



# Welcome To Allround Vegetable Processing B.V.

A culture and level of technology.



### ALLROUND BOX STORAGE

- The products are stored in large bins.
- The product is stacked up to about 6 boxes high.
- Box storage is a very flexible way to store agricultural products.
- It is a perfect system to separate all de different products, varieties, sizes and qualities.
- Products to be stored: Table potatoes, Onions, Cabbage, Carrot, Red beet, Banana, Apple, Seed potatoes etc.

#### **INDIRECT ROOM VENTILATION SYSTEM**

#### Advantages

- Easy to handle
- Highly controllable product conditions

#### Disadvantages

• Not for drying





### ALLROUND BOX STORAGE SOLUTIONS



- Complete solutions for: Box storage and equipment's.
- We are using the highest quality components in our products.
- Allround will be able to make a equipment for storage, specifically for your situation.
- We can upgrade your storage.





### **100 MT STORAGE SOLUTION**

- Box storage for potatoes.
- Total capacity: 100 MT











### **STORAGE COMPONENTS**





### HEAT EXCHANGER

All kind of stored agricultural products are sensitive for too high  $CO_2$  levels. Too high  $CO_2$  levels can affect the quality of the product. For example during storage of industrial potatoes, high  $CO_2$  levels can affect the frying quality. In systems where a lot of outside air is used, it is not so difficult to control the  $CO_2$  level. In hot climates, or very cold climates where use of outside air is limited, a  $CO_2$  heat exchanger will be the best solution. In warm climates outside air cannot be applied directly since this will cause an increase of the product temperature. With the help of a heat-exchanger the extracted cold air from the storage room with high  $CO_2$  level is applied to pre-cool the warm outside air with low  $CO_2$  level. In this way energy savings up to 90% can be achieved.



#### Components

- Control panel
- High efficient heat exchanger
- Western Europe fans used
- Housing made of galvanized steel

#### **Important Features**

- Compact design
- Cross air flow which give maximum efficiency
- Controls the CO<sub>2</sub> under all conditions
- Energy savings up to 90%
- Standard unit for up to 1000 ton potatoes, carrots or onions

#### CO, HEAT EXCHANGER

### HEAT EXCHANGER AIR FLOW





### HUMIDIFIER

Agricultural products like potatoes and carrots need to be stored under quite humid conditions. Especially in dry climates it is necessary to add moisture to the air. For this application Allround has developed a high-pressure pump system which is able to humidify the air with droplets which are about 5, 5  $\mu$ m (1/1000 millimeter, or micron) in diameter on average. This provides the store with the necessary humidity.

#### Components

- High pressure pump
- Triple filter unit with 25, 10 and 5  $\mu$ m filter
- Set of tubes
- Anti-drip nozzles
- Nylon tubing coil

#### Important Features

- Plug-and-play system
- Capacity of 1 litre / minute
- Maximum pressure of 80 bar / 1145 psi









### TURN KEY CHILLER

#### Advantages Allround Cooling System

- A system with plug-and-play machines
- No pipelines required
- No machine room required
- No special operator required
- 100% Online monitoring and data protection
- Zero use of water in our cooling system (No water wastage)
- No use of harmful gases
- Almost maintenance free system
- R 410A gas for cooling.
- Bitzer latest series compressor which has the possibility to use R 513A (Low SWP) gases when required because of efficiency or government laws
- No need to refill gases or change oil
- Every room has its own independent cooling system
- Long term storage
- Most of the spare parts easily available worldwide
- Full after sale and training backup
- Lowest energy use in comparison with other suppliers
- Minimum of weight loss to product









### FANS

Fans are an integral part of the storage system, and therefore it is very important the proper type of fans are chosen for the right application. Furthermore, fans should be reliable and able to work under difficult circumstances. Our fans are designed especially for agricultural applications.

#### **EC Fans**

- In-build soft starter
- Frequency control
- Saves 20% energy.

#### **Important Features**

- High effective motors
- Proven construction
- Strong and reliable











### A-GATE AND SWITCH PANELS

#### A-Gate User Interface

- Easy-to-use interface for the customer to monitor and control
- storage parameters
- Designed for the storage of agricultural products.
- Easy to use with smart phone or tablet.
- Shows relevant data online on phone and over internet.
- Unlimited number of rooms in one system.



#### **Switch Panels**

- Durable enclosure of the panel made by Rittal
- Components are Schneider Electrics
- Leaves the factory thoroughly tested
- HMI touch screens





Group monitor		User :- user1 21/12/2018 - 10:52:15
Room 01	Room 02	Room 03
distant and	Auto	and Automatic
Fan	Fan	Fan
Autom	an Automa	Auto
Hatch	Hatch	Hatch
and a state of the	and Automatic	ten Autor ma
Humidifier	Humidifier	Humidifier
and address of	and a state of the	and a fail to see
Cooling M	Cooling M	Cooling M
and the second second	and the second second	State Collinson
Defrost	Defrost	Defrost
Contract of the local division of the local	and the second second	Terror College
Drying	Drying	Drying
ALLROUND	<b>A</b>	



### SHAKE GRADING LINE SG 60 SERIES

- Accurate grading up to 95% for potatoes and onions.
- Capacity up to 5 tons per hour
- Easy operation and almost maintenance free.
- Can be used as subgrader for seed potatoes
- Grading in 4 + 1 sizes (Sieves can be changed according to requirement easily)
- Roller bed for efficient inspection.











## THANK YOU