



packer / stacker

Orders are placed in boxes and/or bread crates which are stacked in loading bay or cool room for truck drivers to deliver to shops/restaurants etc.

Packers tend to work at the end of the production process, and for dedicated roles this is often at night time. Shifts are variable depending on size of orders but generally 8 hours long with a half hour meal break.

work environment

- > tiled or concrete floor which can become slippery
- > multiple work benches 85-90cm high on average and 80cm deep on average
- > artificial overhead lighting
- > temperature within comfort zone except for cool room generally at 5 degrees Celsius
- > low level noise
- > limited floor and circulation space

tools and equipment used

- > hook for pulling stack of crates
- > dollies for wheeling stacks of crates
- > cardboard boxes of various dimensions
- > plastic bags of various sizes
- > crates measuring 60 x 67cms and 14cms deep on average
- > foot operated heat sealer
- > foot operated cardboard stapler
- > pallet jack / scissor lift / forklift

personal protective equipment

- > closed in rubber soled shoes
- > latex / vinyl gloves (may wear cotton gloves underneath)
- > uniform and / or apron
- > head cover / hair net
- > insulated jacket if required to access cool room for long periods

human factors

physical factors

- | | |
|------------------------------|--------------------------------------------------------------------------------------------------------|
| reaches | > Ranges from overhead to floor level |
| controls and displays | > Nil |
| force exertion / lift | > Low level push/pull force at maximum of 8kgs for trolleys/crate stacks and lift between 2 and 12 kgs |
| endurance required | > Constant standing |
| static muscle loading | > Shoulder elevation if reaching to high crates |
| work / rest patterns | > Generally one meal break |
| frequency of handling | > Constant product handling |
| grasping requirement | > Power grip |

social, interpersonal and psychosocial factors

- > Generally works with others as a team
- > Provides supervision or is supervised
- > Order packing can become monotonous

cognitive factors

- > Information ordering
- > Memorisation
- > Ability to apply mental arithmetic

task analysis - packing to boxes



Boxes are made up at bench by folding and inserting edges into each other. Product is collected and placed in box which is then closed and may be placed in crate. Crates may be stacked from floor level to above head height. Label is applied to box or crate to designate destination.

Packing of one box takes up to 30 seconds.

| physical demands | frequency | comment |
|-------------------|------------|----------------------------------------------|
| standing | constant | |
| walking | frequent | 0 - 2 metres per box |
| lifting | frequent | 1 - 5 kgs |
| stooping | occasional | |
| shoulder flexion | frequent | up to 90 degrees |
| power grip | frequent | |
| fine manipulation | occasional | with force through fingers when making boxes |

task analysis - **packing to bags**



Products such as biscuits may be placed directly into plastic bag which is sealed by depressing foot pedal of sealer, and placed in an outside cardboard wrapper or directly into a box.

Process takes up to 5 seconds per bag and may be constant throughout shift.

Sliced bread may be packed into bags by hand. Loaves of bread are placed into the bread slicing machine. The machine controls are adjusted to thin or thick slice as required. The bread is guided by hand through the machine and put on the metal shelf where a plastic bag is placed over it, and the bread in the bag slid off the shelf. The blades of the bread slicer are protected from the operator by guarding. A twist tie or other device may be used to close the end of the bag.

| physical demands | frequency | comment |
|--------------------------|------------|-----------------------------------------|
| standing | constant | |
| sitting | frequent | depending on benches and equipment used |
| lifting | frequent | 0.1 - 2 kgs |
| | occasional | up to 15 kgs |
| trunk flexion | occasional | |
| shoulder flexion | frequent | up to 90 degrees |
| power grip | frequent | |
| pinch grip | frequent | bags |
| hip / ankle extension | frequent | with force for pedals |
| bread | | |
| standing | constant | |
| lifting | frequent | approximately 0.2kgs |
| trunk flexion | frequent | |
| shoulder flexion | frequent | up to 90 degrees |
| shoulder rotation | frequent | move bread into bag |
| bilateral power grip | frequent | bread loaves |
| pinch grip | frequent | bags |
| fine finger manipulation | occasional | adjustment of controls |
| push / pull force | occasional | trolley of bread - 4 - 6kgs of force |

task analysis - packing to crates / cartons



Cartons may be made up by stapling edges by depressing footpedal of stapler. Paper sheet is placed on a crate / carton. The cooked product is taken from the tray and emptied into crate/carton. Crates are placed on stacks or covered.

When packing orders for multiple locations, stacks of crates or trolleys are pulled out of the coolroom and placed near packing stations. Packers collect products from crates/trolleys and place in a separate crate or carton which is placed on a dollie or trolley when full. The crate/carton is labelled to designate location and the order sheet is checked off. Dollies can be stacked 15 high in 2 rows. Full dollies/trolleys are pushed up to the loading dock and then crates are lifted from the dollie and placed in various locations on the floor of the loading dock or directly onto trucks. The empty dollie is either wheeled or carried back to the packing area.

Approximately one minute per crate/carton.

task analysis - **packing to crates / cartons** (continued)



| physical demands | frequency | comment |
|-----------------------|------------|------------------------------|
| standing | constant | |
| walking | constant | 3 - 6 metres per crate |
| lifting / carrying | constant | up to 6 kgs |
| | occasional | up to 15 kgs for bread rolls |
| trunk flexion | frequent | |
| trunk rotation | occasional | |
| shoulder flexion | frequent | up to 90 degrees |
| | occasional | up to 170 degrees |
| shoulder elevation | frequent | |
| shoulder abduction | frequent | up to 90 degrees |
| elbow flexion | frequent | up to 90 degrees |
| wrist extension | frequent | up to 90 degrees |
| power grip | constant | handling products |
| hip / ankle extension | frequent | with force for foot pedals |