

Lighten the Load

Information for employers and workers of the **construction sector**

Avoid, reduce, reorganise



■ One of the examples of devices for transporting construction materials between places located at different heights can be a band conveyor (or a lift), as shown in the photo, installed next to the building or structure under construction.



■ In case of larger objects, the use of mechanical lifting aids may prove indispensable, as it will eliminate manual transport. The most important aspect then is the proper attachment of an object which is to be moved mechanically.



■ The necessity to remove the output manually from the excavation is eliminated by using a digger, which enables the contractor to carry out the work faster and significantly shorten the time needed to complete the investment.



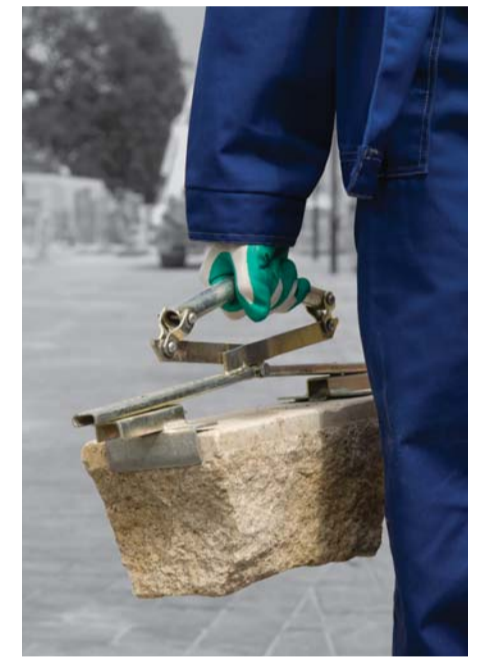
■ Lifts with special fork roots are helpful while relocating loads of considerable mass for a high altitude.



■ One of the facilities which can be used during demolition work to eliminate the need for manual handling of construction materials is a chute for throwing rubble from heights. During disassembly of large elements, the use of lifts can significantly reduce the physical load for workers.



■ During lifting of smaller objects, pressures on the worker's back can be limited significantly by the use of auxiliary equipment in the form of various grasping devices. Their simple structure facilitates the work, as the worker does not have to bend frequently.



■ Light objects, like cobbles, can be laid by hand in the kneeling position. In such cases provision of knee protectors would be indispensable. Good organization of work should enable the worker to change his body position from time to time in order to activate other muscles and reduce the pressure exerted on his joints, leg muscles and heart.



■ Suction devices can be used for manual transport of glass panes. It is recommended that glass panes should be carried on one side of the worker's body (torso), which reduces the risk in case the glass gets broken.



■ The necessity to bend towards mortar spot boards placed on the ground can be reduced by using a movable work surface. It should be placed at such a height so as to ensure comfortable reaching out to take the mortar, without the need to bend forward or sideways.



■ Wherever manual handling of loads cannot be avoided, one has to remember to follow the correct lifting and carrying techniques, first of all to place the feet next to the object correctly, to use thigh muscles while lifting with the straight back, and to keep the handled object as close to the torso as possible.



■ Gradual lifting of a long object, with a straight back and by using thigh muscles, reduces the risk of damaging delicate structures of the spine.



■ The photo shows safe handling of an object by 2 workers who are of similar height and age, when the distance between them is at least 0.75 m. Please note the necessity to coordinate such team work, and to use shoulder protectors in cases when the handled object rests on the workers' shoulders.