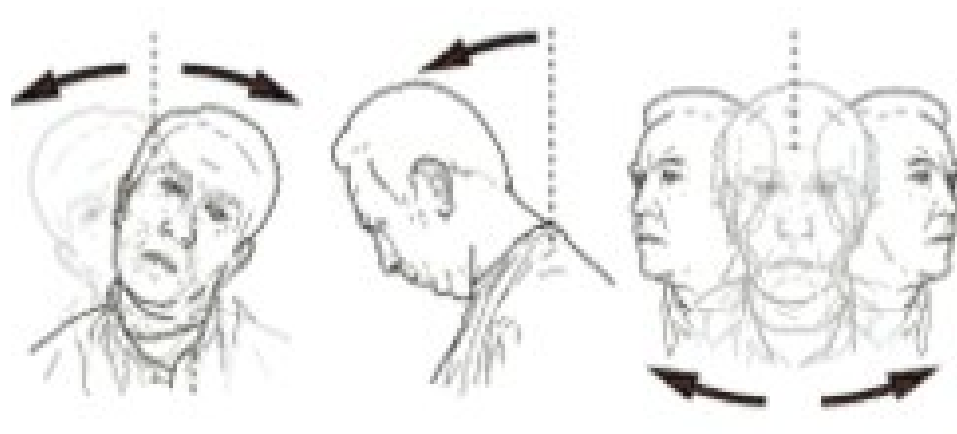
Light force	There is no indication of any particular effort
Moderate force	Force needs to be exerted: <ul style="list-style-type: none"> - Pinching or gripping with some effort - Moving levers or pushing buttons with some effort
Strong force	Force is obviously high, strong or heavy
Very strong force	Force is near to the maximum level that the worker can apply

Stage C : Awkward postures

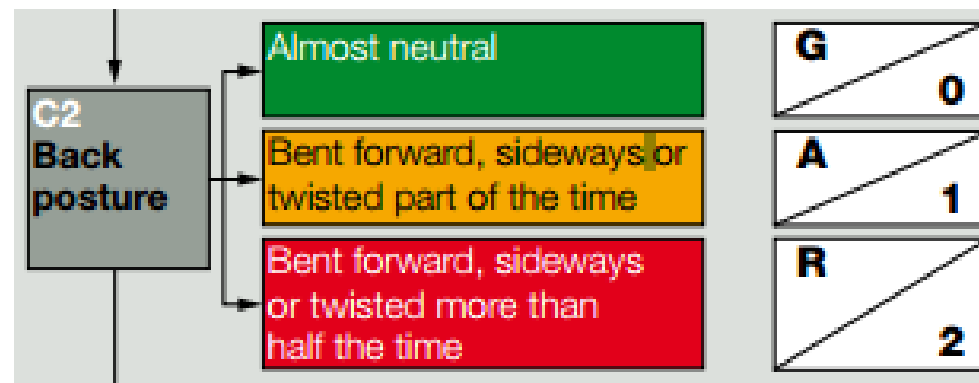
Stage C Awkward postures			
C1 Head/ neck posture	Almost neutral	G 0	
	Bent or twisted part of the time	A 1	
	Bent or twisted more than half of the time	R 2	
C2 Back posture	Almost neutral	G 0	
	Bent forward, sideways or twisted part of the time	A 1	
	Bent forward, sideways or twisted more than half the time	R 2	
C3 Arm posture	Elbow close to the body or the arm is supported	Left G 0	Right G 0
		Left A 2	Right A 2
	Elbow raised away from the body more than half of the time	Left R 4	Right R 4
C4 Wrist posture	Almost neutral/straight	G 0	G 0
	Bent or deviated part of the time	A 1	A 1
	Bent or deviated more than half of the time	R 2	R 2
C5 Hand/ finger grip	Power grip or no awkward grip	G 0	G 0
	Pinch or wide finger grip for part of the time	A 1	A 1
	Pinch or wide finger grip for more than half of the time	R 2	R 2

- Awkward posture: a part of the body is used well beyond its neutral position
- Static postures: a part of the body is held in a particular position for extended periods of time without the soft tissues being allowed to relax.

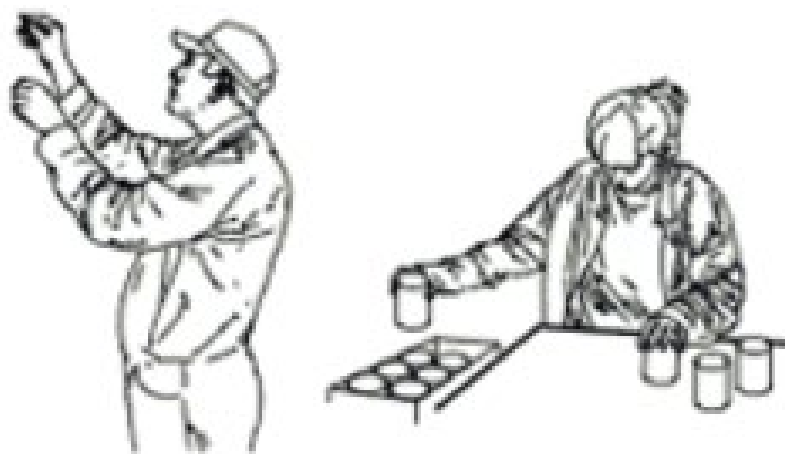
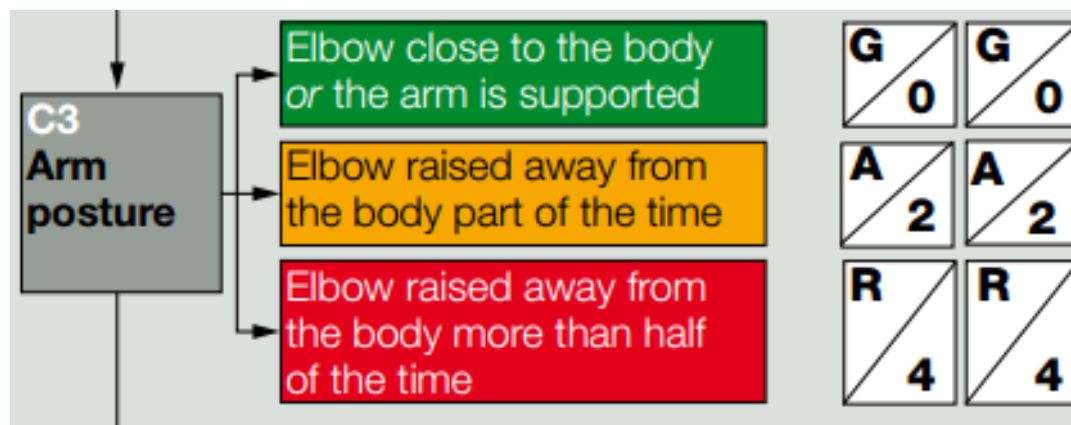
C1. Head / neck posture



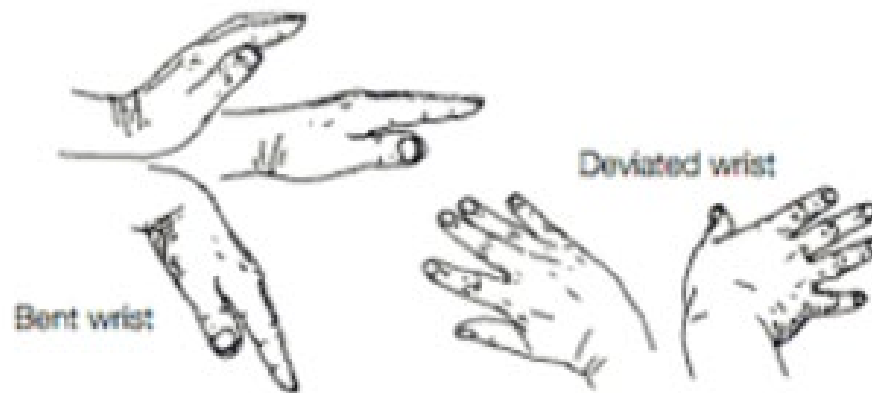
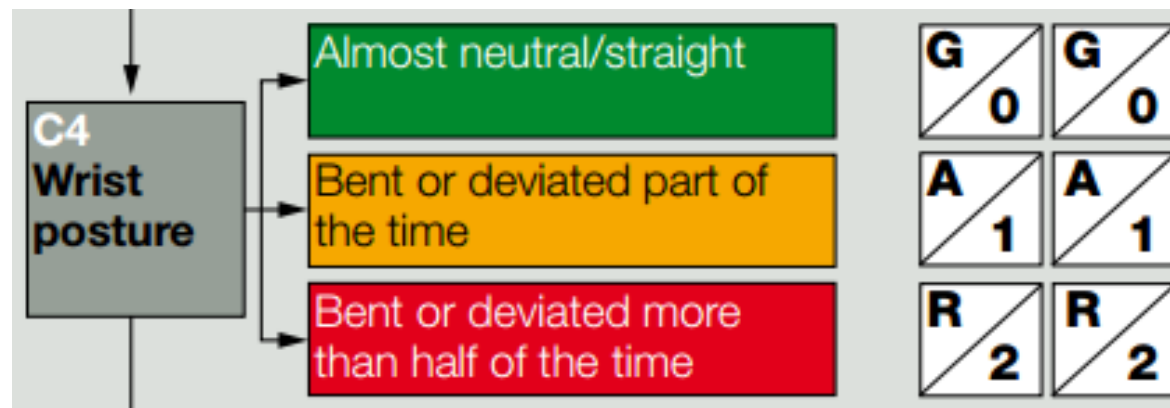
C2. Back posture



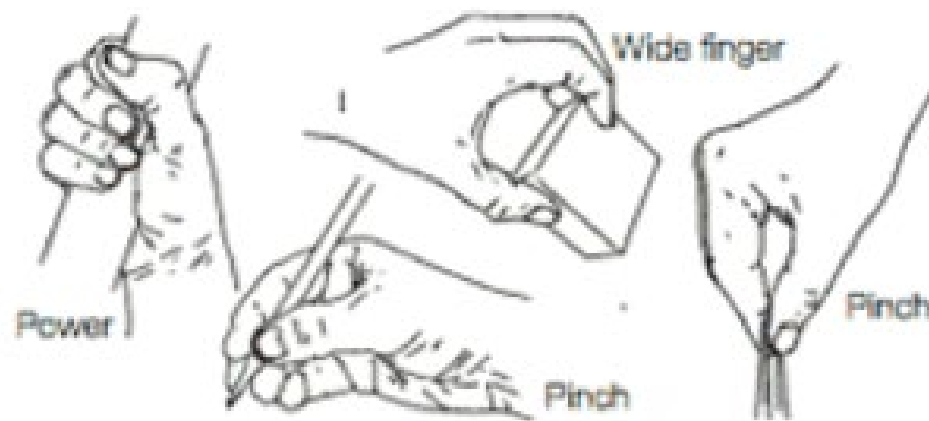
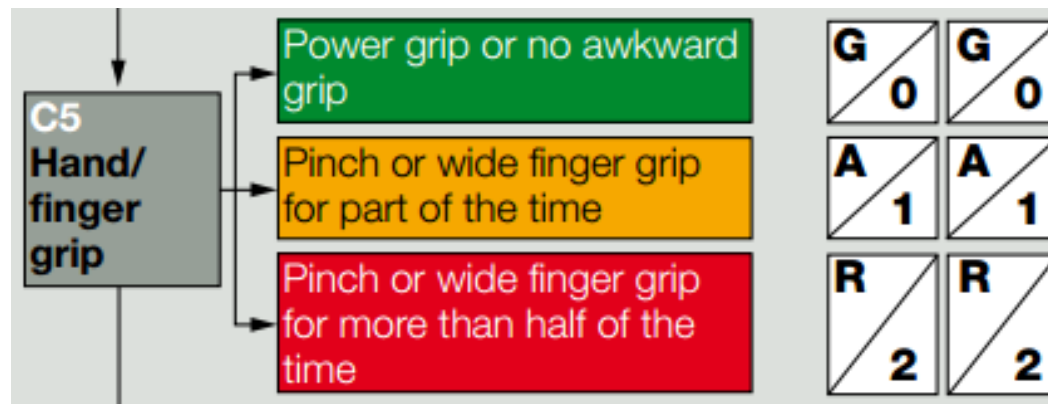
C3. Arm posture



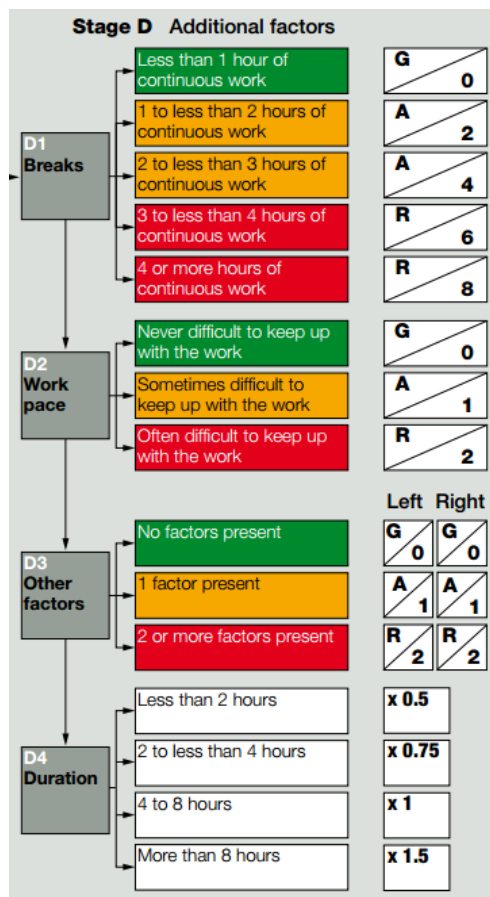
C4. Wrist posture



C4. Wrist posture

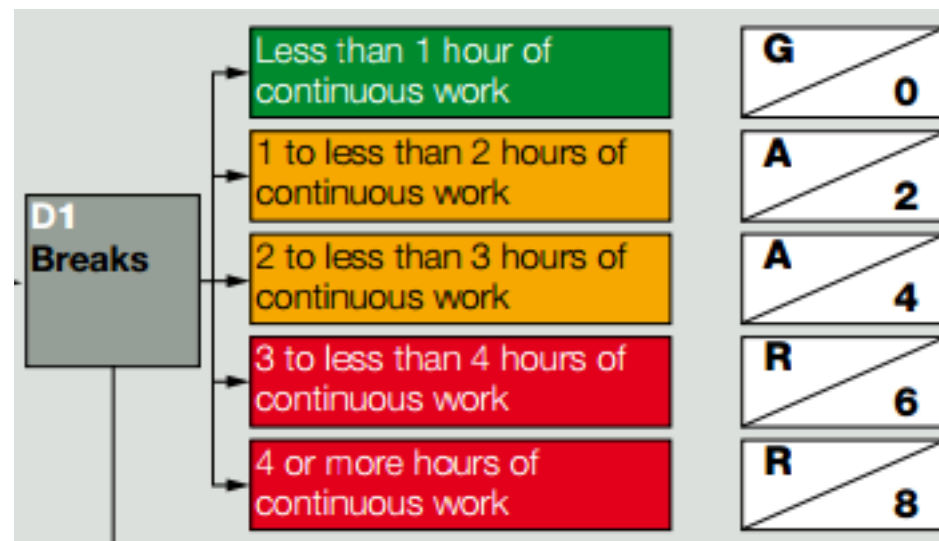


Stage D : Additional factors



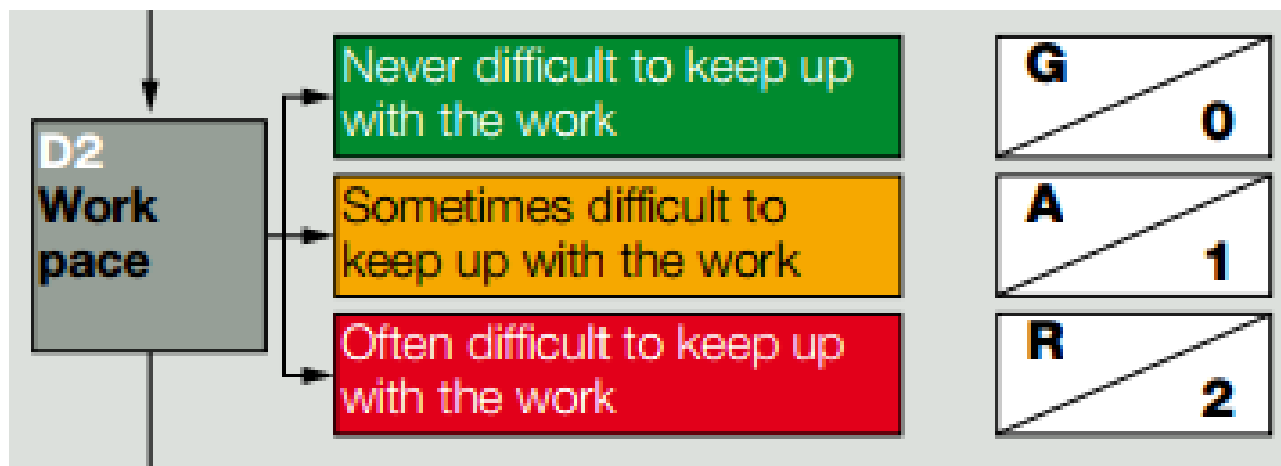
- Duration of exposure
 - ↗ Duration of a person's exposure = ↗ risk of injury
- Working environment
 - Vibration
 - Cold
 - Lighting
- Individual factors
 - Differences in competence and skills
 - Workers with varying body sizes
 - Age and health status
- Psychosocial factors
 - Include the design, organisation and management of work and the overall social environment in general

D1. Breaks



- Determine the maximum amount of time that workers perform the repetitive task without a break

D2. Work pace



- If score = 1 or 2, ask workers for more information about this aspect of the work.
 - When do they find it difficult to keep up?
 - Why do they find it difficult to keep up with the work?
 - How could the task be improved?

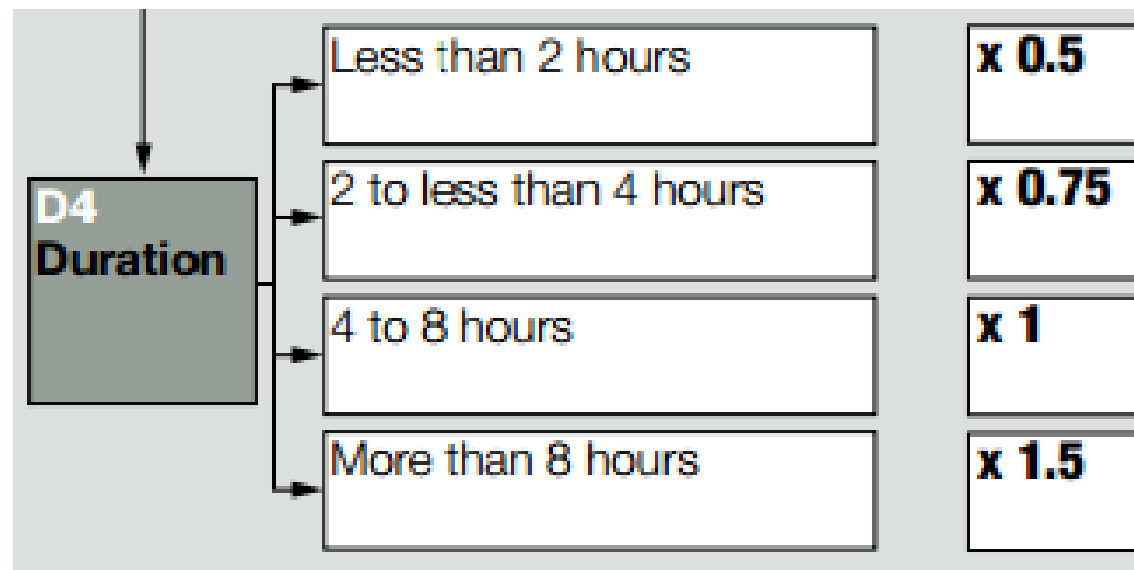
D3. Other factors



➤ E.g.

- Gloves affect gripping and make the handling task more difficult
- A tool is used to strike two or more times per minute
- The hand is used as a tool and struck ten or more times per hour
- The tools, work piece or workstation cause compressions of the skin

D4. Duration



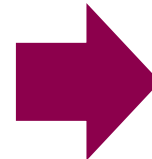
- Determine the amount of time that a worker performs the repetitive task in a typical day or shift













D5. Psychosocial factors

- Psychosocial factors are not given a score. However, they should be considered :
 - Little control over how the work is done
 - Incentives to skip breaks or finish early
 - Monotonous work
 - High levels of attention and concentration
 - Frequent tight deadlines
 - Lack of support from supervisors or co-workers
 - Excessive work demands
 - Insufficient training to do the job successfully

Step 3 : Score sheet

Risk factors	Left arm		Right arm	
	Colour	Score	Colour	Score
A1 Arm movements				
A2 Repetition				
B Force				
C1 Head/neck posture				
C2 Back posture				
C3 Arm posture				
C4 Wrist posture				
C5 Hand/finger grip				
D1 Breaks				
D2 Work pace				
D3 Other factors				
Task score				
D4 Duration multiplier		X		X
Exposure score				
D5 Psychosocial factors				



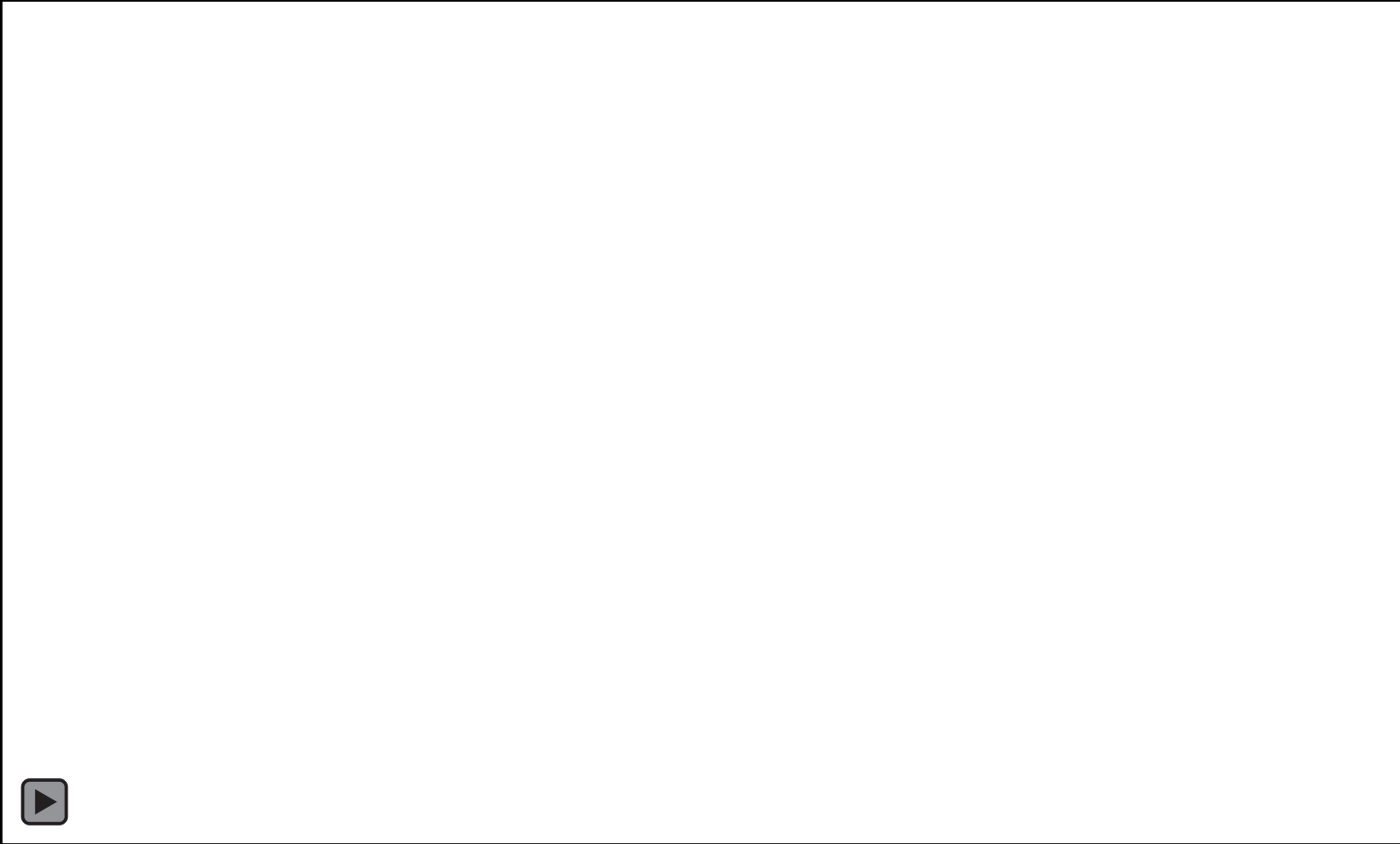
Risk factors	Left arm		Right arm	
	Colour	Score	Colour	Score
A1 Arm movements		6		6
A2 Repetition		4		4
B Force		0		0
C1 Head/neck posture		0		0
C2 Back posture		1		1
C3 Arm posture		2		2
C4 Wrist posture		1		1
C5 Hand/finger grip		2		2
D1 Breaks		4		4
D2 Work pace		0		0
D3 Other factors		0		0
Task score		20		20
D4 Duration multiplier		X 0.75		X 0.75
Exposure score		15		15
D5 Psychosocial factors				

What the scores mean ?

- Help prioritise those tasks that require the most urgent attention; and
- Help check the effectiveness of any risk reduction measures put into place.
- The colours assigned to the risk factors help identify where to focus risk reduction measures.

Exposure score	Proposed	Exposure level
0 – 11	Low	Consider individual circumstances
12 – 21	Medium	Further investigation required
22 or more	High	Further investigation required urgently

Your turn



How did you do?

	Left Arm	Right Arm
A1 Arm Movement	4	4
A2 Repetition	3	3
B Force	2	2
C1 Head/Neck Posture	1	1
C2 Back Posture	2	2
C3 Arm Posture	4	4
C4 Wrist Posture	2	2
C5 Hand/Finger Grip	0	2
D1 Breaks	0	0
D2 Work Pace	0	0
D3 Other Factors	1	2
D4 Duration Multiplier	1	1
Total Score	19	22

Online versions

- UK HSE
 - Free single assessment version
 - Subscription based premium version – MAC/ART/RAPP
 - <https://books.hse.gov.uk/MSD-Assessment-Tool>
- ROI EZErgo
 - Subscription based premium version – MAC/ART/RAPP and DSE

www.EZErgo.com

Contents

- Introduction to HSA recommended assessment tools
- How to complete a RAPP assessment
- Assessment guide for moving loads on wheeled equipment
- Assessment guide for moving loads on equipment without wheels
- How to complete an ART assessment



HSA

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Go raibh maith agaibh
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