



THE FORMULA FOR THE RIGHT GRADING OF SAMSO POTATOES

In April 2017 Skals delivered a complete new grading system to the two brothers Søren Peter and Jens Kristian Kjeldahl from the company Brdr. Kjeldahl. The company is located on the 114km² Danish island Samsø in the Kattegat. Since 1988, Brdr. Kjeldahl has been growing and delivering delicacy potatoes of high quality. All potatoes are sold to the retail company Dansk Supermarked.

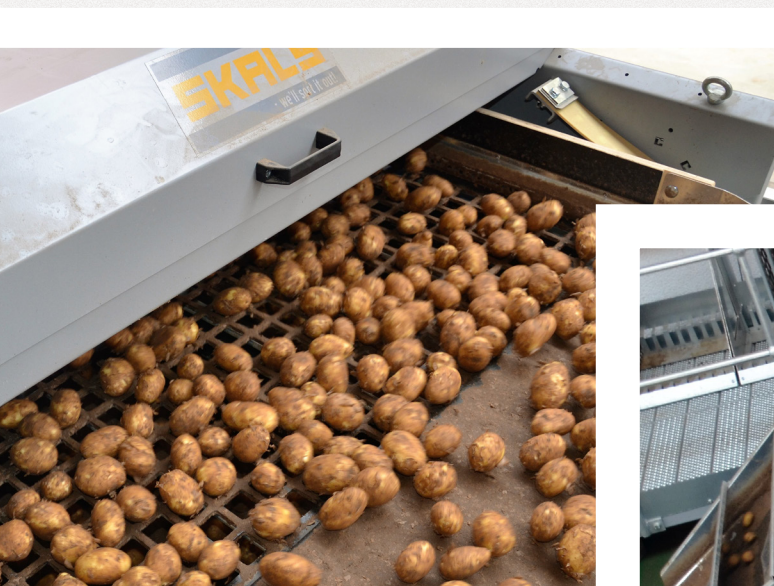
In addition to the 6,000 ton of potatoes each year, the company also grows asparagus, pumpkins, red cabbages, celeries and onions from 750 hectares of land. After decades of use, the previous grading system was outdated and worn down. There was therefore a need for a 2017 update.

ASSIGNMENT:

The task was to construct an updated and efficient system. The fact that production takes place on Samsø, represents a challenge since the goods each day have to be sailed by ferry to the mainland at 16.00. The challenge requires a grading system capable of running without any stops, as it may be extremely costly for Brdr. Kjeldahl, if the grading system stands still.

Therefore, a special solution based on Skals standard components has been built. The system consists of an inclined conveyor belt, from this point it is possible to send the potatoes to either a brushing machine or into a soil extractor. This depends on, how skin-resistant the potatoes are. Once the potatoes are cleaned, they go to the two modular grading machines that are able to grade in five sizes. It is a very important parameter for Brdr. Kjeldahl, that it is possible to send the potatoes directly into the silo, the boxes or to the washing line through cross belts.

Furthermore a platform has been built around the system. A riddle rack is placed on the platform, making it quick and easy to replace the riddles in the grading machines and to service the system.



Increased capacity, no stops and less noise

The great advantage of the new system is the massive increase in the capacity. The capacity has been increased by 50% compared to the previous system.

The new system has been running impeccably without any stops since it was installed.

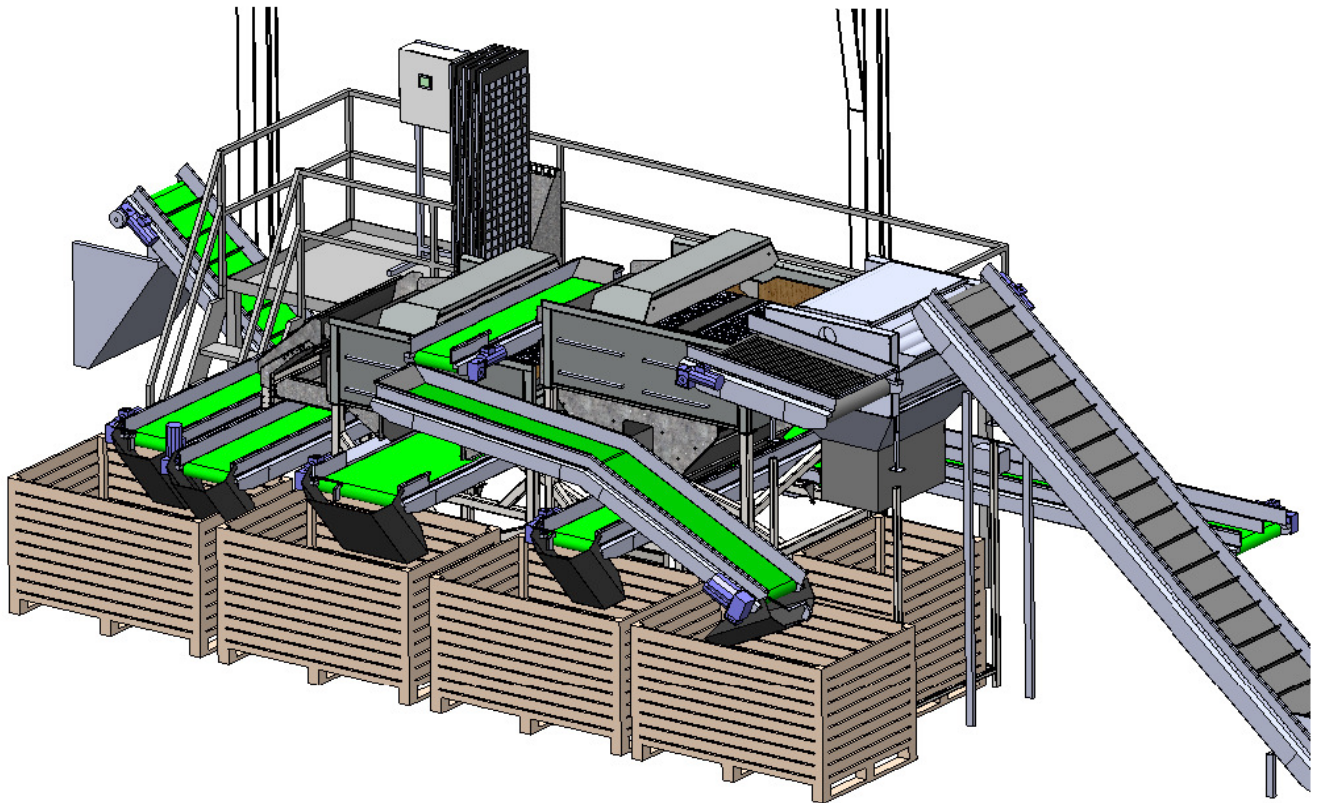
As a side benefit, noise in the production hall has been significantly decreased. Something the employees in the production, greatly appreciate.

Danish quality

It is important for Brdr. Kjeldahl, to choose a high-quality system, where system service and spare parts can be delivered quickly and efficiently. It was therefore obvious to choose a Skals solution.



Søren Peter Kjeldahl go through the grading system with Bøje Olsen and Søren Lund Madsen from Skals.



CUSTOMIZED SOLUTIONS

3D drawing of the system to Brdr. Kjeldahl



The potatoes from Brdr. Kjeldahl are subject to strict quality requirements, to make sure that the consumers always receive the best potatoes possible.



Brdr. Kjeldahl is most pleased with the consulting and service they have received from Skals. Here are Søren Peter Kjeldahl and sales consultant Bøje Olsen from Skals.

SOLUTION:

- TM inclined conveyor belt with carrier
 - Suspension with moveable support rollers
- Possibility of either running into the brushing machine or into the soil extractor
- RK – Soil extractor - Soil, sand, sprout etc. are effectively removed
- BM Brushing - Dirt and soil removal by brushes
 - The products visually appears as better quality
 - makes the products appear as visually better quality
- 2 x SDe grading machines - allows grading up to five sizes - Gentle grading with Hop principle, which ensures optimal precision
- Cross belts - reversible - from which the products can run into boxes, or on the opposite side to the washing line or in the silo
- FDS box fall dampers - automatically open and close using compressed air. To be activated with a remote control from a truck
- Platform with 02 rackets and a stand - making it easy to service the system and replace the riddles in the grading machines

Great customer satisfaction

The company Brdr. Kjeldahl is very pleased with the process of the project and their expectations for the result have been fully met. There has been a good dialogue with both the sales contact and the service team from Skals. The phase up to and after delivery has worked well and corrections have been made as agreed. Søren Peter Kjeldahl comments:

"We are extremely pleased with the cooperation we have experienced with Skals. Throughout the process, our sales consultant from Skals has been a great and professional sparring partner who has provided us with thorough instruction. At no time, we have been in doubt, that we have chosen the right grading system. The system has been running impeccably, since the installation."

Samsø – a strong brand

The island of Samsø is known throughout Denmark for its early potatoes. This is due to the fact, that the island has a mild climate with fewer rainy days and more hours of sunshine than anywhere else in the country. The weather conditions and the good sandy soil on the island create optimal conditions for the growth of potatoes.

Brdr. Kjeldahl start up the potato process in January, when they germinate the potatoes in heated warehouses. When the risk of frost is minimal, the potatoes are placed in the soil. From there on, the wind and weather determine when the potatoes can be taken out of the soil.

In addition, the island Samsø is marketed as the bread basket of Denmark. The last few years there has been a high demand for food from the island. Samsø has built a strong brand, which several supermarket chains have become aware of.

RESULTS:

- Increased capacity: 50% more than the previous system
- Updated and customized production
- Improved working environment - no noise and easy to service
- Increased efficiency in production = No stops
- Excellent service

