

DT Dijkstra: innovation and experience

Bunkers are generally thought of as components of a logistic installation that require little or no maintenance; with the exception of the bunker feed and discharge conveyors, there are hardly any moving parts. Nevertheless, certain parts of a bunker are subject to wear and tear. Over time, the rubbing of the product may cause wear to the steel panels, a process intensified by sand and dust in the product mass, and moisture may also cause corrosion.



Overhaul kit for bunkers

The Schaap Holland company (Biddinghuizen) asked DT Dijkstra if it would be possible to overhaul their bunkers. Schaap Holland has a total bunker capacity of 1,500 tons. The bunkers had been sourced from various suppliers over the years and were showing severe wear in various places due to prolonged and intensive use. Following an inspection and consultation with the customer, it also became clear that the bunkers no longer met the prevailing requirements for food safety and product handling; among other things, the steel walls and pressure-hoods were causing blue spot (internal bruising). Schaap Holland therefore decided to have their bunkers thoroughly overhauled and upgraded to conform with current and future standards

Completely worn out through abrasion

In practice we frequently see bunkers in which certain parts have been completely worn out through abrasion; usually the base panels and pressure-hoods. But the affected surfaces represent only a small part of the total bunker construction, and replacement of the entire construction would be a costly operation. Bunkers are also often integrated, forming part of a comprehensive installation.



Optimal protection

To solve this problem, custom-made bottom panels with pressure-hoods have been developed. These are assembled in production, pre-mounted and then installed in the bunker as easily manageable modules. The panels are made from stainless steel, and include a soft landing layer consisting of 4 cm soft foam covered with a 3.5 mm semi-solid rubber coating. This protective layer continues right through to the lateral panels of the bunker discharge conveyor to ensure optimum protection

of the product and, depending on customer requirements and the bunker filling system, the pressure-hoods are also either partially or fully fitted with soft landing. The seams are fully finished to avoid contamination and to prevent the development of blockages.

Bunker overhaul kit

Schaap Holland in Biddinghuizen are particularly pleased with the result. 'Many of our bunkers were worn and rusted, especially the bottom panels, which is why they no longer met current requirements. In addition, the obsolete construction was causing internal blue bruising of the product', says Henk van Raalte, Technology & Maintenance Manager at Schaap Holland. 'Over the past few months, DT Dijkstra, together with Schaap Holland, have explored a potentially viable, effective and financially acceptable solution for overhaul and improvement (avoidance of blue bruising) of the bunkers, and the DT Dijkstra bunker overhaul kit has been created. And that's not all. DT Dijkstra can supply these panels for any type and make of bunker. An overhaul of various bunkers has therefore been planned for the oncoming months'.

If you would like to know more about the bunker overhaul kit, please contact the DT Dijkstra Sales department.

Compact grading line for seed potatoes commissioned at Geerligs in Anna Paulowna

DT Dijkstra recently commissioned a compact seed potato grading line at the farm of Geerligs in Anna Paulowna. This line was supplied by Prinsen Agricultural & Handling Solutions of Emmeloord. Intensive and optimal collaboration has resulted in a bunker installation with a compact build, entirely in line with the customer's requirements.



The Geerligs partnership

The Geerligs partnership exists of the brothers Dirk and Henk Geerligs. In addition to sugar beet, cereals and grass seed, they also cultivate 50 hectares of seed potatoes. The business also has its own storage facility. During the winter period, the brothers grade and inspect the seed potatoes and pack them into boxes, bags or big bags, ready for delivery or on-site use. 'We have been grading with a DT Dijkstra AT2/5 machine for many years', says Henk Geerligs. 'This machine is very reliable, with low operating costs, but the old installation took up a lot of space in the barn because all the components were installed in line, one behind the other. We have already invested in an automated Van Hees Machinery box filling and emptying module with a stacker and de-stacker, which we also wanted to use for grading. Other modules have also been added, such as a bag-sewing station and a palletising machine. All in all, the set-up of the grading installation no longer suited our requirements'.

Effective

The combination of the DT Dijkstra bunker installation and the VHM box filling and emptying module with box warehouse makes for a highly effective

installation. Henk explains: 'We can buffer a large volume of product before and after grading. As a result, with one person working in the inspection room and the other taking care of product feeding and discharge, my brother and I can grade all batches ourselves'.

Dust prevention

The recently commissioned installation was constructed in an area of 5.5 x 15 m. This area is surrounded by walls so that it is separated from the processing area. 'This is how we decided to minimise dust formation. The dust often contains residues of pesticides and treatment agents, and as more and more information is becoming available about the potentially harmful long-term consequences of this, we want to avoid the breathing in of dust as much as possible in future', says Henk'.

Minimal footprint

'We discussed our requirements with Prinsen and DT Dijkstra and they came up with several solutions, all worked out in 3D blueprints. This enabled us to form a clear picture of the pros and cons of the solutions proposed. We had several sessions with DT Dijkstra to discuss the possibilities, and the

ensuing modifications were consistently processed in 3D blueprints. We liked this approach, which gave us the opportunity to make the right choices'.

Eventually, the brothers opted for a 5 bunker configuration, with the RT 2/5 grading machine installed above it. This machine features a frequency control for setting the shaking speed, plus a hydraulic sieve clamping system which enables a fast and easy change of sieves. A distributor conveyor was installed behind the grading machine. The use of adjustable guidances facilitates various choices for the use of the bunkers. A hedgehog conveyor leading to the grading machine was also installed.

Henk's verdict: 'Thanks to this installation and its effective grading method we are ready for the future. We are very happy with the collaboration with DT Dijkstra, and we expect this relationship to continue for many years'.

Wet cleaning

50% less water

Processing businesses prefer to have an appropriate over-capacity with a high degree of flexibility for the wet cleaning of products. DT Dijkstra offers industrial food-safe washers, with drums ranging from a diameter of 1 m and a length of 3 m. The range also includes washers with a length from 8 to 10 metres for potatoes, and a special newly-developed carrot drum can also be fitted to the washer if required. This octagonal lattice drum ensures optimum mutual rotation and rubbing of the product. An integrated auger is available to ensure an efficient and cost-positive use of washing water, whereby up to 50% can be saved on water consumption.



Benefits of the DT Dijkstra washers:

- Configured according to clients' requirements and tailor-made
- Consistent operational reliability and 'built to last'
- Completely food-safe (option)
- Water-saving integrated auger (option)
- Maximum washing flexibility
- User-friendly HMI
- Option: combination with stone, clod and haulm separator.

Grading

Unrivalled capacity and quality

The DT Dijkstra grader represents 90 years of experience, and the unique double-shaking technology with alternating stroke length remains unparalleled. A unique combination of flexibility, grading quality and capacity. Size changes can be made within just a few minutes thanks to the hydraulic fast-clamping system for the sieves.

DT Dijkstra grading machines are available in widths ranging from 1,000 to 2,400 mm (10 to 65 tons per hour).



Benefits of the DT Dijkstra grading machines:

- Completely food-safe (option)
- Maximum grading capacity
- Outstanding size accuracy
- Unrivalled durability.



Also available in stainless steel

dt DIJKSTRA

Potato Europe

DT Dijkstra will also be attending this year's edition of Potato Europe. Make sure you visit our stand (V442) to explore the latest developments in the field of potato, onion and carrot processing. Take a good look at our latest stainless steel grading machines, the revamped transport conveyor frame and the bunker overhaul kit, among other things. We would be delighted to meet you on our **stand V442**, where our Sales Team will be happy to help you!



Agrofoodcluster

DT Dijkstra will be participating in the Job Journey during the Potato Europe event. This has been organised, in combination with the Students' Day, by the Agrofood Cluster, with the aim of showcasing career opportunities within the agricultural industry. If you would like to know more about job vacancies and career opportunities at DT Dijkstra, visit us on **stand V442**. You can find more information about the Job Journey and Students' Day here: <http://agrofoodcluster.com/potato-europe-studentendag/>



AgroFood
ClusterNL



dt DIJKSTRA

excellent service & maintenance

Standstill due to breakdowns or worn machine parts is always an undesirable situation, detrimental to productivity and often leading to unwanted costs which could have been prevented.

Maintenance:

prevention is better than repair

Have your preventive maintenance carried out by our qualified DT Dijkstra service team. With our specialist expertise and experience, we will ensure the optimum maintenance, repair and adjustment of your installation.

Maintenance contracts

DT Dijkstra Service offers various customer-specific maintenance contracts. These ensure that your installation will be fully checked, optimally adjusted and repaired whenever necessary; always in accordance with the appropriate time schedule. These maintenance packages

are put together in consultation with you, and realised with due regard to all your requirements and business conditions. A maintenance contract also enables you to plan your maintenance budget beforehand.

Spare parts

DT Dijkstra Service uses only original parts in keeping with the prevailing specifications, always making sure that modifications or adjustments are implemented consistently, so you always benefit from ongoing technological developments, and your machines remain up-to-date.

Planning of maintenance or inspection

If you would like to have your machines thoroughly inspected and/or be informed about the benefits of a maintenance contract, please contact our Service Department: +31 (0) 527 697 731 or services@dtijkstra.nl. They will always be happy to help 24/7.

Service department:

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