

# Healthy Workplaces Good Practice Awards 2018-2019

## CASE STUDY



### Reducing worker exposure to harmful dust in the arable farming sector



#### ORGANISATION/COMPANY

Mansholt BV in collaboration with Stigas

#### COUNTRY

Netherlands

#### SECTOR

Agriculture

#### TASKS

Potato handling in arable farming

### Background

Mansholt BV is a family-run farming business based in Westpolder, Vierhuizen, the Netherlands. The company's main activity is cultivating seed potatoes. From October to March, potatoes are sorted in a shed and prepared for delivery to clients. At this processing stage, the material adhering to the potatoes is dry, forming a dust consisting mainly of soil and vegetation. Inhalation of this dust can be harmful to health, particularly if it contains crystalline silica, which can cause chronic lung disease and lung cancer.

Periodic risk assessments carried out by Stigas — the occupational health services provider for the agricultural sector in the Netherlands — have highlighted that the company's workers were at risk from exposure to such dust. The company was committed to addressing this problem and has worked closely with the sectoral body over the years to develop an action plan for minimising exposure.

### Aims

The company aimed to reduce the exposure of workers in its potato-sorting shed to potentially harmful dust and to provide a clean, safe and healthy working environment for all workers.

### What was done and how?

Through collaboration with Stigas, Mansholt BV has identified practical ways of reducing worker exposure to dust. A combination of technical, organisational and personal protective measures have been implemented in stages, following the hierarchy of control measures foreseen in legislation.

In 2003, the company purchased an electric forklift truck for the potato-sorting shed to minimise the amount of dust blown about, while also eliminating exhaust fumes and reducing noise from formerly fuel-powered engines.



Source: Mansholt BV.



Source: Mansholt BV.

In 2007, the company installed a new potato-sorting unit in a specially designed 'reading room' with a low ceiling and positive pressure system, meaning that dust is forced down at the sides. Before the potatoes enter this room for sorting and processing, they pass over a special conveyer belt that removes most of the dust. A sweeper vacuum machine was also purchased. This is used to clear the floor of dust in the morning before work begins and at various intervals throughout the day.

In 2012, a large dust extractor was installed. All points of the potato-sorting conveyer at which the potatoes fall from one level to another are enclosed and connected to a large central air extraction point to prevent dust from escaping into the air.

The company also implements a daily cleaning and vacuuming regime, to keep the level of dust in the air as low as possible.

Importantly, the above technical and organisational measures are very effective at minimising worker exposure to dust, meaning that personal protective equipment is rarely needed. For any activities that are likely to lead to exposure to particularly high levels of dust, masks with exhalation valves are provided.

In addition to these measures to reduce exposure to dust, the company has also taken other steps to improve working conditions; for instance, the installation of LED lighting and a skylight has created a more pleasant working environment in the potato shed.

## What was achieved?

The combination of measures implemented by Mansholt BV has substantially reduced the amount of dust in the air in the potato-sorting shed and has considerably improved working conditions. This is appreciated both by workers and by clients. Moreover, the company's achievements have been recognised by Stigas, with one prevention advisor highlighting that its efforts to invest in a healthy workplace make it a leader in safety and health in the agricultural sector in the Netherlands.

However, despite these achievements, the company is not complacent and continually looks for ways to reduce risks and improve working conditions, through effective collaboration with Stigas and with the active participation of workers.

## Success factors

The company is committed to ensuring safe and healthy working conditions for its employees, recognising that worker well-being is key to ensuring satisfied customers and a successful business.

With the support of the sectoral body for occupational health, it has implemented the hierarchy of control measures to address the risks posed to workers by hazardous dust in its potato-sorting shed: although substitution is not possible, as the handling of potatoes cannot be avoided, the company has reduced risks first and foremost through the implementation of collective technical measures at as early a stage in the processing chain as possible.



Source: Mansholt BV.

The workers value the company's efforts and actions to improve working conditions, and are actively involved in finding solutions and implementing changes. Management and workers work together when purchasing new equipment and updating production processes to ensure that occupational safety and health are priorities.

## Transferability

The approach taken by Mansholt BV is a good example to other companies, including those outside the agricultural sector, of how a small business with limited resources can make real improvements to worker safety and health through cooperation with a sectoral body and by changing equipment and processes gradually.

## Costs and benefits

In total, the forklift truck, sweeper vacuum machine and dust extractor cost more than EUR 100,000, which is a considerable investment for a small company. However, this expenditure was manageable because it was spread over a period of several years. Moreover, the costs are outweighed by the benefits, that is, a decrease in the risk that workers will develop dust-related health complaints and low rates of sick leave.

## Key features of good practice example

- The company systematically addresses workplace risks with the support of the sectoral occupational safety and health body, Stigas.
- Despite being a small company with limited resources, Mansholt BV has successfully implemented a range of collective technical and organisational measures to protect workers from potentially hazardous dust, leading to improved working conditions for workers.
- The measures taken go beyond legislative requirements and are sustainable.
- This example of good practice is transferable to other small businesses, including those outside the agricultural sector.

## Further information

Further information can be found at: [www.stigas.nl](http://www.stigas.nl)

## References and resources

<https://www.hseactueel.nl/nieuws/mansholt-en-volandis-winnen-competitie-goede-praktijken/>

***'The company's efforts to invest in a healthy workplace make it a leader in safety and health in the agricultural sector.'***