

NEWTEC NEWSLETTER

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NEWTEC

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Dear Newtec dealers,

It is with great pleasure we hereby send you the latest version of the Newtec Newsletter.

As you are all aware, we always have many activities going on here at Newtec, projects in the laboratory, new software developments and new machines to suit the demands in your different markets.

In this Newsletter we will highlight and describe some of the new machines and their functionalities. As you will learn reading through this Newsletter some of these machines are already available today and some will be in the very near future.

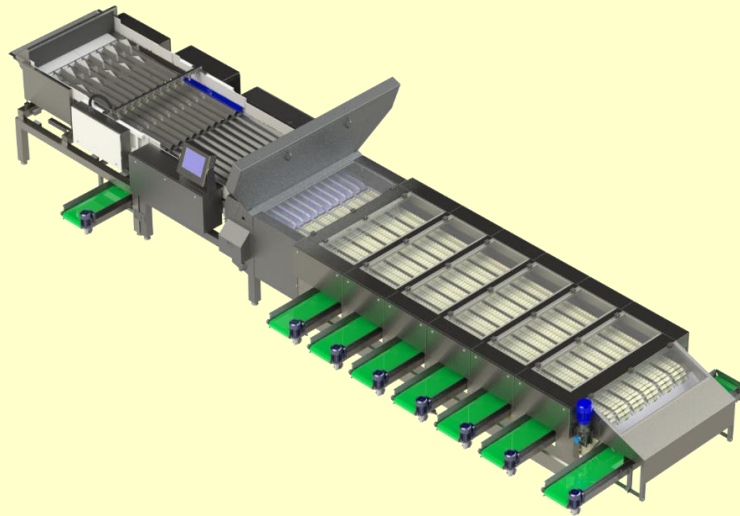
Also, we would like to use this opportunity to thank all of you who have visited us since the last Newsletter – with or without customers. It is always a great pleasure to welcome you here, and we hope more of you will do the same. We have a strong feeling that these visits are very beneficial for you, your customers and Newtec.

Please take your time to read this Newsletter we are sure you will find the information very useful and valuable. Should you have further needs for information, please do not hesitate to contact us.

All the best wishes,

The Newtec Team.

New Celox Carrot Machine



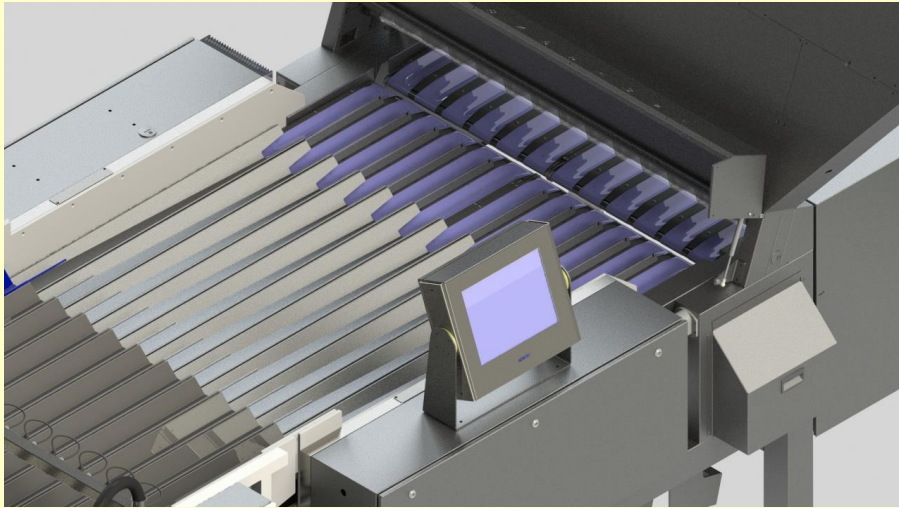
The new NEWTEC Celox-C UHD machine for carrots includes nine of the newly developed UHD cameras in total – three mounted underneath the machine and six mounted on top of it to cover the full surface of the carrots. As the XT-model, this new Celox-C UHD is of course also compatible with Newtec Web-Services.

The web-based interface allows the operators to configure the machine through a web browser on external devices. Additionally it provides NEWTEC service technicians with the possibility of having direct access to the machine for troubleshooting, service and support.

The Celox-C UHD can grade out carrots with:

- Green tops
- Sunburned tops
- Black spots
- Growth cracks and rot
- Carrots that are C-shaped, S-shaped or broken
- Carrots that are albinos or split

A major change to the inspection system has been the new belt system, which consist of four units that can be removed without the use of any tools. That makes the system more maintainable and user friendly.



The Celox-C UHD also grades carrots accurately for length and diameter within +/- 1mm, volume within 5% accuracy, and shape and quality simultaneously. The Celox-C UHD is available as an 8-lane model or as a 12-lane model and from 3-13 outlets. Both models handle the carrots very gently with capacities of up to 80,000 carrots/hr and 120,000 carrots/hr respectively, equalling up to 10 tonnes per hour (average weight of carrots being 83.3 gram).

NEWTEC can produce and install specific customer requested filters on the machines to capture local defect types.

New NBM Concept



Over the last years, the number of NBM-machines sold has been very positive. This, of course, brings the NBMs in focus and has now led to a long planned up-grade and modification of the standard NBM machines.

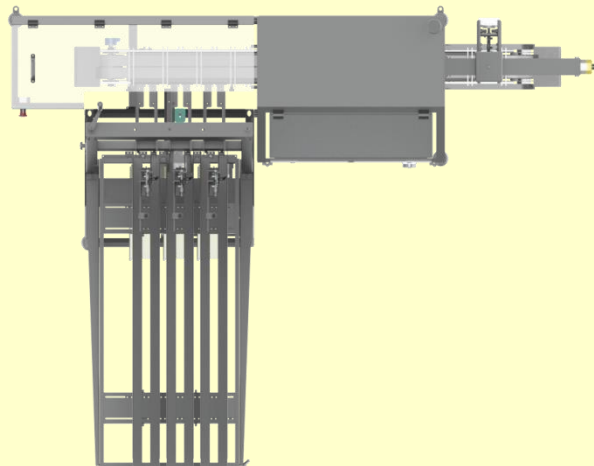
The new concept is now taking form, and we are pleased to bring you the first status of the project. Saying that, shortly before the summer holidays we plan to have the first prototype ready for initial testing.

In the following text, we will highlight some of the changes and benefits we bring in the new version of the NBM-family. As you will see, we have addressed and improved a large number of the functionalities in the machine along with a much more generic design – resulting in a higher level of flexibility and configuration.

Changes and benefits

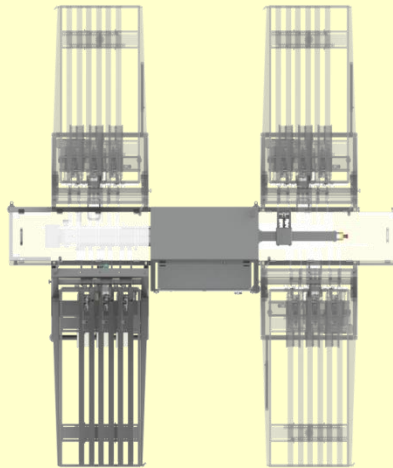
The new series of NBMs will come with the RC206 touch screen, which will improve the Man-Machine-Interface. The new machine will also be equipped with an encoder – to replace the current index sensor – to ensure correct placement of the punnets, this is also planned to be operational through the touch screen.

The punnet conveyor is now placed more in-line in the machine.



The new center driven conveyor can be delivered in extended versions, which brings several advantages to the machine. In an extended version, the customers can either have manual dispensing of punnets before the automatic dispenser station or manual punnet handling after product infeed. Furthermore, the design allows easy add-ons as labelling, printers etc. If needed the new NBMs can be fitted with extra push-outs in both directions, and with the new punnet conveyor design we can now avoid the

current roller conveyors and push the punnets directly onto the takeaway belts. The new design also makes it possible to have multiple dispenser sections and a possibility to place the dispenser section in each corner, as shown underneath. In other words, a very high level of flexibility, which will meet far most of the specifications we have seen so far.

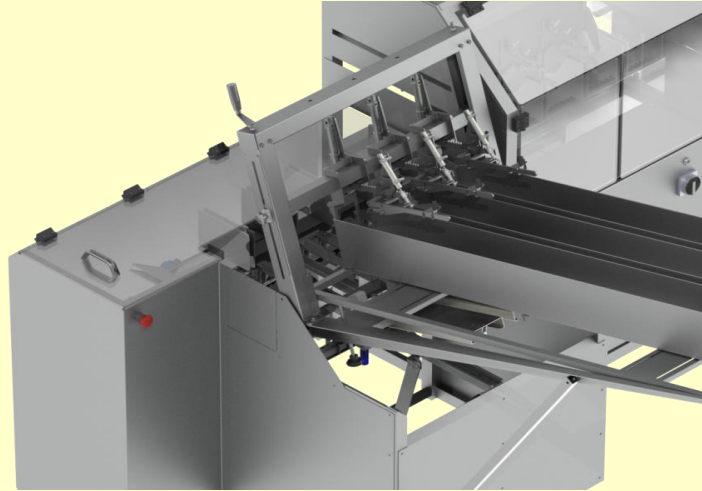


A large improvement in the design of the new punnet conveyor is the enhanced way to adjust the belt for different punnet sizes. On the new NBM the operator simply loosen/tighten the belt with a socket wrench through a hole in the cover. This combined with the functionalities in the touch screen and the improvement described underneath makes the change over time from one punnet to another much shorter than known today – and brings clear benefits to the customer.

To further improve the needed adjustments on the machine we have made several changes around the dispenser system. In the magazine, where the punnet stacks are placed, the side guides are now connected in right and left pairs. This means that the operator only adjusts one – and the rest will follow. As a new feature, you will find that the new NBM is equipped with a sensor on every lane in the dispenser magazine. When one or more lanes are running empty a light on top of the machine will indicate, in due time, for the operator to re-fill the magazine.

To separate the punnets a new system has been developed so the adjustment of the knife can easily and accurately be done by only using a hand wheel. In order to accommodate for the different heights of the punnets the new punnet separator is mounted on a cross bar also operated by a hand wheel. This makes the adjustment very easy and more important very precise. The new system fitted on the cross bar

ensures that the level adjustment always is equal in both sides of the bar and that the separator always is perfectly placed to the punnets.

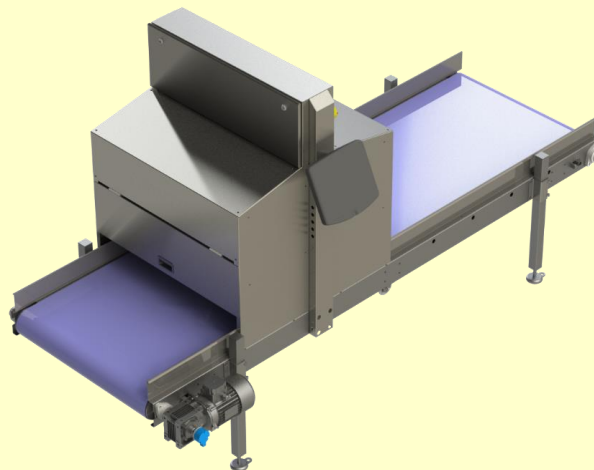


As shown on the picture the new NBM is designed with transparency to both the punnet conveyor and the collecting pans. At all times you can see and follow the products and the packaging process. The design fully complies with all the CE-marking standards and all needed covers for protection are included.

We hope this has caught your interest and will contribute to the future sales of the NBMs. We believe the new model contains a large number of excellent selling points as described above. We have prepared brochures, which will be released together with the machine, and once the first machine is produced, a video will follow.

Last but not at least, we aim to sell the new models at the same prices as the current NBMs.

Changes to the Scout camera



Newtec Engineering has now introduced the new design of the Scout camera.

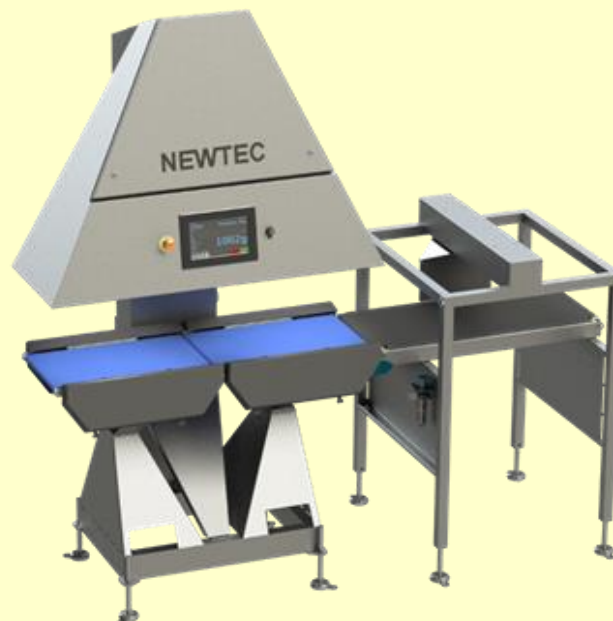
The Scout camera offers potato growers and packers a way to automatically measure their entire potato produce before storage.

The camera measures the **length**, **width** and **height** of the potatoes so that the packers can be confident about the size distribution of the batch.

The scout camera will show discrepancies between guess and true size distribution in a batch and the differences among various batches in terms of tuber sizes. This enables the growers/pack house to correlate results between different fields and between different field-treatments. The accurate information from the Scout is automatically exported into Newtec Web-Services and presented to the user in simple and understandable formats. This again enables the user to precisely plan the production in accordance to orders and thus minimizes the production time needed to achieve the outstanding orders – in other words no more errors, no more guessing and a more profitably crop.

Belt speed 1m/s, width 800 mm. Under normal circumstances 60-65 tonnes/hr. depending on average size of the potatoes.

[Check Weigher Update](#)



The QC90-2 machine is a brand new precision check weighing and visual inspection system.

It provides a fast weighing complying with MID, and the thereby following assurance that the bags are packed correctly.

The QC90-2 is equipped with a high-resolution camera, which incorporates a visual recognition capability. It detects the placement of the bags on the infeed and weighing belts in order to secure the optimal separation of the bags before they reach the load-cell. The speed of the belts will vary and pull the bags apart. Naturally, the QC90-2 is able to reject over and under weights using one of the three options available as reject system.

The stainless steel construction makes it very stable, reliable and easy to maintain. Furthermore, it features a user-friendly operating system with touch screen interface. Web Services is enabled for data collecting, archiving and process monitoring. It can provide feedback to Newtec weighing machines for automatic runtime and adjustments.

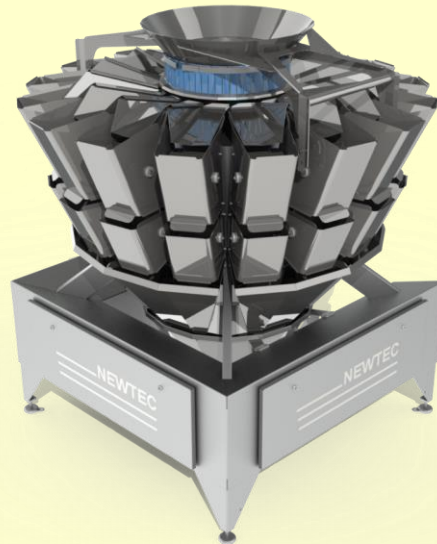
The new Check Weigher has a range of 0.5kg to 6kg and has a capacity up to 90 bags per minute at 2500g.

The weighing accuracy: e2, accuracy class XIII(1)

- 500-1000g +/- 1g
- 1000-4000g +/- 2g
- 4000-5000 +/- 3g

Soon a new brochure will be available. This brochure will highlight all the new features and the new options for the reject systems.

Newtec Round Weighing Machine



The first Newtec round weighing machine has now been through its first field test. This took place at the company Flensted in Denmark. Flensted is owned by the German company Wernsing.

The test went on for a good 3 months, and the weighing machine performed very well the entire period.

The cooperation and feedback from the production people at Flensted have taught us the strong and weak points in the machine. During the trial period the machine performed approx. 600.000 weighments.

To those who have not yet seen the machine we can inform that it is a 16 channel weigher optimized for ½ to 2,5kg portions, but can go up to 5kg in one dump.

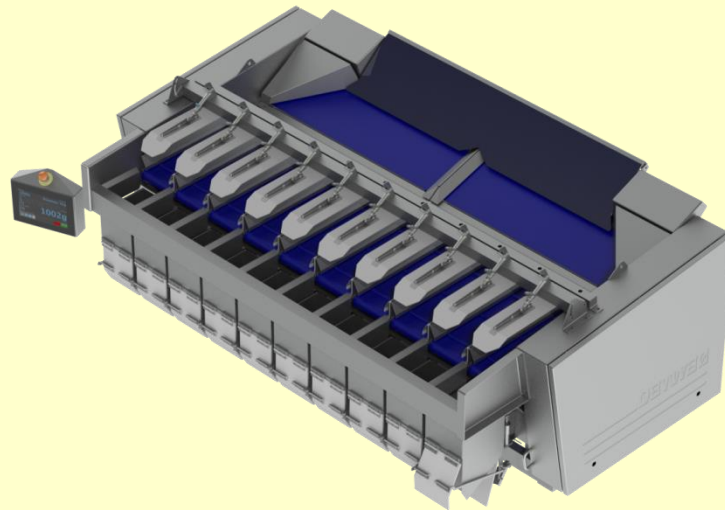
At Flensted they have mostly done 1 and 2,5kg portions. Maximum speed of the machine is estimated up to 90 packs per minute.

The prototype machine is now back at Newtec after the trial. We now have a project to do some proposed changes we learned about from Flensted and some modifications we want to do after seeing it run in production. A couple of examples hereof is; changes in the weigh cups to make them more tight for smaller products, possibly to change the integrated floor frame design for easier maintenance and finally to make some modifications in order to reach a stage of IP67.

We do not yet have a time estimate for those changes/modifications, but we will inform you when this gets closer. In addition, we plan a new field test once the changes are in place.

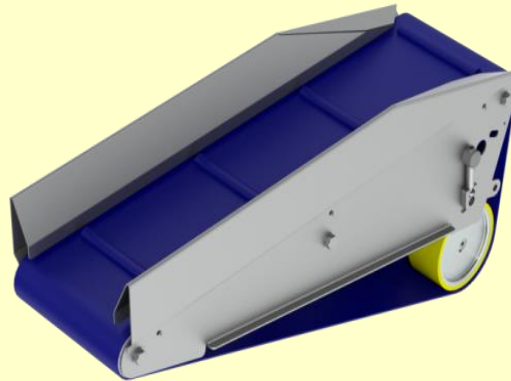
Look in the next Newsletter for the next status report for the round weigher.

New Weigher for unwashed products: 4010XXB1CI



Newtec is developing a new weighing machine optimized to weigh big portions quickly, with unwashed product such as potatoes. The weigher will be designed with conveyor belts instead of rear vibrators to distribute the products efficiently into all 10 lanes, which will also consists of conveyor belts, instead of vibrating chutes. The newly designed belt conveyors will then be able to deliver up to 5 kg of potatoes every 3rd second into each of the weighing cups. This new system brings the benefits of moving big amounts of products quickly and thereby provides a faster filling time.

Another nice feature is that the filling conveyors are constructed so they can be easily removed and thereby provide optimal conditions for service and maintenance. Worth mentioning is also that this machine, compared to other competitive machines, is NOT driven by chains, but by individual motors incorporated in each belt.



A prototype of the filling conveyor has been made, and there have been done some initial testing with very promising results.

The benefits by using belts instead of vibrators are that dirt from the unwashed potatoes will not stick to a chute, making cleaning necessary too often. The products can be moved more quickly and precisely with a conveyor belt, which is an advantage doing big portions.

As shown on the picture above the weighing section and the collecting section will be made of already known components from the XXB-series. PCS-systems will be developed according to orders.

The frame and electrical cabinets will appear as glass blasted units, which emphasize cleanability.

The first machine will be shown at an exhibition in the UK in the beginning of August 2015.

We thank you for taking your time to read our Newsletter, and hope you found it interesting. Once the new machines are ready for sale we will inform you, also brochures will be available accordingly.

All the best from the entire Newtec Team.

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