

Vertical Farming

Member Company

ACERINOX EUROPA, S.A.U.
on behalf of Farmitank

Category

Original application concept for stainless steels; Strong environmental improvement potential; reduction in routine maintenance costs; life-cycle costs (LCCS) lowest compared to competing materials

The Challenge

The objective is to allow you to grow crops anywhere in the world regardless of external climatic conditions. Vertical farming turns agriculture into an industrial process which constant costs, production and quality are achieved.

Why?

Because it was observed there will be shortage of food and water in the years to come and that will become a worldwide

issue. The challenge was carried out in order to prevent the future food crisis.

Needed Action

To develop a fully climate-controlled hydroponic farm that integrates an advanced technology to achieve the optimal climatic and lighting conditions that, combined with a perfect mix of nutrients, guarantees the maximum product quality. It is an isothermal, modular and scalable stainless-steel tank.

Action Review

Specific; It is developed to solve the problem detected.

Measurable; It is quantified the quantity of water it is being saved.

Achievable; It is achievable because it is already in use.

Realistic; It is designed as a modular system. It can be adapted to the client



needs.

Time-bound; It has been developed in phases starting from the idea, and passing through three different prototypes before having the final version.

Horizontal Expansion Capability

It is a patented system.

Outcome

The project contributes to territorial development allowing horticultural products processing in those regions and countries where it would not be possible to grow certain products, due to the climate conditions or the shortage of water resources.

The elevator system improves the employees' health and wellbeing at the same time that improves the business efficiency.

