



Machinery Safety
Through Operational Learning
Understanding Energy, Work and Work Design

Different ways people can reach past a guard

Consider how workers can reach the hazard through, over, under, around or from above.



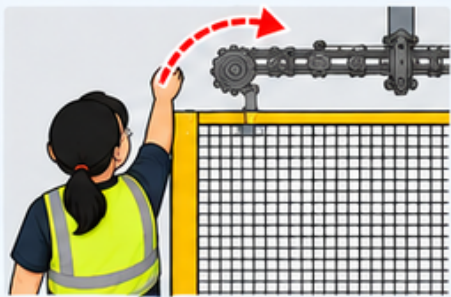
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Reach up

Can a person reach over the top of a guard?



- Can someone reach up and over the guard?
- Consider standing on something (e.g. a step, pallet or equipment).
- Keep the hazard far enough away.



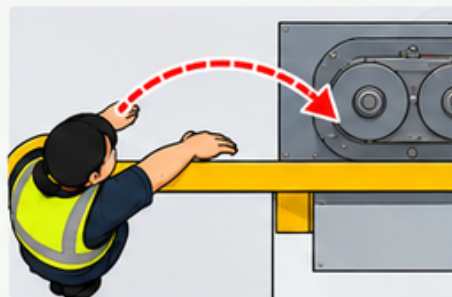
Example: Overhead chain conveyor (view from above)

Reach over

Can a person reach over a barrier or guard?



- Can someone lean and reach over the guard?
- Consider reaching from the side or while stretching.
- Keep the hazard far enough away.



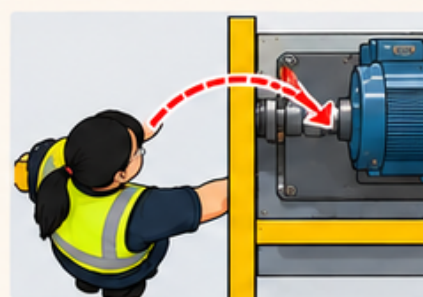
Example: Reaching over a barrier (view from above)

Reach around

Can a person reach around the side of a guard?



- Can someone reach around the side of the guard?
- Consider angled reaching and gaps at the ends.
- Keep the hazard far enough away.



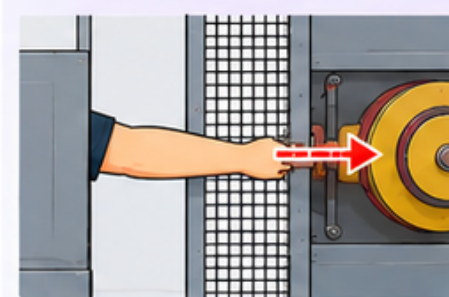
Example: Reaching around the side (view from above)

Reach through

Can a person reach through an opening in the guard?



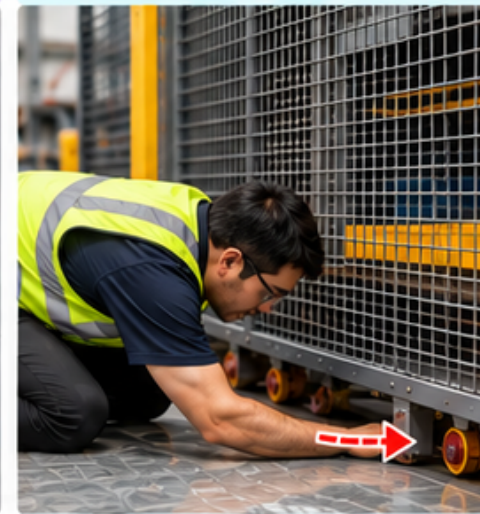
- Can someone put a hand, arm or other body part through the opening?
- Consider the size and shape of the gap.
- Keep the hazard far enough away.



Example: Reaching through an opening (side view)

Reach under

Can a person reach under a guard or fence?



- Can someone reach under the guard?
- Consider the gap between the guard and the floor.
- Keep the hazard far enough away.



Example: Reaching under a guard (side view)



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Note: These examples show common ways people can reach a hazard. Keep the hazard far enough away and use appropriate guarding and safety distances. Always refer to the applicable standard and carry out a machinery risk assessment for design or verification.