

crystalvision

Cutting-Edge Field Lab Solutions

Circular Economy Pitch event,
May 5th, 2021

Kibbutz Samar



Organic dates plantation

- Over 10,000 dates palms
- Over 800 tons of dates per year
- Operating since 1976

Kibbutz Samar



Who we are



- CrystalVision is an Aqua-, Agri- and Med-tech company, specializing in control systems, automation and R&D facilities
- Founded in 1992
- Based in Kibbutz Samar in Israel

Sustainability



Water & sewage treatment solutions



Problem:

Lack of fresh water for dates farmers in Arava region (including our dates plantation)



Solution

Crystal Vision created a control system for reusing sewage water from Eilat to irrigate the palm dates in regional farms`

We monitor:

- Water salinity (not good for plants)
- Toxins

We control:

- Level of water in the reservoir
- Pumps to maintain certain pressure 24/7
- Chlorination system

Agritech



Lysimeters



Lysimeters

- Help researchers and farmers understand the optimal requirements of the plants in water
- Helps reduce the water & fertilizer usage

Who we are



What we do?

- We design and build lysimeters for companies and research institutes
- Long term projects (5-10 years)

Aquatech



Monitored Climate Simulator



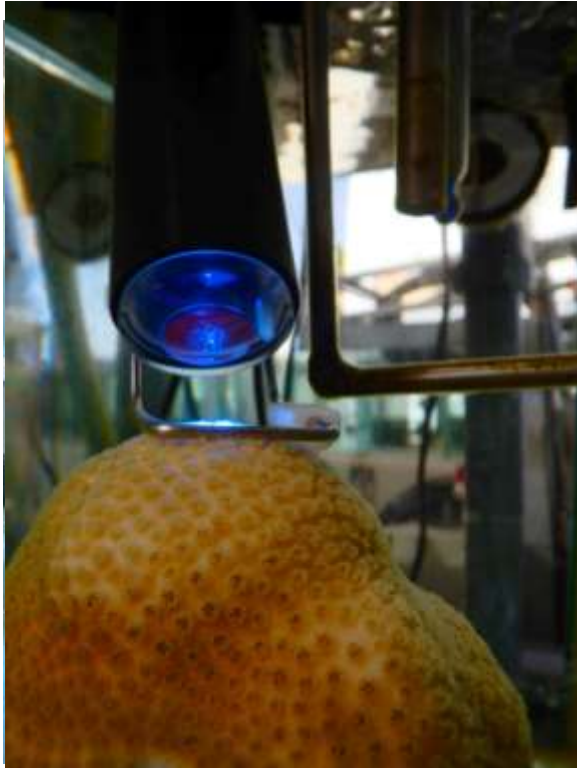
Problem 🤔

Global warming and pollution destroy the coral reefs

Goal 📍

To analyze the behavior of reefs under different conditions

Monitored Climate Simulator



What we did



1. Developed and built a system of 80 acidity and temperature controlled aquariums
2. Installed a smart remote control robot to automatically measure:
 - water temperature
 - dissolved oxygen
 - pH
 - electrical conductivity
 - photosynthesis activity
 - salinity

Monitored Climate Simulator



The Monitored Climate Simulator
is a unique system that simulates
climatic changes in the sea



Check out video about this project:

https://youtu.be/GBoDP_7TDa4

Fish Feeder Robot



- Feeding fish is a complex and expensive process
- The CrystalVision Fish Feeder robot system optimizes the feeding process and cuts down the costs

Fish Feeder Robots



- ✓ Cut the costs on manual labour
- ✓ Provides accurate feeding distribution
- ✓ Each robot serves up to 200 pools
- ✓ Easy data collection
- ✓ No room for human error

SCADA OPC

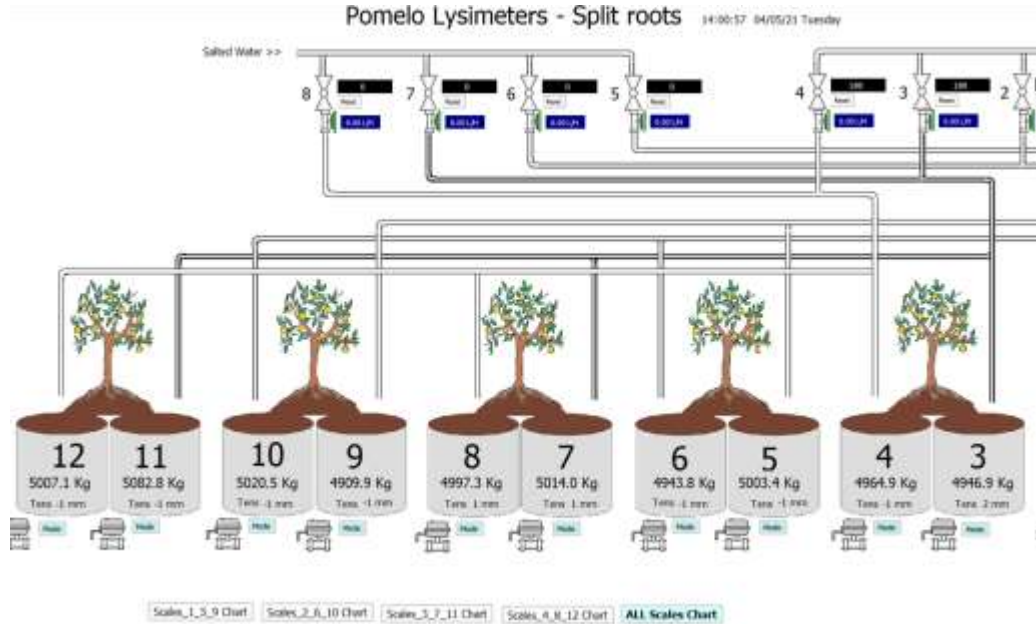


Crystal Vision OPC



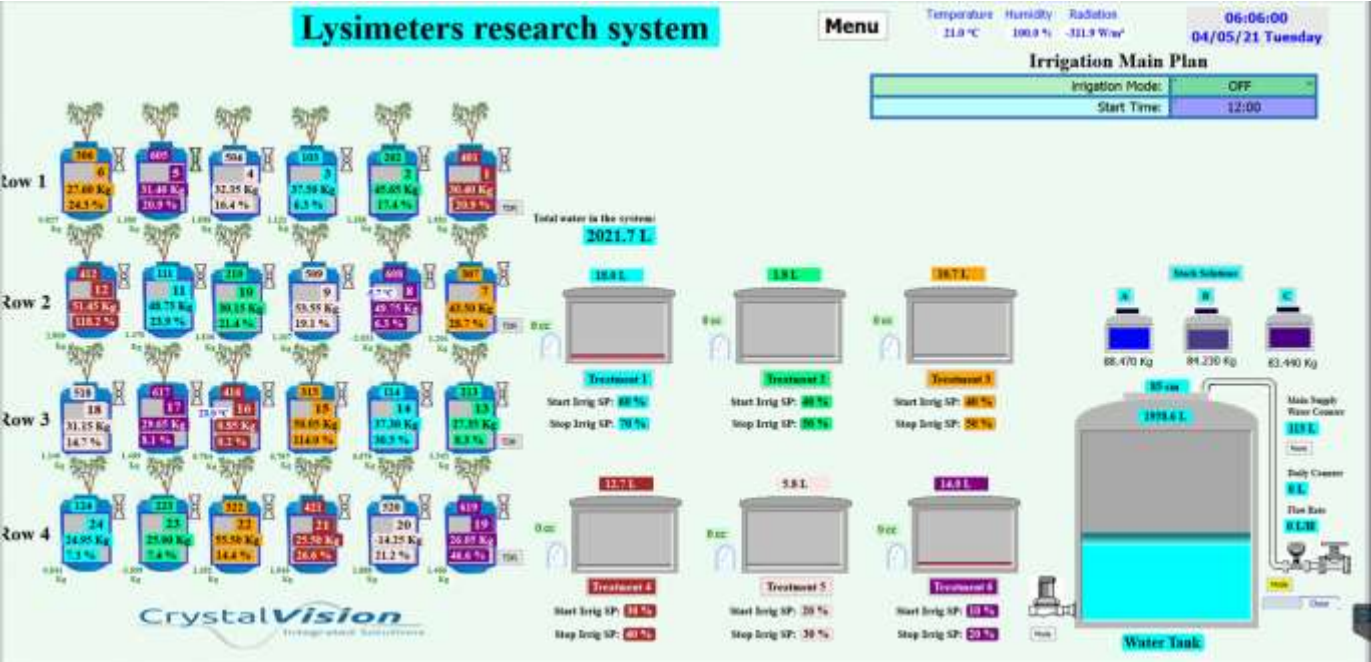
- Supervisory control and data acquisition - simplifies maintenance & enables management to get a good picture of anything they want to know about automation system.
- The interface was developed by Crystal Vision in 2006
- Provides very good basic functionality for small & medium size projects

Crystal Vision OPC

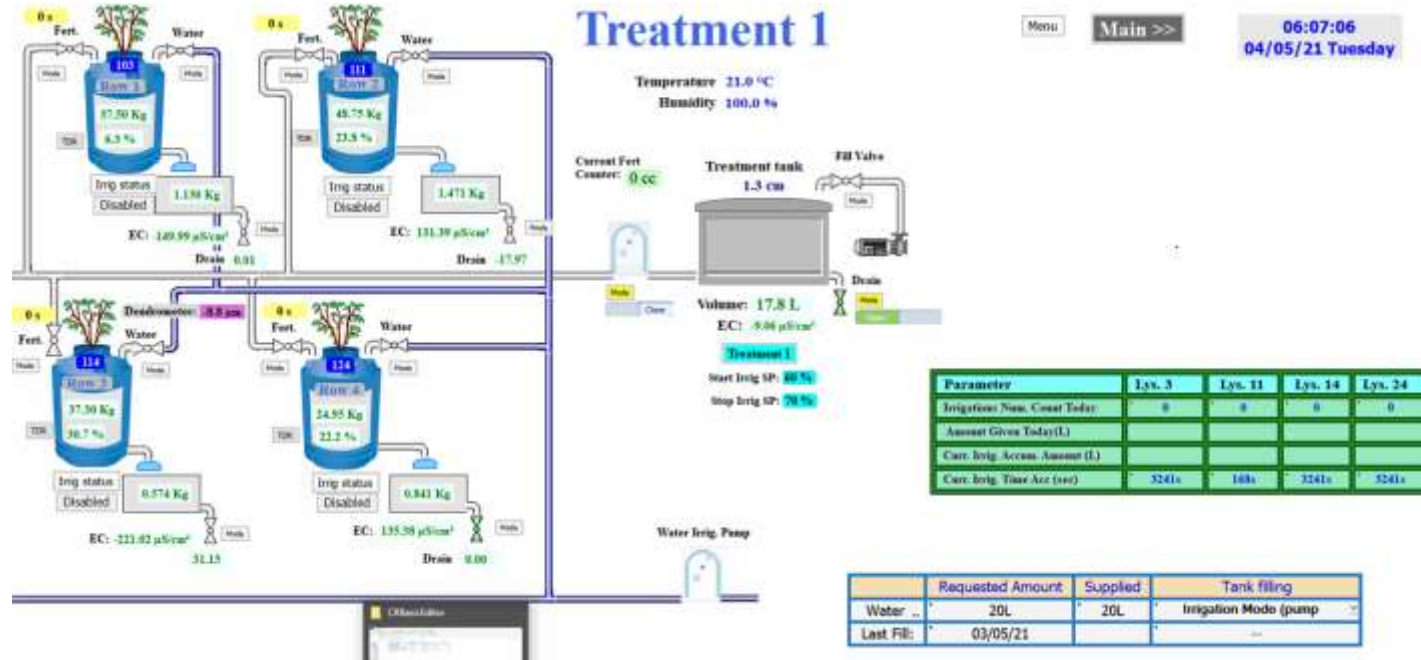


- ✓ User friendly dashboard
- ✓ Real time alerts
- ✓ Flexible graphs and reports
- ✓ Remote control operations

Crystal Vision OPC



Crystal Vision OPC



Opportunities with Crystal Vision



- Automated fish feeding solutions
- Environmental control systems for aquaculture
- Lysimeters & soil monitoring
- Water & sewage treatment stations
- SCADA OPC for medium & small companies
- Medical devices prototyping

Thank you!

Contact us at:

www.crystalvision.co.il

Mike Vishnevsky

mike@crystalvision.co.il

+972533855449