



Key-Ready Greenhouse

WHY CHOOSE US?

The integration of various processes and technologies in the greenhouse requires a high level of specialist knowledge. With Corpus Agro, breeders can benefit from this knowledge. As always, we advise you professionally and tailor-made, because we know how important a well-done professional planning is in a greenhouse project.



FULL SERVICE

DESIGN AND ENGINEERING

AUTOMATION

HEATING

COOLING AND MORE



Greenhouse technology is a comprehensive concept that includes structural design, energy conservation, cooling, automation and packaging. Whether you are building a new greenhouse or converting an existing one – Corpus Agro has the know-how you need. The different climatic, social and economic conditions have led to many different situations, technical challenges and related solutions for the greenhouse industry. Corpus Agro's approach always focuses on the needs of a particular greenhouse. Each project is unique and needs to be adapted to the individual needs of the customer to achieve maximum planting results. The details determine the quality of the end result. The details determine the atmosphere, the appearance, the maintenance intensity, the sustainability, the price and the function of the greenhouse.



**DESIGN &
ENGINEERING**

**ENGINEERING
DESIGN &**



ENGINEERING SERVICE

PLAN DEVELOPMENT

DESIGN

PROJECT PLANNING

DRAWING WORK

CONSTRUCTION SUPERVISING



GREENHOUSE

It's easier to organize from A to Z.

Greenhouses are a huge investment and require special care. Corpus Agro's formed a team to permanently supervise the greenhouse project. In every investment phase. Corpus Agro's turnkey greenhouse project (also known as a "turnkey project") means a full service for growers from A to Z, and the total price is clear from the start. After graduation, there won't be any unpleasant financial surprises! As part of the turnkey project, Corpus Agro's is responsible for the planning, construction and installation of the system as well as for all other aspects until acceptance. The holistic approach leads to company-specific solutions with a long service life and a high return on investment. With the help of Corpus Agro's , breeders learn how pleasant good preparation and all-round service can be!



Turn-key

Turn-key

ENGINEERING SERVICE

PLAN DEVELOPMENT

DESIGN

PROJECT PLANNING

DRAWING WORK

CONSTRUCTION SUPERVISING





With its greenhouse knowledge, experience and constant pursuit of improvement, Corpus Agro can add value to any greenhouse project around the world. The engineering services provided by Corpus Agro include the creation and elaboration of detailed drawings, obtaining the necessary permits and all necessary work preparations. The engineering team is responsible for completing all management tasks related to the contract required for the greenhouse project. The Corpus Agro engineering team can coordinate the following areas as required:



ENGINEERING SERVICE

PLAN DEVELOPMENT

DESIGN

PROJECT PLANNING

DRAWING WORK

CONSTRUCTION SUPERVISING



NEW GREENHOUSE CONSTRUCTION CONSTRUCTION NEW GREENHOUSE

Your greenhouse, our challenge
Specialization and complete logistics enable
Corpus Agro to build high-quality greenhouses at
attractive prices all over the world. In the
deployment and design phase, quality is the
number one priority. The result is professional
and complete advice. This is achieved through
clear, easily understandable offers.

Corpus Agro's experts worked with growers to
design and build a future-oriented greenhouse
solution that would simplify growing in many
ways. A greenhouse that meets current standards
and environmental requirements - with a solid
shape, a high quality system, a reliable system
and perfect glass. And all according to customer
requirements. All phases of the carefully designed
process require central coordination. This is not
only interesting in terms of price, but also
prevents misunderstandings from the outset.



CONSTRUCTION

As good as new

Second-hand greenhouses are an interesting choice in terms of price. Thanks to the quality and durability of today's greenhouse materials, in many cases a greenhouse made from renovated old materials is an excellent choice. The greenhouse is dismantled, all greenhouse materials are carefully examined to determine if they are suitable for reuse. This is an option for growers who want to build a new greenhouse but lack economic resources. The same applies to greenhouse systems: New or used, everything is available. Corpus Agro has a wide range of greenhouses and greenhouse systems and can combine multiple system types to provide the best complete solution for any specific operating situation around the world!



USED GREENHOUSE





SCREENING SYSTEM

Energy efficiency for the future

There are several reasons for installing a screening system.

A screen can be used to dim, adjust the light emission, save energy or prevent sunlight. The umbrella system usually completes the combined function. The umbrella system can make an important contribution to saving energy without affecting production. Before determining the screening system, the requirements it must meet should be clarified.

Each culture requires a different screening system. In addition to a large selection of umbrella cloths, there is also a large number of different screening systems. Umbrellas are also ideal for the (climate) separation of different parts of the greenhouse. Roller screens are important to reduce light emission, save energy or to darken the greenhouse. This system is used on the outside wall of the greenhouse. The drum can be operated entirely or in sections. It is also possible to create an intermediate facade



Insect screens are used in the greenhouse to restrict the movement of insects in and out of the greenhouse. Insect screens have many different hole sizes. They should be selected based on the size of the smallest insects.



SYSTEM

Increase efficiency

Automation and know-how go hand in hand. The aim is to simplify cultivation as much as possible while paying attention to quality and quantity. The ideal and optimal combination of light, air and water forms the basis for quality and quantity. Electrical engineering connects everything and lays the foundation for process automation. In short: automation includes all devices that control or regulate systems in the greenhouse.

On the other hand, electrical engineering includes the power supply for all devices and systems in the greenhouse.

Management One of cultivation

One can say that the climate computer is the core of the horticultural business. It can automatically adjust, monitor and control the ventilation, heating, lighting, humidity and carbon dioxide in the greenhouse. The computer and the associated software must be easy to use and future-proof. By effectively responding to climate change inside and outside the greenhouse, growers can avoid unnecessary energy consumption.

Corpus Agro has provided and installed various climate computers, including the top model Priva Connex. Priva Connex is the newest process computer from Priva. The computer is the product of 50 years of process control experience in the global horticultural industry



WATER

TECHNOLOGY

ТЕХНОЛОГІЯ

The rapid growth of the world population requires more and more agricultural innovations to use limited resources to increase production. Compared to outdoor cultivation, the water consumption in the greenhouse is reduced. There are four main reasons: 1) Evapotranspiration, less strong winds, increased humidity and temperature regulation in the greenhouse environment reduce the water content of plants. 2) The drip irrigation system improves water efficiency. 3) Plants are closer and reduce water waste. 4) The growth cycle of greenhouse plants is usually shorter than the outdoor growth cycle, so water consumption is lower throughout the growing season.

Indispensable water technology in the garden. An accurate, technically mature water system is a prerequisite for optimal growth of cultures. Good water quality is important. The water must be in good condition and safe. A water system that is adapted to the type of plant, the type of substrate, and internal and external factors can ensure optimal plant growth. The results are immediately reflected in production.



Water is the driving force behind any type of cultivation. The water technology system should not only be understood as an irrigation pipe network, but also as a water storage system, water treatment, recycling, fertilizer unit and water transport.



HEATING SYSTEM

SYSTEM
HEATING

Effective climate regulation

Every grower wants to be able to control the climate in the greenhouse optimally and effectively, because this is the only way to achieve the best quality and the highest yield.

The heating system is also known as the greenhouse blood flow system because the main goal of the greenhouse is to maintain the required temperature 24 hours a day.

Precise temperature control ensures that the culture thrives and produces high quality products. Controlling the temperature with the help of a heating system is a prerequisite for achieving the production goals. Many options are available for air conditioning. In order to coordinate quality, price and energy consumption, personal advice is important.



In addition to heat, the system can also produce CO₂. This way the system is used optimally. Corpus Agro offers tailor-made systems to ensure a balance between quality, costs and returns.



COOLING SYSTEM

SYSTEM COOLING

Moisture is an important growth factor in greenhouses.

This has direct and indirect effects on production and cultural quality. A high pressure lighting system (also called a fog system) is used to maintain relative humidity and cool the air.

The fog system can achieve the cooling effect. Depending on the outside air temperature, it is possible to achieve a temperature drop of more than 8 degrees compared to a sector without cooling. The system can also be used to keep the temperature in the expansion compartment at a constant level.

The working pressure of high pressure mist is between 70 and 120 bar, and the enormous pressure creates very fine mist. The uniform microscopic mist is so fine that the mist evaporates immediately and does not deposit on the plants. Evaporative cooling uses heat in the air to evaporate water from plants and other damp surfaces, keeping the greenhouse temperature 10 to 20 °C below the outside temperature. The "Pad & Fan" system works as follows: Install a fan on one side of the greenhouse and a pad wall on the other side.



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Carbon Dioxide Dosing

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The buffer tank system is also known as a heat store.

These water tanks are mainly used for short-term heat storage. The buffer tank can flatten the energy peak, which saves costs and energy. The buffer tank is provided and installed horizontally and vertically.

The buffer tank is designed in such a way that CO₂ from the boiler

and / or the CHP system can be used. If there is no well thought-out CO₂ management, the effect of the lighting is partially limited. It is therefore important to ensure that the CO₂ concentration in the greenhouse is correct.



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Use the growing system to easily grow vegetables, flowers, and plants. Agricultural systems make it easier to control the growth and development of plants. As a result, the yield is usually higher and the quality of the harvested product is better than when growing outdoors. In addition, you can make better use of the available storage space. In this way, labor and production costs can be saved by cultivating the water tank system, thereby increasing production.

There are many different options when choosing an evolving system. Basically, however, there are three basic systems: Cultivation container system, pot system, cultivation platform system

There are several reasons to choose a culture channel system. From environmental reasons such as collecting and recycling drainage water to technical reasons such as a precise overview of the work and favorable working conditions. Which cultivation channel system is used depends on the cultivation method.

The gutter of a culture gutter system can be used in various ways. The cultivation of vegetables and flowers should ideally take place on the cultivation channel.



CULTIVATION SYSTEMS

The pot cultivation system is a cultivation channel system in which roses and gerberas are grown especially in pots or containers, and each pot or container has its own substrate.

TECHNOLOGY

Lighting has become an indispensable part of modern greenhouse cultivation. There are several good reasons to choose a lighting system. The most common is year-round planting, as buyers now want quality products all year round. Choosing the lighting system shouldn't be too difficult because if it grows over the year, the system will pay for itself in a short amount of time.

The lighting system has two functions: providing growth and development light. Growth (by photosynthesis) requires light, and the growth of plants (shape and flower) requires light. For the growers in each branch, lighting is important to artificially lengthen or influence the daylight cycle.

LED lighting is increasingly used in the garden area. This is a sustainable and efficient option as it can on the one hand compensate for certain climatic effects that limit the yield and on the other hand it can accelerate certain planting processes. With the help of LED lighting, growers can change the spectrum of light to choose the most suitable light for each plant. This makes LED lighting an interesting alternative that offers a great advantage with lower operating costs.



The integration of various processes and technologies in the greenhouse requires a high level of specialist knowledge. With Corpus Agro, breeders can benefit from this knowledge.



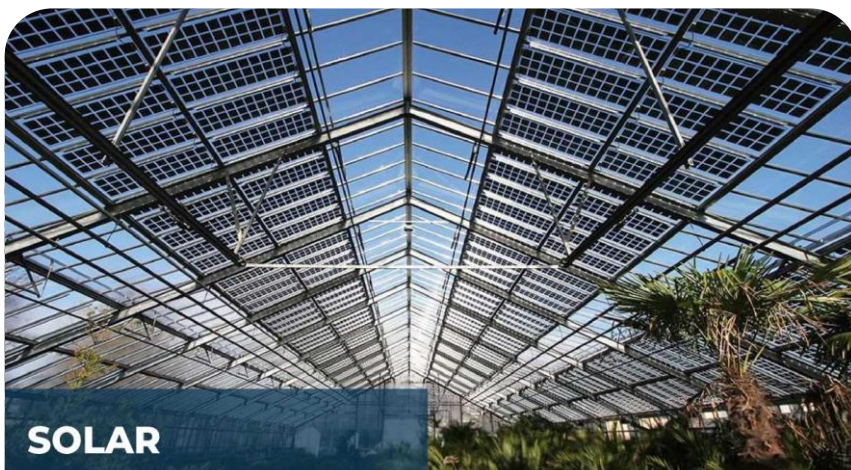
FUTURE ENERGY - SOLAR PANEL

Greenhouses and related structures usually have a large roof area. If it is equipped with solar panels, it can be put to good use. Companies can generate sustainable energy through very manageable adjustments. This significantly reduces energy costs.

Energy costs are expected to continue to rise. It is therefore becoming more and more interesting to invest in generating your own energy. In many utility companies, the energy generated by the solar panel system can fully offset the energy consumption, and the price is the same (balanced) as the energy consumption.

Solar cells are micro power machines that convert the sunlight they receive into electricity. It is converted from direct current into alternating current (230 V) with the help of an inverter. This storm can be used immediately. Unused electrical energy is fed back into the grid.

Sandwich roofs with solar module systems are also possible. If you need more information, please contact us!



**SOLAR
SYSTEMS**

SYSTEMS

SOLAR



Greenhouses and the associated work rooms often have a large roof area. This can be used sensibly.



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