KIM for assessing and designing physical workloads with respect to Awkward Body Postures (KIM-ABP)

Workplace/sub-activity:			
Duration of the working day:		Evaluator:	
Duration of the sub-activity:		Date:	

1st step: Determination of time rating points

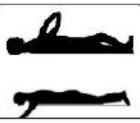
Total duration of this sub-activity per working day [up to … hours]	up to 1	2	3	4	5	6	7	8	9	10
Time rating points:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

2nd step: Determination of the rating points for other indicators

A		Loads on the back – body posture when working without or with low force exertion		Amount of time as part of the sub-activity: up to 1/4 occasionally	up to 1/2 frequently	up to 3/4 predominantly	> 3/4 constantly	Points
	1	**Upright back posture** in a standing, squatting or kneeling position[1], also interrupted by walking a few steps or by body movements (trunk can be inclined forward up to 20°) e.g. sales personnel, machine operators		**2**	**4**	**6**	**8**	
	2	**Torso being moderately inclined forward** (> 20-60°) in a standing, squatting or kneeling position[1] or inclined backward e.g. sorting conveyors for baked goods		**7**	**15**	**22**	**30**	
	3	**Torso being severely inclined forward** (> 60°) in a standing, squatting or kneeling position[1] - e.g. steel fixers		**10**	**20**	**30**	**40**	
	4	**Sitting in forced postures**, torso being moderately to severely inclined forward, mostly looking permanently towards the work area - e.g. working at a microscope, driving cranes, endoscopy (medicine), also sitting on the floor		**3**	**6**	**9**	**12**	
	5	**Sitting in a variable sitting posture** e.g. office work (administration)	**Alternation to standing / walking is** not possible	**2**	**4**	**6**	**8**	
			possible	**0.5**	**1**	**1.5**	**2**	

[1] *Please note: For hand/arm postures, also complete Part **B** where applicable! If the work is carried out in a squatting and kneeling position, Part **C** is also to be completed!*

Total of risk scores A **Back:**

B		Loads on shoulders and upper arms when working without or with low force exertion[2]	Amount of time as part of the sub-activity: up to 1/4	up to 1/2	up to 3/4	> 3/4	Points
	1	**Arms raised, hands above shoulder level** in a standing, squatting or kneeling position e.g. dry construction, interior design, electrical installation, installation of ventilations systems, skilled manual assembly work, servicing	**10**	**20**	**30**	**40**	
	2	**Arms raised, hands below shoulder level or at a distance from the body** in a standing, squatting or kneeling position without the arms being supported, e.g. sorting activities at sorting conveyors	**6**	**12**	**18**	**24**	
	3	**Lying on the back, arms over head**, e.g. ceiling painting, assembly work, ship's bottom, tank construction **Lying prone, arms in front of / below the body**, e.g. harvesting equipment ("flyers"), assembly work	**7**	**14**	**21**	**28**	
Remaining time		Portion of the assessment period **without posture loads of the shoulders/arms**	**0**	**0**	**0**	**0**	

[2] *Please note: If there are physical workloads of the hand/arm system, this sub-activity should also be evaluated using the KIM-MHO.*

Total of risk scores B **Shoulders and upper arms:** ◊

C		Loads on knees/legs when working without or with low force exertion	Amount of time as part of the sub-activity: up to 1/4	up to 1/2	up to 3/4	> 3/4	Points
	1	**Constant standing**, also interrupted by walking a few steps, e.g. sales personnel, machine operators	**2**	**4**	**6**	**8**	
	2	**Kneeling, squatting or sitting cross-legged**[3], e.g. dry construction, interior design, electricians, pipe layers, manual welding, harvesting, flooring/tiling, cobbling, skilled manual assembly work and servicing	**10**	**20**	**30**	**40**	
Remaining time		Portion of the assessment period **without posture loads of the knees**	**0**	**0**	**0**	**0**	

[3] *If this sub-activity involves crawling, the KIM-BM is also to be used for evaluation.*

Total of risk scores C **Loads on knees / legs:** ◊

Unfavourable working conditions (specify only where applicable)		A Back	B Shoulders/upper arms	C Knees/legs
Twisting and/or lateral inclination of the trunk identifiable	occasionally	1	0	0
	frequently to constantly	2	0	1
Head: Inclined backward and/or severely inclined forward or constantly turning	occasionally or constantly	1	1	0
Upper body cannot be supported when inclined forward - with the hands, by leaning against something, by means of tools	not possible	2	0	0
Narrow space for movement	frequently to constantly	2	2	2
TOTAL of the risk scores for additional loads for block A / B / C				

Further working conditions (specify only where applicable)	A	B	C
Restricted stability, uneven floor	1	1	1
Moisture, cold, strong draughts, drenching of clothes possible	1	1	0
Strong shocks (vibrations) resulting in physical tension[4)]	1	1	0
Very high mental concentration (e.g. recognising objects)	1	1	0
TOTAL of the risk scores for special working conditions for block A / B / C			
None: there are no unfavourable working conditions	( )	( )	( )

[4)] *Please note: If there are physical workloads due to vibrations, they are to be evaluated separately! See https://www.baua.de/EN/Topics/Work-design/Physical-agents-and-work-environment/Vibrations/_functions/Publications-search_Formular.html?nn=8718374*

3rd step: Evaluation and assessment

		A Back	B Shoulders/upper arms	C Knees/legs
Total of risk scores in key indicators				
Unfavourable working conditions +				
Further working conditions +				
Time rating points	Total of all indicator rating points			
X	Risk scores of body postures			

Highest risk score (Total risk)

The risk score calculated and the table below can be used as the basis for a rough evaluation:					
Risk	**Risk range**		**Intensity of load*)**	**a) Probability of physical overload b) Possible health consequences**	**Measures**
	1	<20 points	low	a) Physical overload is unlikely. b) No health risk is to be expected.	None
	2	20 - <50 points	slightly increased	a) Physical overload is possible for less resilient persons. b) Fatigue, low-grade adaptation problems which can be compensated for during leisure time.	For less resilient persons, workplace redesign and other prevention measures may be helpful.
	3	50 - <100 points	substantially increased	a) Physical overload is also possible for normally resilient persons. b) Disorders (pain), possibly including dysfunctions, reversible in most cases, without morphological manifestation	Workplace redesign and other prevention measures should be considered.
	4	≥100 points	high	a) Physical overload is likely. b) More pronounced disorders and/or dysfunctions, structural damage with pathological significance	Workplace redesign measures are necessary. Other prevention measures should be considered.

*) *The boundaries between the risk ranges are fluid because of the individual working techniques and performance conditions. The classification may therefore only be regarded as an orientation aid. Basically, it must be assumed that the probability of physical overload will increase as the risk scores rise.*