

“Trailers to transport different size fruit crates” (Transport fruit crates, boxes)

Task Description: PL_6j (PL–Poland, 6 – Harvesting of tree fruit, outside, I–male, 44 years, 28 ha field space, which consists of 19,5 ha apples)

- Manual handling and carrying the fruit boxes, crates on the orchard and from orchard to a cool storage
- Task connected with carrying, lifting and moving a fruit crates

Pictures:

AFTER



Comments of the employee:

- No helping devices available
- Loads too heavy, carrying distance too far, too low, ...

Comments of the employer: motivation regarding solution:

Working in position with hands above shoulder level, load of the upper limbs and lower back

Comments of the employee:

- “When I am carrying apples boxes from orchard to a cool storage I feel discomfort in upper limbs”
- “Discomfort in shoulders and lower back increases when I lift and carry heavy fruits crates with apples”
- “After all day work I feel strong pain in my lower back”

MSD risks:

- Posture
- Force

Exposed areas:

- | | |
|---|---------------|
| X | Neck/shoulder |
| X | Lower back |

Solutions:

Add the special trailers for transport fruits on orchard and from orchard to a cool storage. The trailers are adjusted to transport big fruit crates and small fruit boxes. They are suitable to aggregate with quad and with themselves make a kind of train up consists of a quad and trailers. Quad can easily reach boxes and crate situated on a path between trees. Quad is not as heavy as a tractor what avoid too strong pressure on a ground. Quad is smaller than a traditional tractor so it does not destroy trees branches. Additional quad is four-wheel drive, what is a huge benefit in an orchard.

Comments after implementing good practice solution:

- Performing this kind of task involves high load especially in shoulder, due to carrying heavy fruit boxes and crates
- Quad with small trailers is perfect solution to transport fruits boxes and crates from orchard, which reduce shoulders load and avoid developing MSD