

RIETVELD EQUIPMENT



Integrated solutions for 2 to 100 tons/hour



ALLROUND
VEGETABLE PROCESSING

Complete Lines



UPMANN
PACKING SOLUTIONS

Packing Solutions



Dust Extraction



Line Automation



Water Treatment



Palletizers



Bin Automation



Packing Solutions

www.rietveldequipment.com

RIETVELD PARTNERSHIP OF COMPANIES



ABOUT US

Rietveld Equipment referred to as "RVE" is proud to present you the Partnership of companies. RVE and Allround VP started selling lines for the processing of onions, potatoes and carrots since 2014. The projects that RVE has realized and has in order have become larger and more complicated. Each project has multiple disciplines and suppliers. However, the different types of machines must work together flawlessly. We therefore have a group of companies in the Partnership together that are among the top in the world in their field. RVE in collaboration with Allround Marketing coordinates the contact between the various companies. When we have a proposal, we bring the customer into contact with the various suppliers in a joint conference call. The starting point is consistently to find the most cost-effective solution together with you. We are not a collection of dealerships

but a composite team of specialist companies that are well integrated with each other. Allround Marketing has all relevant drawings of all of the companies to be able to immediately present a composite project for you. We also have all relevant data such as product capacities, water volume, and power consumption of the various machines of the partners. With this data, our data analysts will make a fully developed quantitative model of the proposed project. From here John Rietveld will visit the company to discuss and analyze the project.

We go to great lengths to make the ideal proposal. It is no exception that we make more than twenty options or more to any project. We do this free of charge and very quickly. Usually the day after the meeting we worked out the changes in the layout both 2D and 3D.

ABOUT BROCHURE

In this brochure, we at Rietveld Equipment LLC, will give you an idea of how we manage an integrated project with you from start to finish by further explaining the following:

1. Detailing the process we use.
2. Revealing the extensive library of experience we draw upon.
3. Explaining the engineering team we have in place.
4. Past, current, and future projects.
5. Partner company details.
6. Analytical tools for labor, water, and machine savings.

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All capacities are indications based on experience from the past and depend on the agro climatic, soil and logistic conditions of the product, RVE does not guarantee any of these.



RIETVELD EQUIPMENT



Complete customer service
Stock machines & parts

Truck to package solutions

Over 20 years of experience distributing agricultural equipment and offering complete lines or single machines.
Backed by our certified technicians.



RIETVELD EQUIPMENT

THE APPROACH OF A PROJECT

PROJECT FLOW

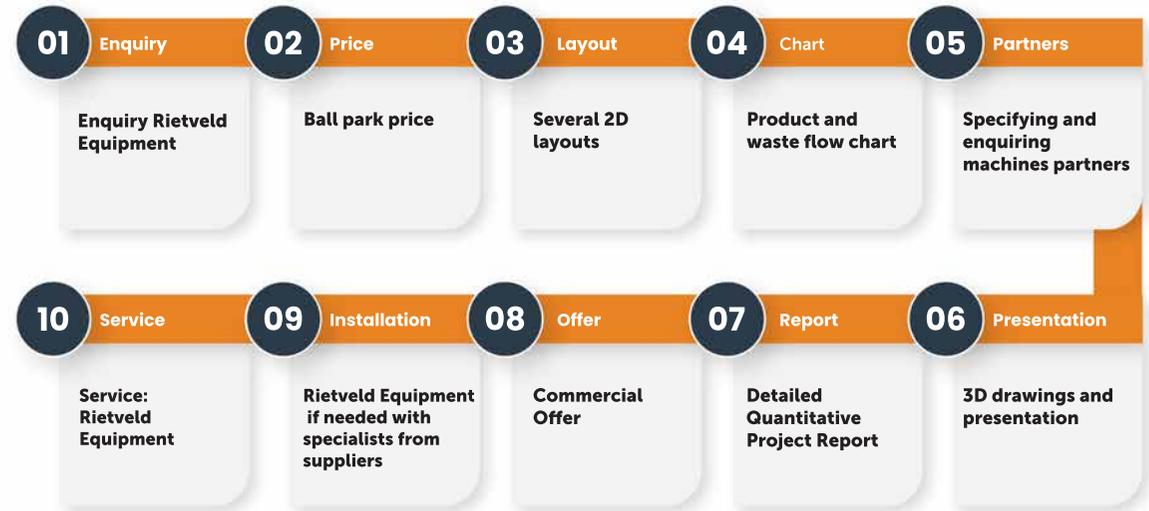
RVE and our partners work very closely together in the realization of a project. Once a project starts, we and a team of six engineers at Allround work full time on the development of lines and projects. We have the most extensive graphic software for this. In the elaboration of proposal we go further than all our competitors. Allround has its own developed software for a database in the cloud. Here all realized projects with drawings and films can be called up directly. The program is called AIMS, which stands for Allround Intelligence Marketing System, and it is a very efficient tool in the design of new projects.

ALLROUND INTELLIGENCE MARKETING SYSTEM

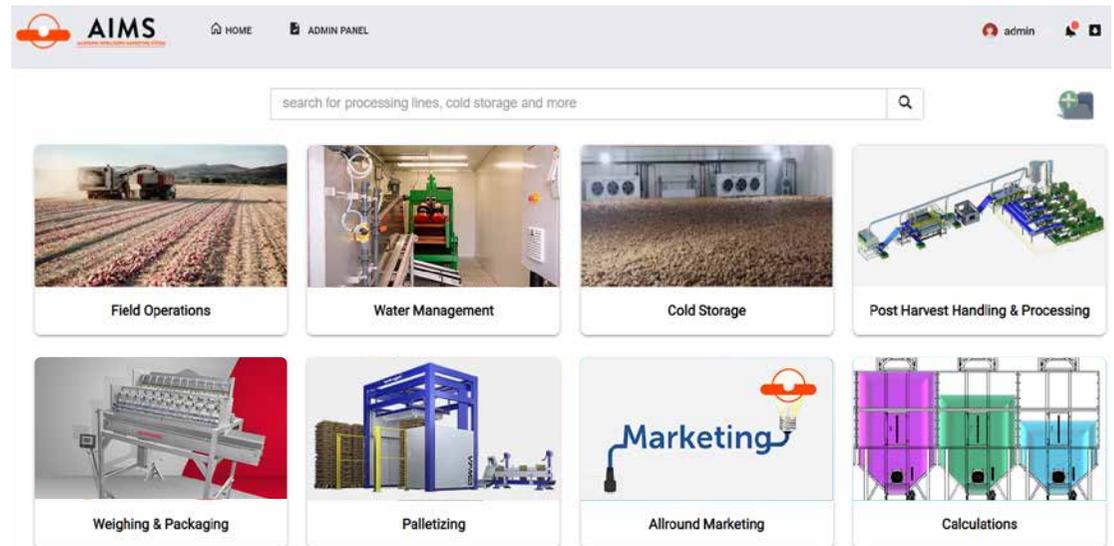
In AIMS, all individual machines, lines and projects can be found through the search engine. The program contains more than 10,000 drawings of lines and projects. A very extensive collection of arranged photos and a video library with more than a thousand films. A specially appointed programmer and administrator is exclusively involved in this. With the help of AIMS, the video conferences are very effective. We can search and immediately come up with all the alternatives that have already been worked out according to type of product, machine, or name.

At this point, we involve the customer in this process with video conferencing. The process as we usually go through can be seen in the diagram. Customers will see new ideas and designs that will benefit the design of their own systems, that they would not have known about without this database.

The project flow chart



Allround Intelligence Marketing System



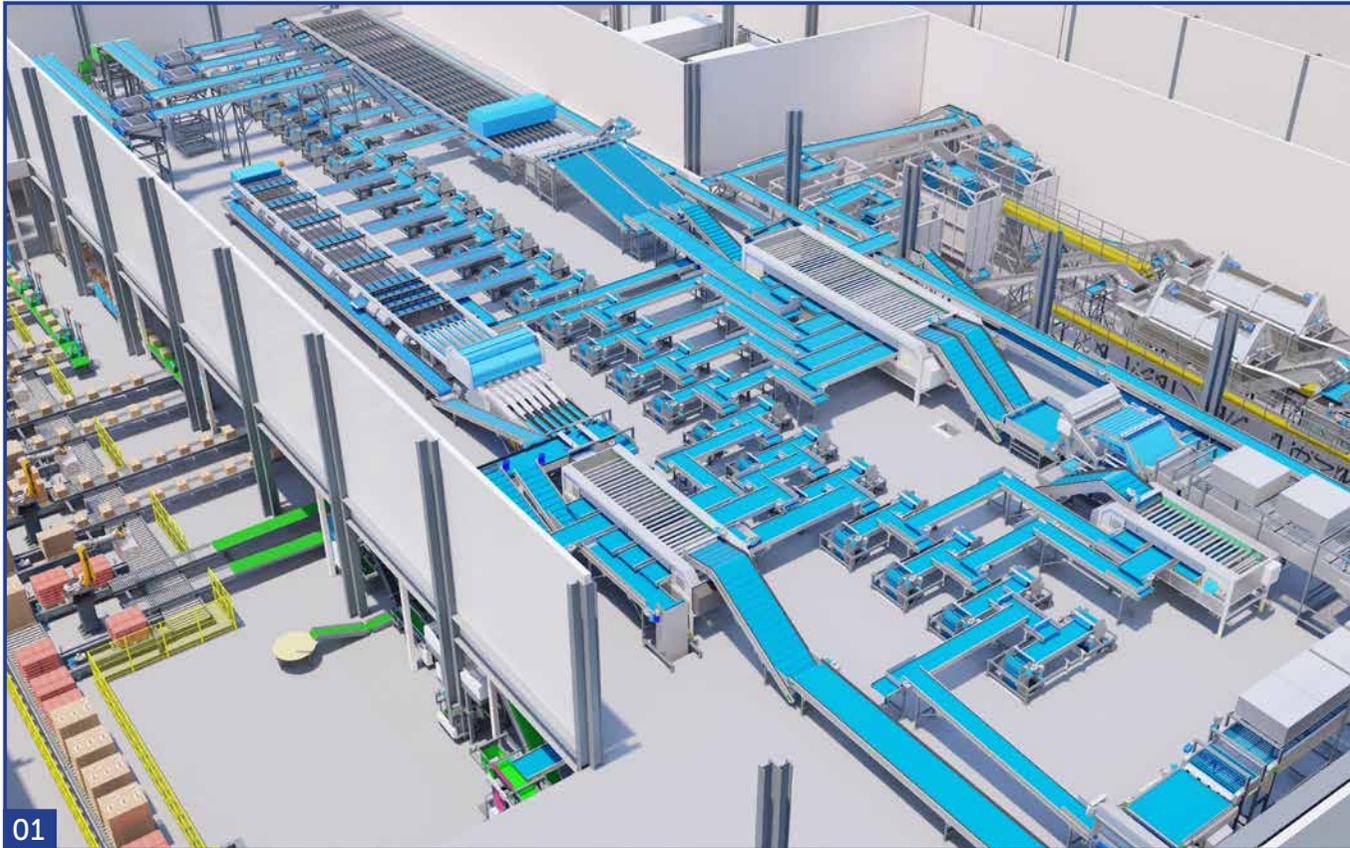
THE PROJECT TEAM

For a project we work at Rietveld Equipment and Allround Vegetable processing with a project team. A project team consists of the core team and the members who are brought in when a specific part is discussed or needs further explanation. Most of the members belong to Allround Vegetable Processing and Rietveld Equipment. When parts of partner companies, such as dust extraction, weighing and packaging, and water purification, etc. are discussed, the representatives of these companies will be involved in the discussions. In all so-called "Greenfield" projects, we have intensive contact with the representative of the construction company of the new building during the development of the project at a later stage. The projects are so complicated and Multi disciplinary these days that a salesperson simply

cannot manage all this on his own. The salesperson is the coordinator/project leader. By working with a team of specialists, the chance of errors in the proposed solution is also as small as possible. During the video conference where of course we work with share screen, we have access to AIMS, Allround Intelligence Marketeng System. In this web base built on soft ware, we can have more than 10,000 drawings categorized. A thousand relevant films and thousands of photos and calculations. Together with you as a customer naturally belong to us, we can come up with the best ideas and perhaps new insights. We would like to invite you to become a member of our team of your project.

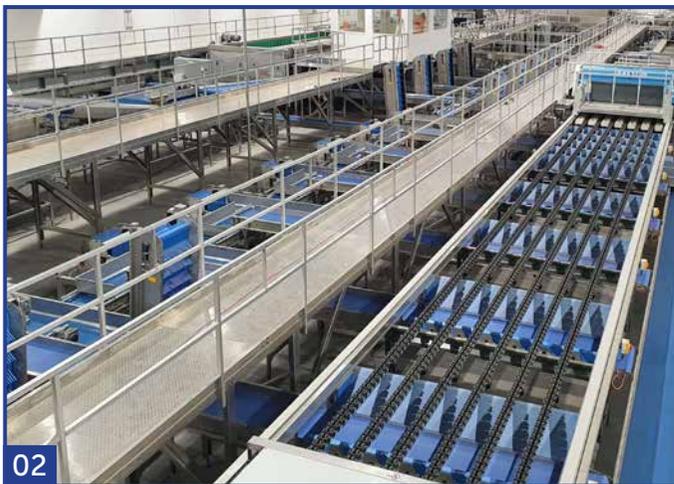


INDUSTRIAL POTATO LINE 60 TONS PER HOUR



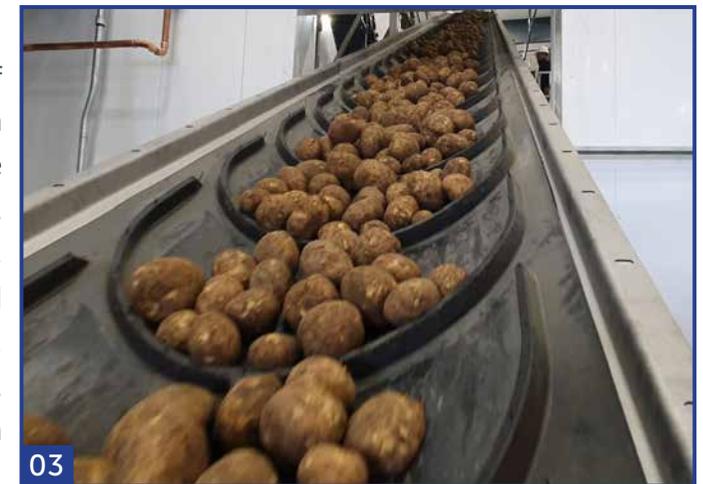
Picture 1

Here is an impression of a project that we realized a few years ago. It was a so-called greenfield project where we were in close contact with the civil contractor. The lines have a capacity depending on the type of soil and degree of contamination of up to 60 tons per hour. The radial grader acts as pre-grader for the optical graders. The installation on the top view drawing consists of: 110 machines of which 106 machines were supplied by Allround. Two optical sorters and two electronic sorters. The whole line has 440 different positions including, 307 conveyor belts with a total length of 5700 feet. All machines and conveyor belts are made of stainless steel.



Picture 2 and 3

(2) We work together with all manufacturers of optical sorters. The optical sorter is built into a number of other machines. Of many of these machines we have the step files (3D images). Because of this large database of machines, we can very quickly make the most detailed proposals of a project with an optical grader. (3) We produce a whole range of trough belts. The trough belts can also be equipped with adjustable spouts.

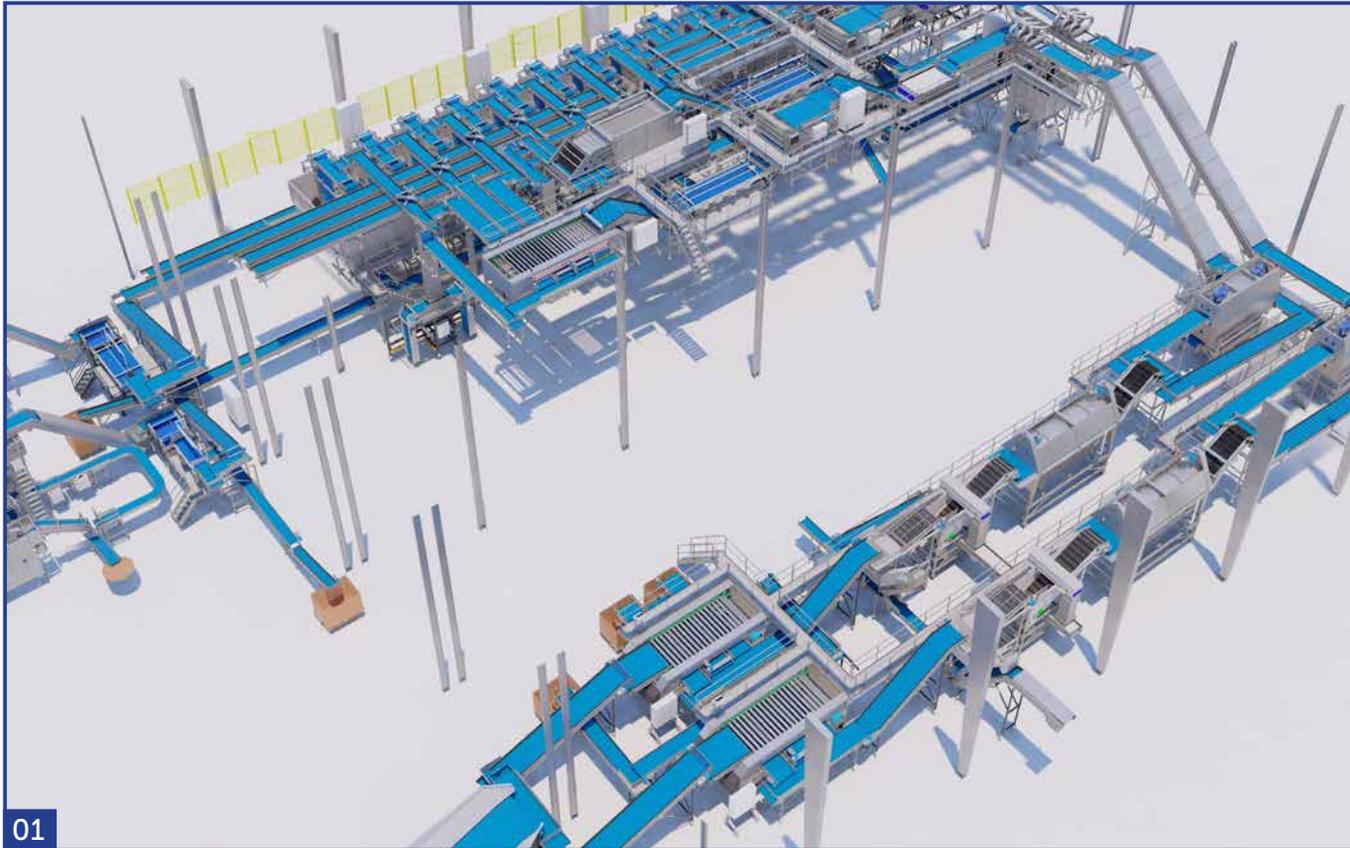


Picture 4, 5 and 6

Together with you, we make the starting points of the grading and sorting bunker installation. (6) All storage hoppers are equipped with two vertical filling belts for maximum filling without any damage to the product. We strive for maximum flexibility with as few transport belts as possible. The starting point is usually "from every storage bunker we want to reach every weighing and packaging machine". (4) At the outlet belts of the storage hoppers there are pneumatic product dividers to have the option to go to two different belts. At the transitions from one transport belt to another transport belt, the drop height is always minimal. The storage hoppers are equipped with fans as desired. (5) Filling station for waste; From the collection bunkers for waste and rejected product a filling system for open trucks. The system is able to fill the trucks perfectly in a very short time. The trucks are under a roof, the bunkers in a closed barn.



MINI POTATO LINE 60 TONS PER HOUR



01

Picture 1

A 60 tons per hour washing and sorting and grading installation for potatoes. The entire installation is situated in one building. The building is designed around the installation. The storage section consisting of 13 tanks placed under the mezzanine. Working with a mezzanine has three major advantages. The first advantage is that you save a lot of space. The space you create with a mezzanine is relatively cheap. (3) The biggest thing however is that when the sorting and grading machines are placed above the storage tanks by means of the mezzanine, the delegation of product to these bunkers can be organized very efficiently. This way you can achieve maximum flexibility. (4) A very effective Meconaf air knife in order to dry potatoes hygienically.



02



03

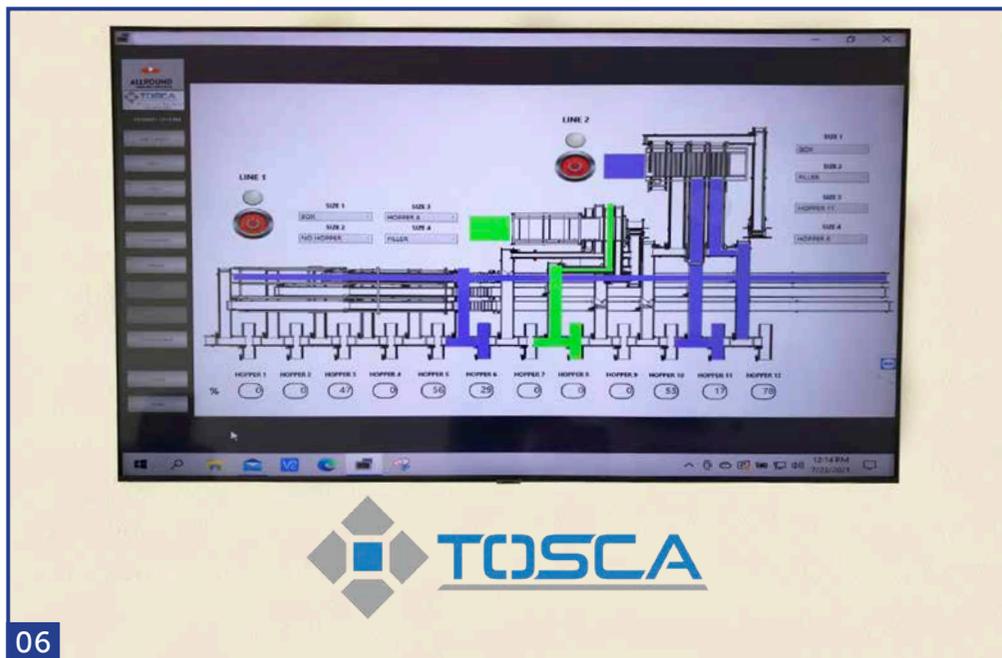


04



Picture 2, 3 and 4

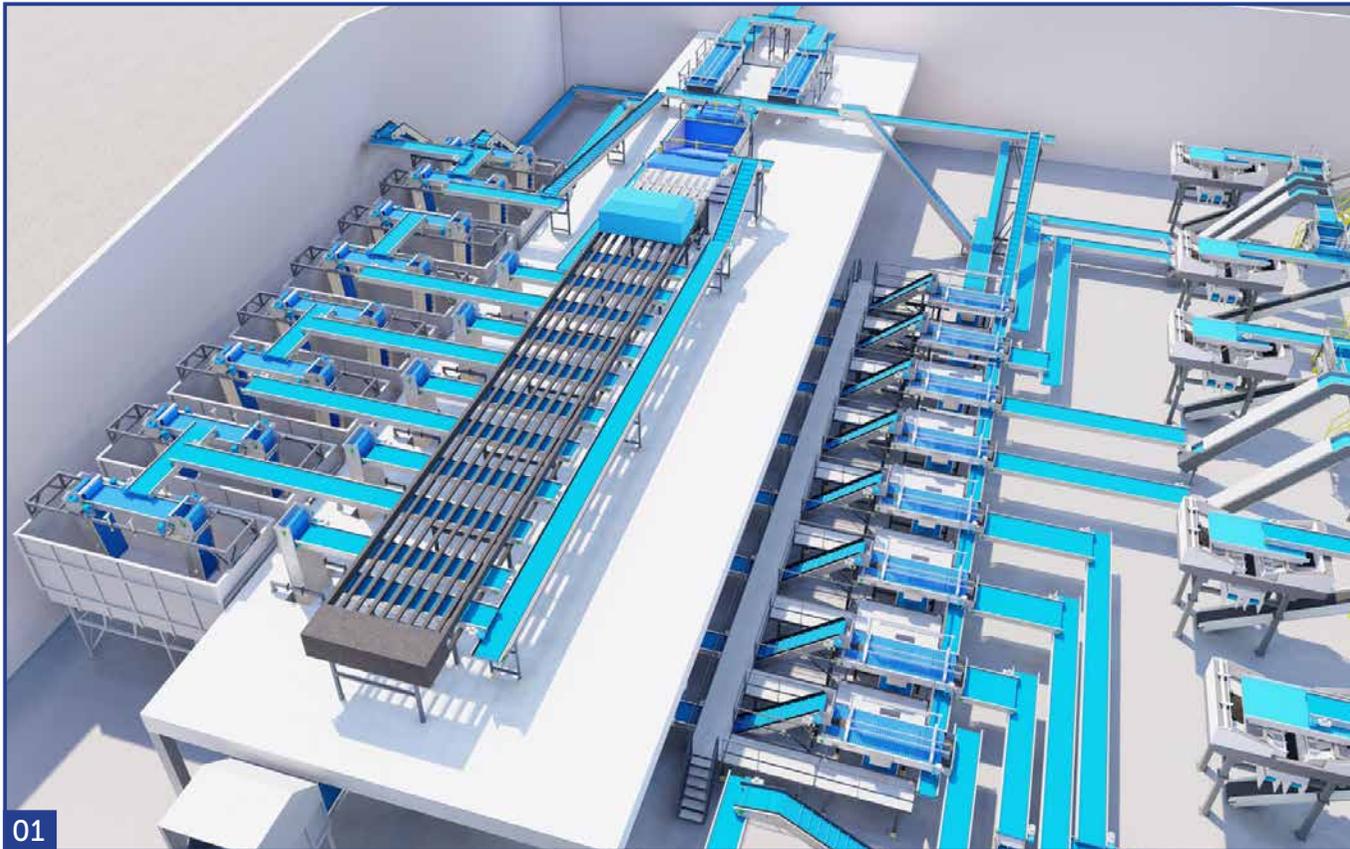
(2) Two identical washing lines next to each other. The lines consist of: pre-grader with a radial sorter, destoner, leaf separator, drum washer, polisher with by pass. The preparations for a third line have already been made in the building. The washed product goes to the mezzanine. (3) The distribution of the potatoes from a shake grader and a radial grader to the storage hoppers. Storage hoppers are filled with vertical filling belts.



Picture 5 and 6

(5) From the grading machine here the distribution to the storage hopper. All transport belts are made of stainless steel. On the picture you can clearly see how accurate the Allround shake grader is grading. (6) Entire project is centrally controllable. The operating system includes both the washing part and the processing part. The system is very user-friendly. Staffing needs can be reduced to an extreme minimum. With the central control system you can do everything from one place. The water management can also be operated from this system. The entire system can be followed on remote devices. Tosca has a great deal of experience in installing and designing such systems. They have carried out major projects in both America and Europe.

ONION LINE 60 TONS PER HOUR



01

Picture 1

Diagram of an onion processing plant which has the ability of sixty tons per hour. The reception and onion topping department is placed in another room. Four storage hoppers to receive untopped and ungraded onions each with a capacity of a truck is used like a buffer. Four onion toppers with string graders for pre-grading. The sorting both to size and internal quality is here with an optical grader. The optical grader is on a mezzanine. At the operator's request or at the command of the sensor, the outlet of the optical sorter goes directly to the weighing and packaging machines or to the storage hoppers. The storage hoppers act as large even-flows. From here any storage hopper or any weighing and packaging machine can be reached. Product can also be entered into the line with the SHB {Storage hopper bin tipper}. The onions then go directly to a weighing and packaging machine of your choice without sorting. Full flexibility for packaging has been achieved.



02



03

Picture 2 and 3

Supply of onions to the onion toppers. Pre-grading with string graders. In the foreground the storage hoppers for rejected product and waste. Storage hopper and box tipper combination to bring boxes direct to the line of our weighing and packing machine.

Picture 4

The Upmatic 2112 scale (12 heads), the universal scale for weighing onions, can process up to 20t/h in combination with the Upmatic 1351 net machine. For this purpose, the scale is specially equipped with a 250mm wide cross belt. Due to the open design of the scale, it is easy to attach a two-branch extraction system at the important points. In the proposal for you, we immediately make the entire air and dust extraction in the drawing. A budget quote can also be sent immediately. Weighing and packaging, topping and grading line design work very closely with the dust and air extraction. From the very beginning, we work out a line completely. By immediately having a total overview you have an idea about the total price and it alleviates facing unexpected practical problems because it was not well explained in the drawing.



04



05

Picture 5

The dust extraction at an optical grader is of the utmost importance. Each grading line must be kept clean very carefully. When the onions come into the cabin with the cameras, the environment must be clean to get the sharpest possible image. The optical graders are machines that can't really handle a lot of dust very well. The service life and degree of maintenance costs of the grader strongly depends on how clean the machine remains during operation. Meconaf with Bas Ruygrok as an experienced expert, has a lot of experience with installing extraction systems on optical graders. When we put together a project for you, we immediately also give the extraction system with all extraction points on the grader as well as on the other points of the installation. This includes the onion toppers as well as with the weighing and packaging machines.



01

Picture 1

This fully automated 30-tons/hour onion line was constructed in France, it uses a box feeding system with three high speed revolving box tippers, three onion toppers with a rail and crane system for changing sieves easily and safely, roller inspection tables in cabins for a cleaner inspection area and both a radial grader and shake grader depending on the shape of product being processed. Both grading options have vertical box filling systems to achieve even filling and minimal drop height. (2) Brushing machine with an adjustable feeding belt to by-pass over all brushes. (4) Box automation software made by Tosca.



02



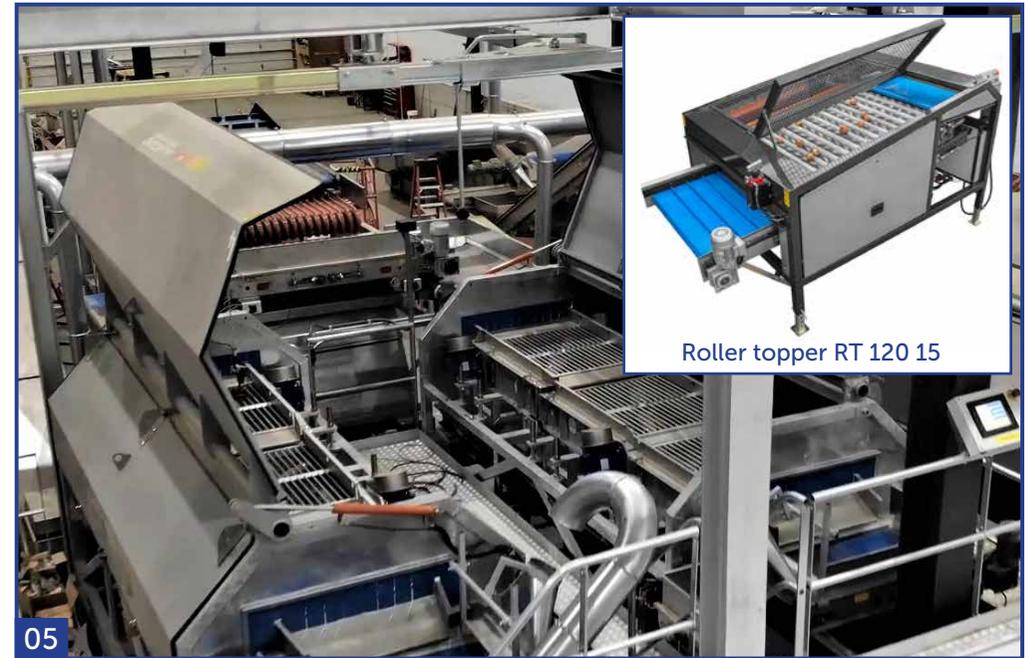
03



04

Picture 5

We at RVE always want to have spare parts and one or more onion toppers in stock. In the product range of Allround Vegetable Processing we offer three conventional onion toppers. The A 1 with one blade, the A 2 with two blades and the A 3 with three blades. On request the onion toppers can be supplied fully galvanized. In the photo you can see the onion toppers with the so-called "open top doors". By means of this special door, the entire top of the machine is open so it is easier and safer to change the sieves. Allround also offers the roller onion toppers. The bed is divided into three compartments and equipped with three frequency drives. This machine can also be seen at RVE's showroom.

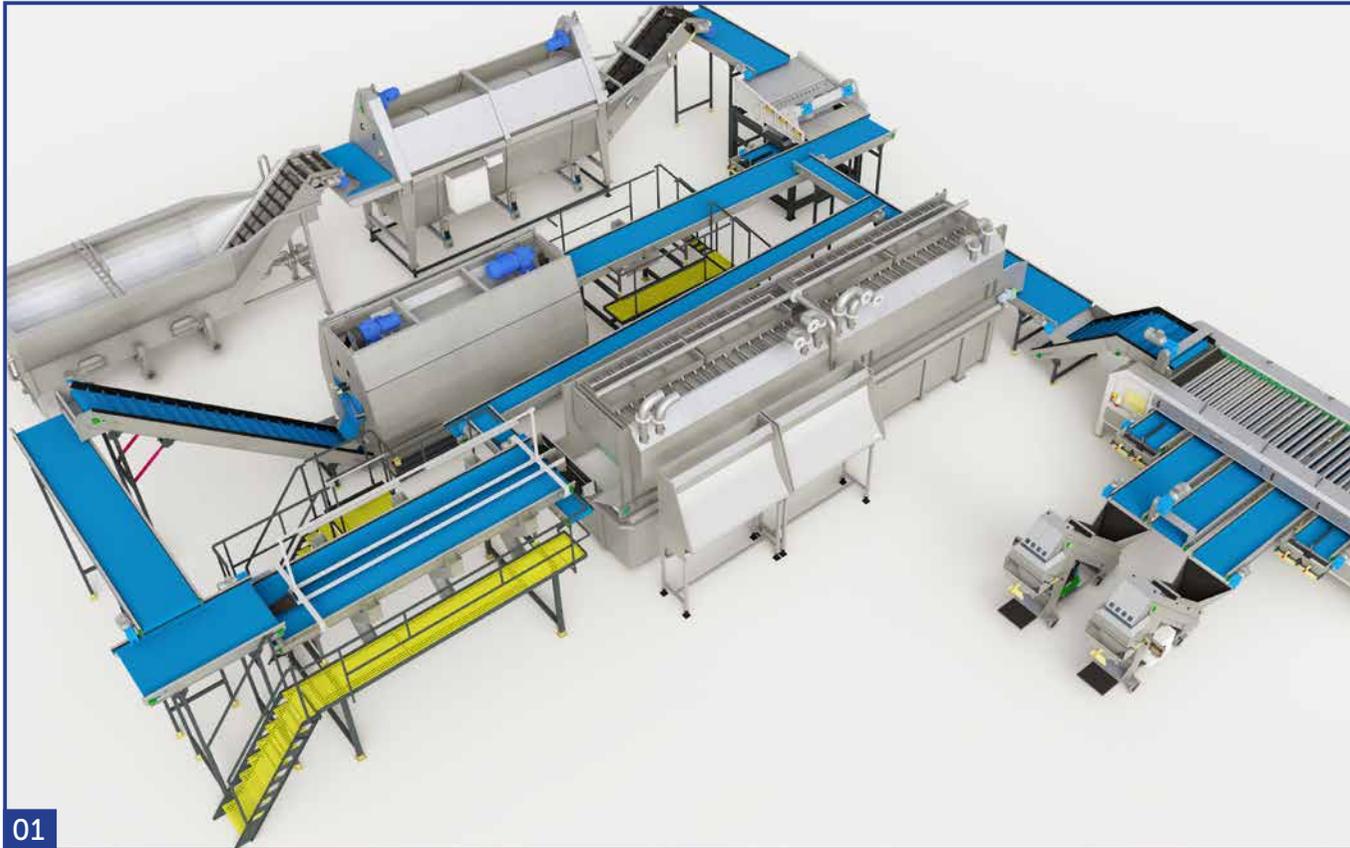


Picture 6

The fully automatic case packer Upmatic 4080 F can fill cases and bulk bins. The bag, crate, and container feed is fully automatic. Depending on the packing pattern and bag sizes, an input of up to 90 ppm can be packed.

The photo was taken at a German customer. The system was installed in 2015 and now comprises a total of 5 robots and three conventional case packer lines.

CARROT LINE 15 TONS PER HOUR



01

Picture 1

Allround Vegetable processing is one of the leading producers of complete carrots processing lines in the world. The lines can be executed in stainless steel or in mild steel. The line has a capacity depending on the size of the carrots from 15 tons to 20 tons per hour. The bottle neck in the line is the polisher and the hydro cooler. At the beginning of the line is a wet hopper which are used in heavy ground. After the wet hopper a drum washer, chunk grader, polisher, manual selection. With the manual selection, carrots that need to be polished again can be returned to the polisher. After manual inspection hydrocooling. Then the radial grader with five grades. A complete water management proposal or a Taneco water treatment plant can be sent directly with the proposal.



02



03



04

Picture 2, 3 and 4

(2) A dry carrot washer C500. (3) Hydrocooler 200 HW. (4) Length grading at outlet of radial grader.

Picture 5

The latest development from Upmann, the Upmatic 4060 Delta 3 crate filler, is a camera-guided crate inserter for film, paper bags and trays. With this set-up, two different products can be processed at the same time. The total capacity is up to 105 ppm regardless of the packing pattern and the number of products per box. With the help of the camera, the exact position of the products is detected and recorded by the suction cup so that the product can always be placed in the desired position in the box. The entire system works fully automatically, from product and crate infeed to crate discharge. Automatic crate palletizing is also available.

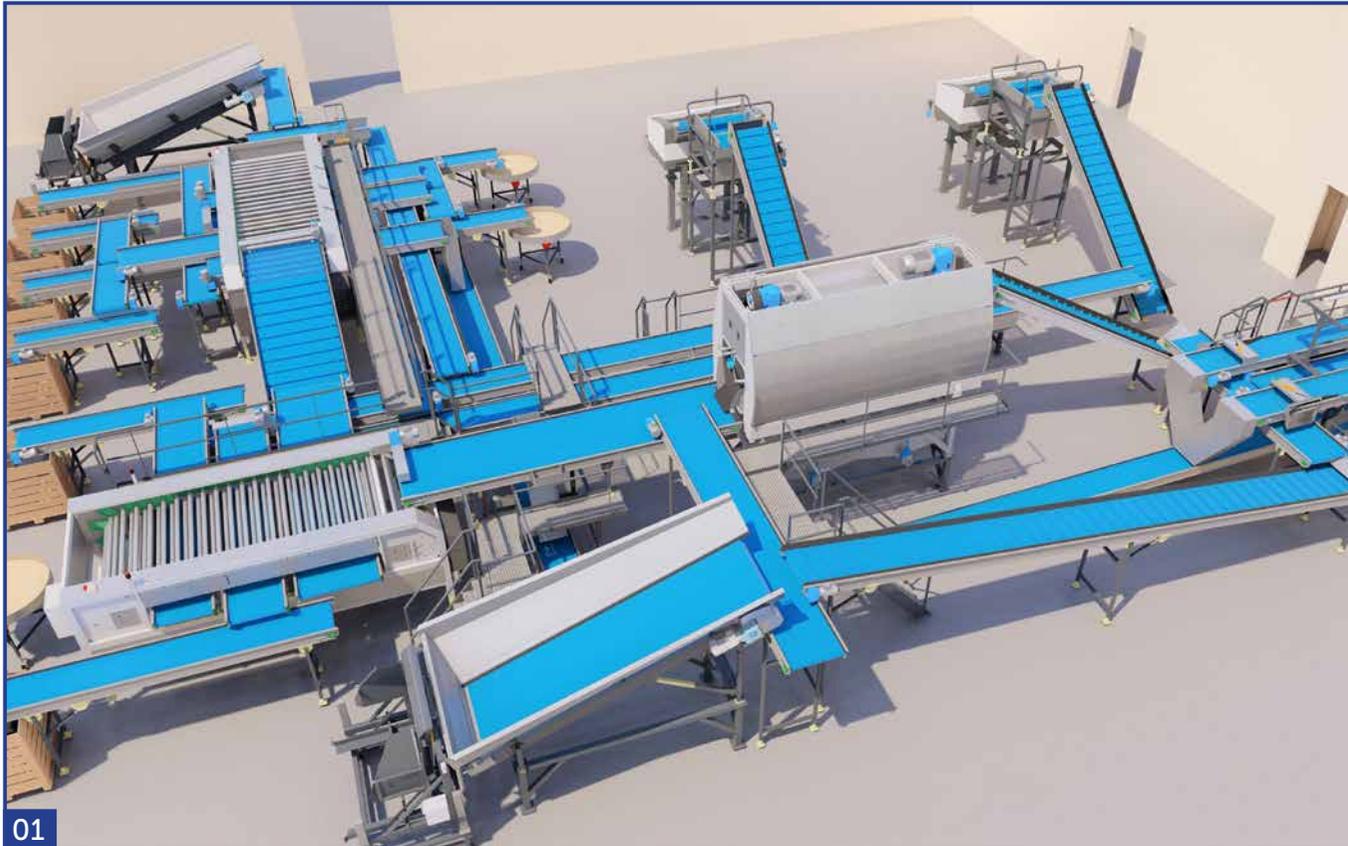


Picture 6

For a large carrot line, we supplied a central bin filling system. From the radial grader, the under-size and oversize are sorted out. The two middle sizes are sorted again with an optical sorter. From the optical sorter the carrots are distributed via a distribution belt to the central bin filling system.

The bin filling system has a central bin supply. Empty bins are automatically placed when there is an empty place. Bins under the filling belts are carefully filled. The bins go back and forth under the belt. When the bins are full they will be replaced for an empty one.

See page 21 for the advantages of bin/box automation



Picture 1

Allround Integrated Processing Lines are a very effective solution for processing various products for the fresh market. The AIPLS's can be executed like the line on the drawing for different vegetables but can also be extended for potatoes and onions.

For examples of these lines, we refer to our website. Allround Integrated Processing Lines are available with a capacity of 3 tons per hour to 30 tons per hour. For the project on the image on the left we were faced with very challenging problems. Five different types of vegetables very different in shape and size. The minimum size for carrots that should be able to be graded out is 0.39 inches, the maximum size for rutabaga is 10.2 inches.



The products are intended for the premium fresh market and must therefore enter the packaging without damage during the process. The line consists of: destoner, drum washer, chunk grader with by pass, manual inspection, polisher with by pass, radial grader 1 for large product, radial grader 2, weighing and packaging machines, round tables for manual packing.

Picture 5

Allround has an extensive range of radial graders. We can offer machines with a minimum size of 6 mm / 0.23 inch to a maximum size of 263 mm / 10.35 inches. The minimum size of the radial grader is directly related to the maximum size. The formula is: the pitch of the chain, on which the rollers are mounted, minus the roll diameter is the minimum size. An image of the roller bed the first sorter of the line on page 16. The grader has a minimum pass-through of 103 mm / 4,05 inch and a maximum pass-through of 10.35 inches. The grader is specially made for sorting out oversized sizes, for example in the beetroot or celery. Products that can become extremely large but where the excess may not end up in the packaging. We can provide radial graders



05



06

 **UPMANN**
PACKING SOLUTIONS

Picture 6

The Upmatic 2114KDE /1500 (14 heads, 150 mm wide chutes) in combination with two Upmatic 2002 film bagger is the ideal combination for the carrot packer. The line impresses both with its high output of up to 65 ppm at 1 kg and its pack weights with an average tolerance of less than 1%.

The entire system is made of stainless steel and is therefore ideally suited for this product. A whole range of options (from a turntable to a fully automatic robot system) are available for the removal of the bags.

STORAGE HOPPERS FOR BUFFERING



Storage hoppers are the most efficient way to be able to run your line at 100% capacity all the time.

The storage hopper is designed to act as a buffer in a processing line, or between a processing line and a packaging line. They can be built in segments, the content of the storage hopper depends on the length and height.

Varying output of each grading size. You can run a size at full speed to a weigher/packer

Picture 1 & 2

Storage hoppers can be in a block or row. Hoppers can be used as well for receiving as well storage for packaging at dispatch, can be with or without a ventilator.

Picture 3 & 4

Two types of filling systems are generally used to fill the hoppers. Vertical filling arms is most gentle solution. Zig zag is a very common way and is cheaper.



SMART HOPPERS FOR GENTLE HANDLING

Smart hoppers are for handling more tender products.

Smart hoppers are generally not as tall and usually longer than our standard storage hoppers. This is done to keep the pressure build up by a layer.

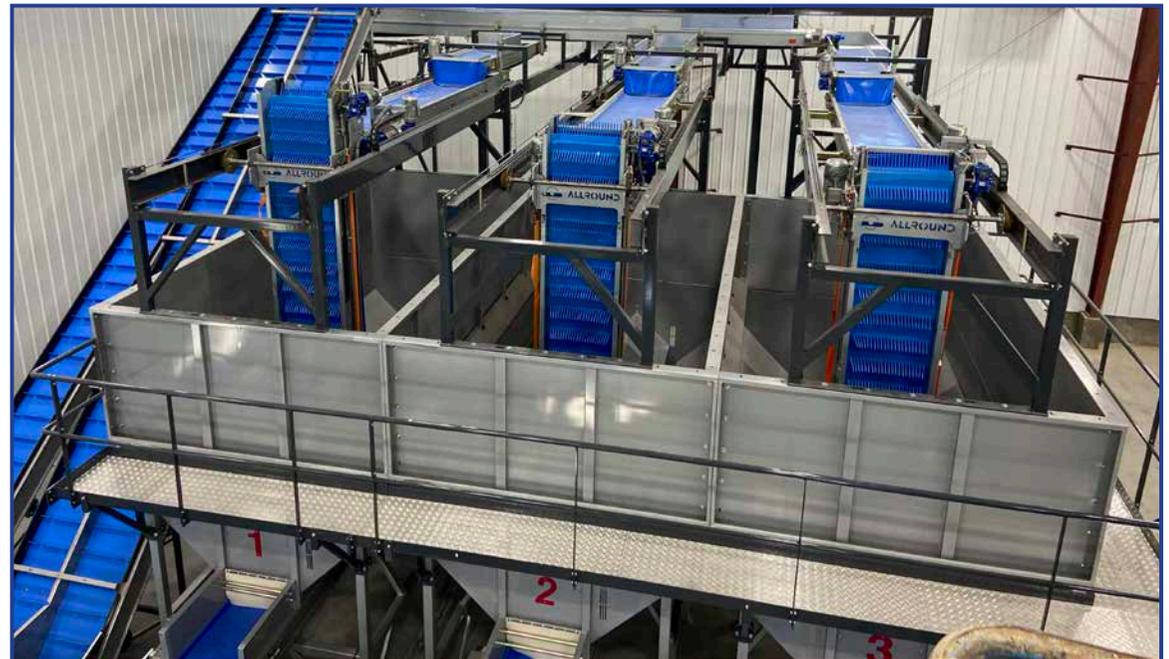
Smart hoppers have less drop height because of the moveable vertical belt which puts the product in the hopper in layers.

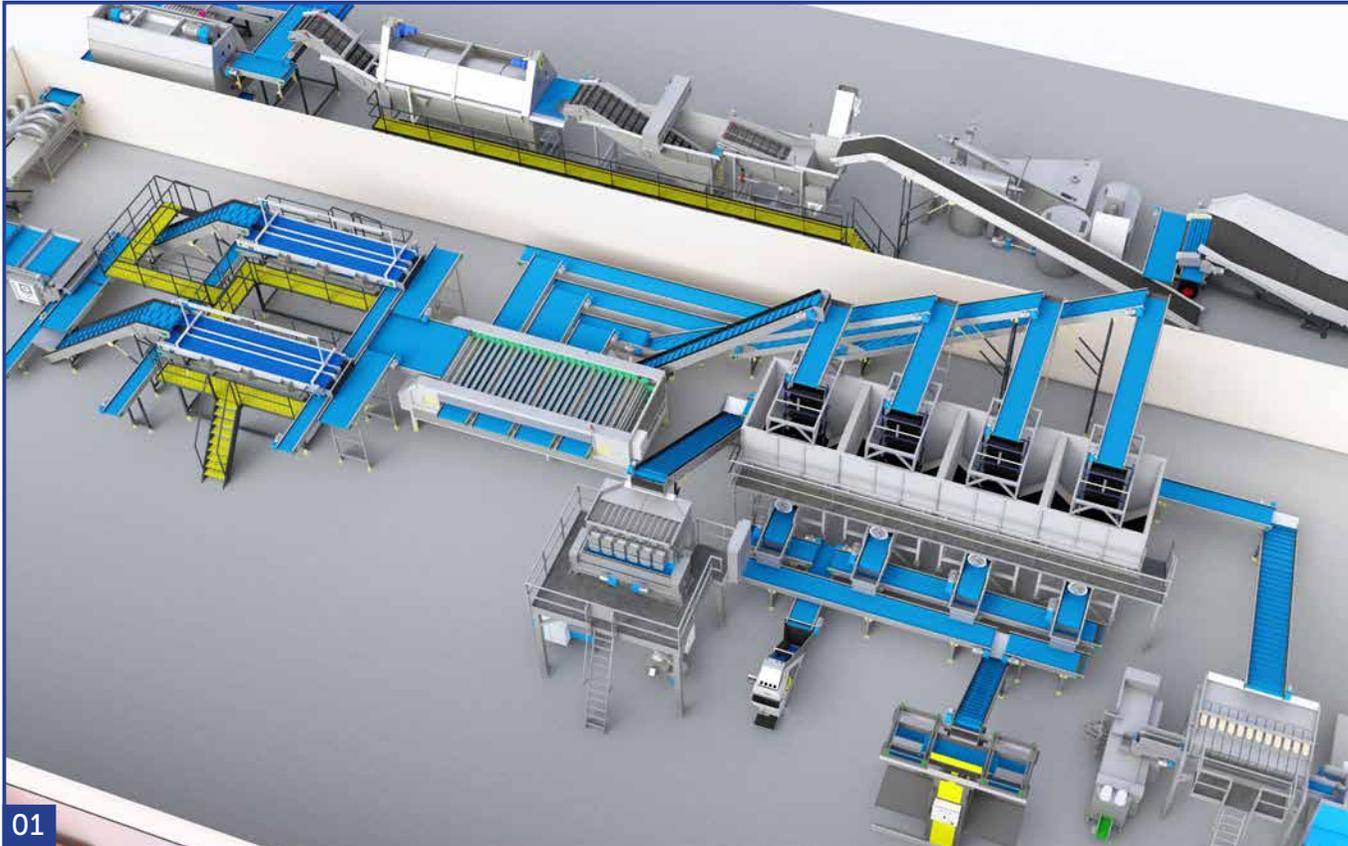
The outlet is also different, because we use two conveyor with two different speeds, driven by a frequency drive.

The smart hopper is meant to make as least as possible small buffer.

Even to make no buffer while running in normal condition.

Size according to calculation. Height of product layer in smart hopper is as high as macro bins. Outfeed is more gentle as compared to tipping with macro bins.





CALCULATION CONSIST OF:

- Receiving hopper/storage hopper, holding capacity with buffer time for different cases.
- Waste and product flow chart.
- Dynamic spreadsheet for each custom line.
- Users can play with it according to the user daily basis lot of products and different grade quantities.
- Packing calculation.
- Water management system
- ROI, payback calculation.
- Delivery schemes.
- Multiple options comparisons with remarks.

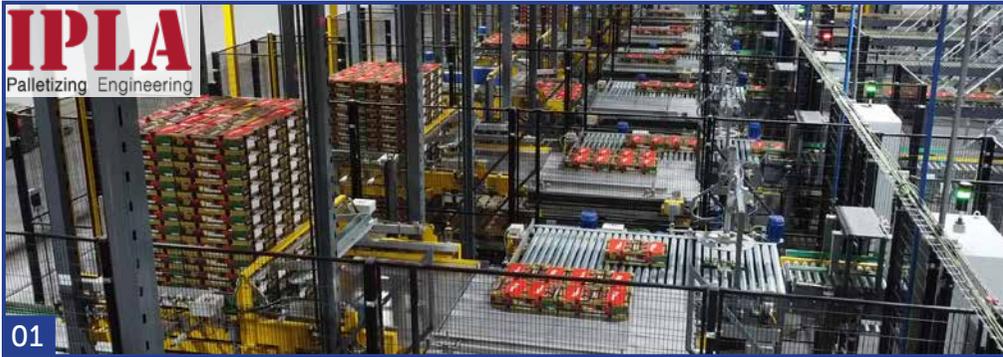
CALCULATION BENEFITS ARE:

- Different scenarios a user can perform with the line.
- Near to reality experience.
- Showing all the outcomes before the line is even installed.
- Comparing the line with the previously used method.
- To meet the specific requirements how the line needs to be run is demonstrated from the calculation.
- What will be the bottleneck of the line?
- Giving a clearer picture of the machine's capabilities.



Custom made water purification by Taneco

THE ADVANTAGES OF BIN/BOX AUTOMATION



Allround has completed several projects in recent years with the bin automation system. With the calculations included in this page, we make it clear that an investment in bin automation is very profitable. The system is aimed at reducing the number of forklift movements and creating a buffer in the system. An additional advantage of a bin automation system is that the logistics are super-efficient, because all sizes of the grading machine are next to each other. At a first glance, it seems that the footprint of the system needs more space, but in practice you use considerably less space because the routing makes more sense. With the help of the bin automation system as shown, the empty boxes are automatically brought to the grading machine. The bins are then neatly filled and stacked three-high. The system has a total of twelve bins for buffering each output grading size. The line also includes two storage hoppers. For example, you can catch two gradings (undersized and oversize) here. In this case, the box automation system can be equipped with two stations.

OPTIMIZING LINE WITH AUTOMATED BOX FILLING AND STACKING SOLUTIONS

Allround not only provides the line designing, but the prime goal is to fulfill the client needs in an optimal way. In the comparison below you can see the benchmark achieved by Allround line solution to decrease the forklift movement by 40%. The number of forklift machines are reduced by 33%. That directly correlates to a reduction in labor costs.

Forklift parameter		
Number of Forklift 's	3	
Total forklift movement	223	per hour
Net movement per hour	74	movements/forklift
Net movement per minute	1.2	movements/forklift
Average movement time	48	seconds

Forklift parameter		
Number of Forklift 's	1	
Total forklift movement	90	per hour
Net movement per hour	90	movements/forklift
Net movement per minute	1.5	movements/forklift
Average movement time	40	seconds

The number of forklift machines are reduced by 66%. That directly saves movement, machines, and power to benefit customer is always our key goal. From converting raw inquiries into logical solutions and providing ROI and payback schemes, our industry experts depict the clear picture

to the customer. What he is buying, how it's going to benefit him in the long run, and what will be the payback time? What are the different line scenarios that can be performed by the Allround integrated line solutions?

CALCULATIONS

Allround Vegetable Processing wants to deliver what it promises. For this we have drawn up a very detailed calculation schedule. All values in this scheme are processed in formulas (formula based) and can therefore easily be adapted to your specific conditions. Together with you, real assumptions are entered in the calculation scheme to get reliable results.

All aspects for a quantitative substantiation of your line or project are covered. A very important outcome is the bottleneck in the process. For this we have put together a line in which as many aspects of a pack house as possible are discussed. The line is a washing and grading line. However, we can of course adjust these for your specific configuration.

Storage hopper calculations

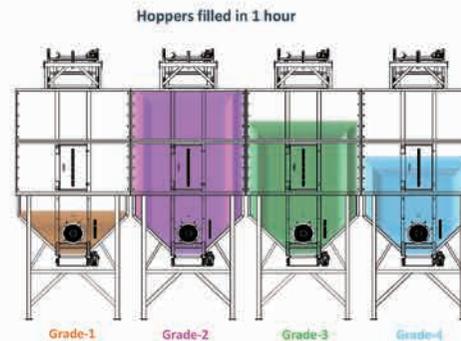
Radial grader to storage hopper calculations

1. After inspection the product will go to the Radial grader.
2. Below is the product quantity distribution from Radial grader into 4 grades.
3. There is 16 m³ (10.4 ton) storage hopper allocated for each grade.
4. Four storage hopper for 4 grades.
5. Buffer time indicates the time it will take the product to fill the storage hopper.

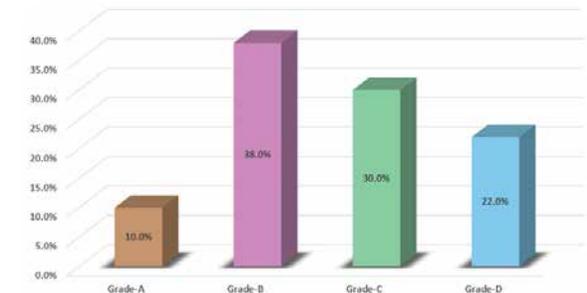
Infeed to Grader: 23.7 t/h

Note: Below are the Calculation based on a scenario when all the are getting filled in bags.

Grades	Quantity (%)	Quantity (t/h)	Quantity (kg/h)	Time to fill the hopper	
				Buffer time	Hopper filled/hour(%)
Grade-A	10.0%	2.37	2371	4 hour 23 min	23%
Grade-B	38.0%	9.01	9012	1 hour 9 min	87%
Grade-C	30.0%	7.11	7114	1 hour 28 min	68%
Grade-D	22.0%	5.22	5217	1 hour 60 min	50%
	100%	23.7	23715		



Grade distribution



Product & waster Calc.

Water calculations

Manning required

Logistic system

FLA

ROI, Payback comparision

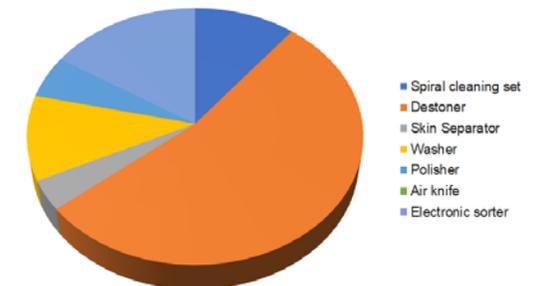
Product and waste calculations

Manual inspection unit: product & waste calculations

1. Culls will be separated from manual inspection unit in the separate transport belt.
2. #2 grade (Useful waste) will be taken out from manual inspection unit at separate transport belt.
3. Remaining product will go into the radial grader machine.

Machine	Infeed (t/h)	Quantity (%)	Product/Waste	Waste (t/h)	Remarks
2 Manual inspection unit	26.06	6.0%	Culls	1.56	cull (total waste)
		3.00%	#2	0.78	2nd grade (useful waste)
		91.00%	Remaining	23.71	into radial grader
		100%			

Waste distribution



Product & waster Calc.

Water calculations

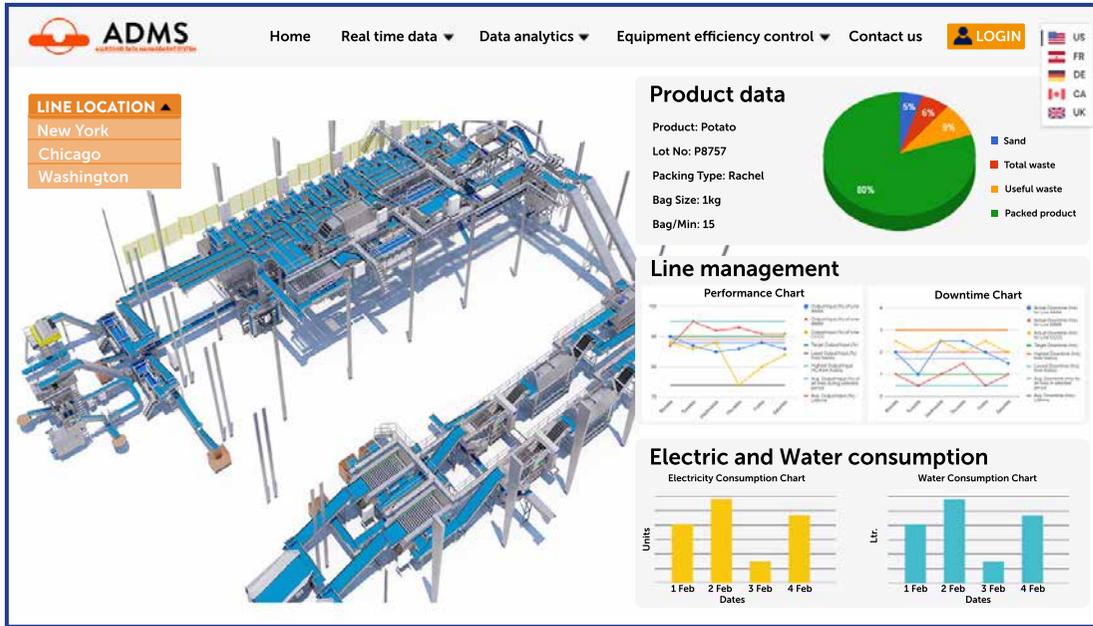
Manning required

Logistic system

FLA

ROI, Payback comparision

ADMS: Home page



The dashboard is split into three parts: real time, history and line optimization. We measure when the party's composition changes.

For example, how much soil is separated at the receiving hopper. How many stones at the destoner. How many rejection/waste during the manual inspection. What are the percentages of the different sorting sizes.

The final results are stored in history, per supplier and stored as total. Ultimately, the entire history of your business operations becomes your sample. This history is then the starting point for any comparisons. Possibly with the help of samples, it is then quite easy and even in real time very important conclusions are drawn. Such as, do we have the correct amount of employees? What is the rejection rate?

CCP: Central control panel



-  **Auto start:** To start full line from pos 61.
-  **Auto stop:** To stop the full line beginning with pos 1.
-  **Auto:** You come back to this page as in image.
-  **Manual:** To run machines individually.
-  **Active alarms:** Machine in alarm red machines stop.
-  **Alarm history:** An overview of all alarms.
-  **Settings:** Adjustment of line.
-  **Display setting:** To adjust date, time and brightness.
-  **Input /output stat:** (IO status) shows individually machine what's wrong.

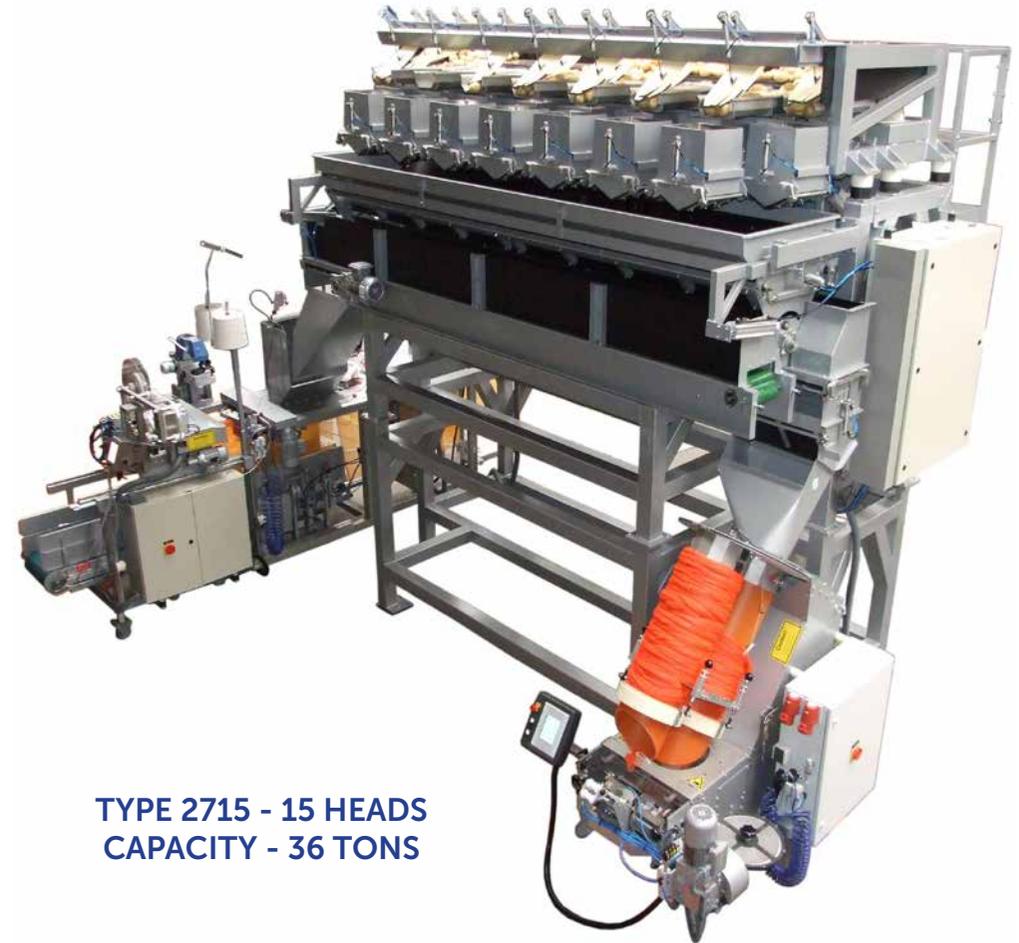
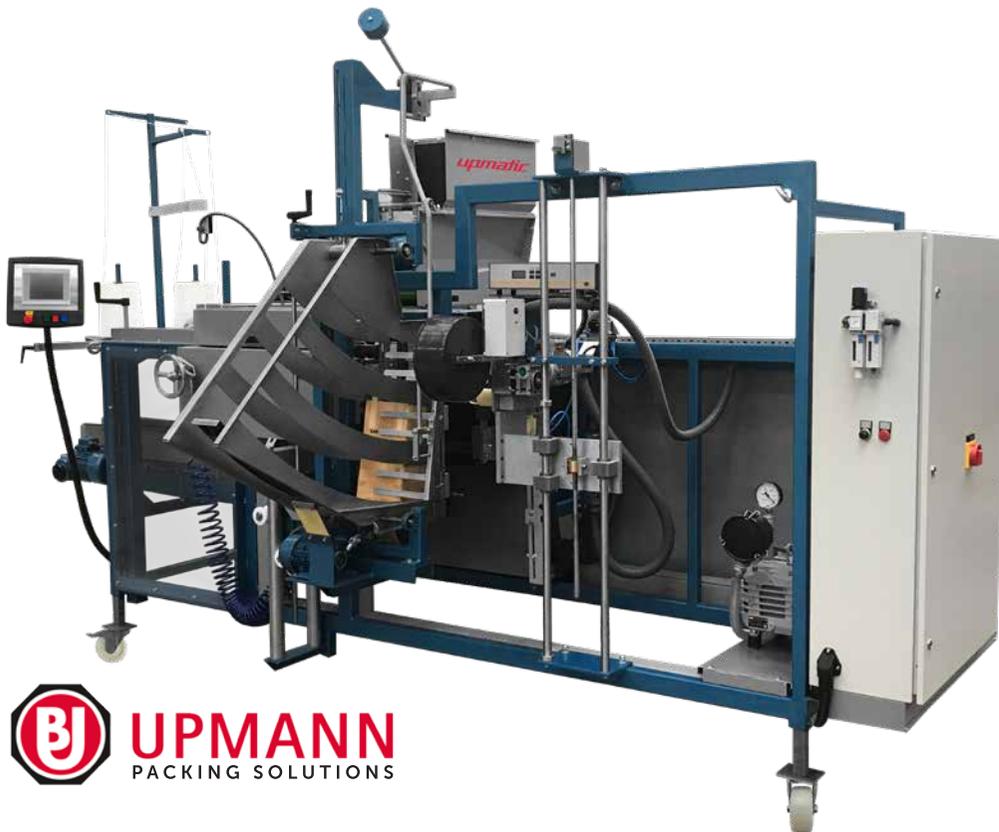
The company Bernhard Upmann Verpackungsmaschinen GmbH & Co. KG is one of the leading manufacturers of weighing and packaging technology for the agricultural and food sector in Europe. As a full-range supplier with a worldwide sales structure, the name upmatic® stands for quality and customer orientation. Continuous expansion of the product portfolio and the development of new markets ensure our growth.

Upmann Verpackungsmaschinen GmbH manufactures machines in series and individual production. This enables us to respond individually

to each customer's wishes and to implement them optimally. More than 200 years of tradition and an award of the "Prof. Adalbert Seyfritz Prize" for exemplary technology transfer are only two important successes of our company.

At Upmann Verpackungsmaschinen GmbH, you get everything from one source. From planning, design, shell construction, final assembly incl. electrics, and programming to assembly and commissioning.

WORLD NUMBER 1 PAPER BAGGER



TYPE 2715 - 15 HEADS
CAPACITY - 36 TONS

IPLA PALLETIZERS

IPLA has been around for thirty years and has its origins in Valencia, the orange capital of Spain. Over the past thirty years, IPLA has specialized in palletizing cartons and RPCs, among other things. IPLA's palletizers for cartons and RPCs are a much more simple solution, so it's less expensive than traditional bag palletizers. The palletizer will be placed directly behind the weighing and packaging line. The footprint of this machine is much smaller compared to the traditional bag palletizers. The palletizing machine is easy to operate. From RPC to carton and for different cartons is no problem. When there are different packaging machines in line, we offer an integrated pallet handling system. With this system, the pallets are collected on a roller conveyor, possibly wrapped

and barcoded. Significant reduction in forklift movements and tight logistics as a result. In the past thirty years, we have installed more than a thousand palletizing systems. Nowadays We deliver one robotic arm every two weeks. However, the robot arm is often an expensive and less good solution for the potatoes and onion industry.. The operation is more complicated. The purchase price is higher. However, there are situations where a robotic arm is the best solution. We will look at this carefully with you. IPLA's machines can be placed and synchronized behind any brand of packaging machine.



VHM BOX & BIGBAG LOGISTICS

The VHM modular philosophy gives you the machines to create the perfect line configuration for stacking, destacking, tilting, filling, turning, emptying and transporting bins & bigbags, in various shapes and sizes. A machine arsenal that was devised, further developed and built by VHM itself, with pride! Endless variations and combinations, fully automatic. Reach out for a perfect flow with maximum capacity. As a turnkey value chain ready for integration into any line. End needless forklift movement.

VHM presents itself as a family of teamplayers. Not only because the modular machines connect seamlessly to each other and to others in the line, VHM itself also likes to work with other parties to pursue the best system solutions.



INTEC PACKAGING SOLUTIONS

INTEC is an agile, dynamic, and flexible company, made up of professionals with ambition and extensive experience in agriculture.

After more than 40 years of experience manufacturing machinery and packaging solutions, we are focused on the agro-industrial sector for palletizing and bagging potatoes, onions, and carrots.

INTEC machines have a large presence in France and Spain, and we are looking forward to offering customers in the U.S. top quality machines for a reasonable price.

Our palletizing system is ideal for fast and accurate palletizing and wrapping of many sizes of bagged products. Our target is to eliminate manual labor and get a full, straight, and tight pallet for transport.

Our automatic bag-placer is excellent for saving labor and producing consistent, uniform bags for palletization.

Today, we have a lot of types of customers, and we can propose the most simple and small solutions for the small farmers to the biggest and most sophisticated solutions for the big companies.



TOSCA LINE AUTOMATION

Tosca offers, during installation, an integral 100% personalized process management, a management of live streams but also modules connected to an I-pad. It is important for us that you can fully exploit its capabilities whether in manual or automatic mode.

We are a company that develops electrical engineering and industrial control, specializing in design and innovation. Our experts study each project from the design office to the installation of electrical equipment

and automaton, as well as the implementation of automation and IT for all your industrial processes.

Thanks to this engineering you have an overview of your engines, and your inputs your outputs ... and all this instantaneously thanks to our automation. Our innovative and powerful technology of custom Software to help you meet all production challenges.



CRATE PACKER RP 5000



MECONAF DUST EXTRACTION

Meconaf BV supplies extraction systems all over the world. This photo concerns an extraction system installed at an onion processing plant in the USA. In this company, onions are cleaned and packaged for the consumer. This processing releases a lot of dust. Furthermore, an onion loses part of its skins during processing. It is important to extract a large part of the dust above the machines with a good extraction system. This ensures a clean working workplace for the people who are present in

the room. The removal of the skins is especially important to achieve a high-quality end product. The Meconaf installations are connected to the correct places of the line by means of a pipework. The extracted air is stripped of the dust and skins in the Meconaf cyclone filters. The air is 99.9% cleaned.



TANECO WATER TREATMENT

Taneco is specialized in Water treatment systems. Taneco offers specific solutions, based on customers demand and requirements, and also offers plug and play systems. Customers as Aviko Potato, Mc Cain, AVEBE are using the Taneco systems already for years.

Taneco developed a solution for potato and vegetable processors to recycle wash water in a simple, compact and affordable way. The system saves up to 95% on water. The Agri WWT comes with capacities from 2,500 gpm - 25,000 gpm. The complete system is built in two 20ft

containers and is fully tested in our factory and is fully installed within two working days.

We live in a world where water scarcity is increasing every day. In order for future generations to benefit from all the possibilities we have today, water is one of the most important resources that we must take care of. Our mission is to reduce the unnecessary use of water in such a way that companies use mainly their own recycled water. With this partnership we think we can reach our goal on making the world a little better.



ALLROUND COMPLETE LINES

Allround Vegetable Processing B.V. is a family business from the Netherlands. The company has its origins in 1960 when the father of the current owners founded the company. The company has seen ups and downs. Today, the company consists of two main branches. The head office with factory is located in Andijk, the Netherlands. The second factory is located in India's state of Haryana in the city of Ambala. In India, Allround has two more sales offices and service points in Mumbai and Ahmadabad. Allround has 140 employees spread over the two companies. Allround has dedicated itself to producing complete lines /

installations. We produce carrot, onion and potato processing lines from 2 tons to more than 100 tons per hour. For matters that do not belong to Allround's core business, we work closely with partner companies. This brochure and the way of working together presented in it is an exemplary example of this. We work with the companies in this brochure in many countries. We organize an optimal exchange of information all on this basis and with this open attitude to each other it is possible to bring the increasingly complicated installations to a successful conclusion together.



PARTNERS



DUST EXTRACTION



WATER TREATMENT



BIN AUTOMATION



PALLETIZERS



COMPLETE LINES



WEIGHING AND PACKAGING



PACKING SOLUTIONS



LINE AUTOMATION