



## WE FOUND THE SECRET TO ETERNAL YOUTH

**Ethylene gas is produced by respiring products in particular and stimulates growth, development, ripening and ageing of the product. The Besseling ethylene gas converter removes this damaging ethylene gas (C<sub>2</sub>H<sub>4</sub>) simply and fast. This way your product keeps its eternal youth.**

The transitional phase from unripe product to ripe product is called the climacteric. During this phase the stored products start to produce ethylene themselves. The ethylene that is produced stimulates the fruit to produce even more ethylene resulting in cumulative ripening. Controlling ethylene levels will postpone the climacteric, which means longer shelf life.

Through research it became apparent that a platinum catalytic converter is very effective in decomposing ethylene within a certain temperature range. An important side effect is that fungus growth and bacteria in the cold room are eliminated as well.



The ethylene absorber consists of two columns, each with a heat storage device, a catalytic converter, heating elements and one ventilator. Alternately, the cold room air in each column is guided upwards and heated. Subsequently, the air is led through the catalytic converter, where the ethylene gas is decomposed. Finally, the air flow is led through the second catalytic converter at which point the remaining ethylene gas is decomposed and the air is cooled down again.

The Besseling ethylene absorber can achieve an ethylene gas level of 1 ppb (parts per billion = 0,0000001%), without the use of chemical agents, which makes this process extremely environment-friendly. In addition, by way of heat extraction and optimum control of the temperature, the absorber consumes a minimum of energy.

**The Besseling ethylene converter:**

- *Decomposition of ethylene to 1 ppb (tested by ATO Wageningen – the Netherlands)*
- *No need to refill the system*
- *Low energy consumption through heat extraction*
- *Deployment by means of time or measurement*
- *No chemical elements*
- *Limited service requirements*
- *Extremely user-friendly*

