



VALENTE[®]

SOLUZIONI TECNICHE PER VIGNETI E FRUTTETI

Orchard Protection in Modern Agriculture

2024 New England Vegetable & Fruit Conference
December 18, 2024 -Manchester, New Hampshire



Today's fruit-growing presents itself as a real challenge, where fruit growers have to deal with a number of new, complex, unknown, unfamiliar and often unpredictable issues

In the last few years our life has changed and the way to farming changed too

Global and integrated market has raised up speed and information transfer and consequently the level of competitiveness



Geopolitical issues effect the market in terms of inflation, mutable prices, uncertain revenues



CLIMATE CHANGE... IS ALREADY IN ACT

**How long could client bear the risk
of loss because of the climate?**

..it disrupts all traditional growing rules.

Farmers must defend their crops from risks
deriving from bad weather

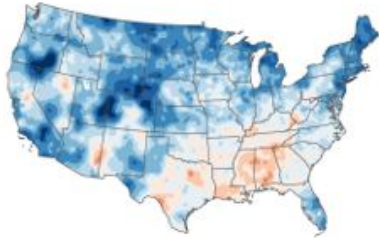
..it **increases** extreme atmospheric phenomena
like **hail storms, strong wind and sun, frost,**
higher temperature, presence of new sort of
insects, also in areas formerly not affected by
these problems



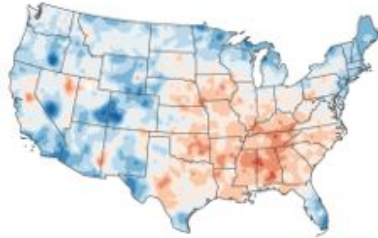
Global warming ...a matter of fact

U.S. ANNUAL TEMPERATURE COMPARED TO 20th-CENTURY AVERAGE

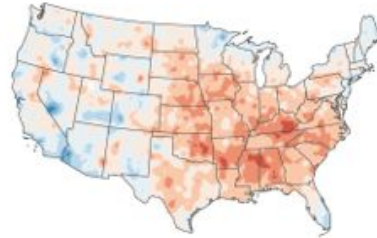
1901-1930



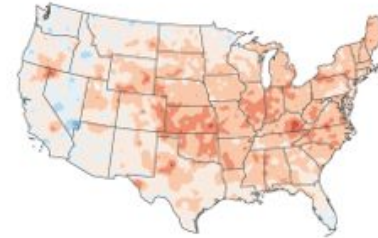
1911-1940



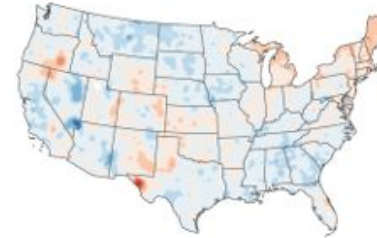
1921-1950



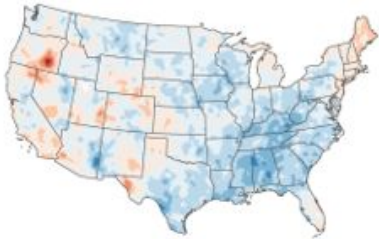
1931-1960



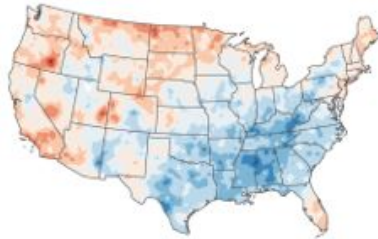
1941-1970



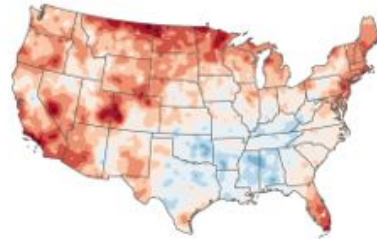
1951-1980



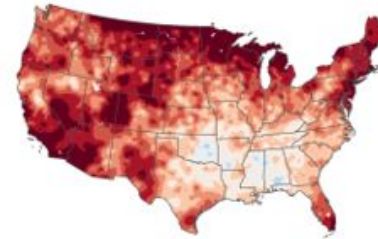
1961-1990



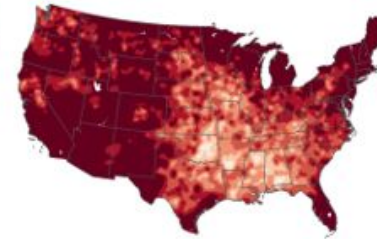
1971-2000



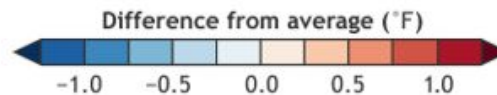
1981-2010



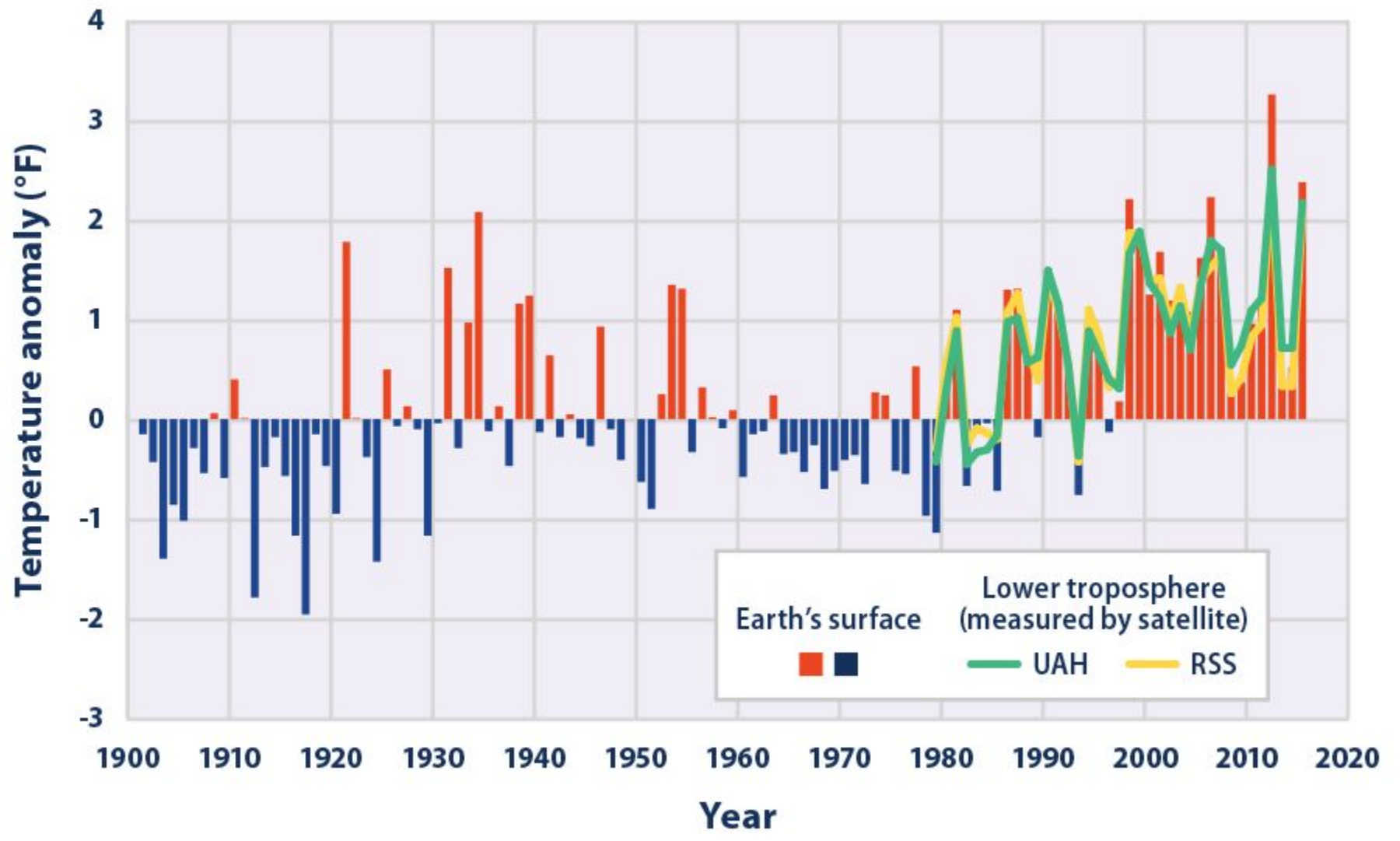
1991-2020



30-year Normal
compared to 1901-2000



NOAA Climate.gov
Data: NCEI





New enemies... new defences



Most recent enemies are Suzuki **Drosophila** that has laid siege a lot of orchards in the world in the last few years striking different species of fruit.



Another dangerous insect is **Carpocapsa**, a little butterfly or moth, lethal for apple trees. Its pink larvae with brown head penetrate fruit far before its ripening, digging out tunnels until they reach seeds.



Asian stink bug, as its name suggests, this insect comes from Asia, it reproduces with alacrity and it could be a threat to coming harvests.

Last but not least, the **Spotted Lanternfly** interfere with photosynthesis and can slow plant growth or even lead to death

*How to deal with them? **Active defence** is the answer*



Protecting systems with perimetrical netting closures, preventing flies to enter in the orchards, allowing farmers to work inside the plot freely





..when it comes..



V

PROBLEM...







**How long does it take to
acquire new habits in
farming?**

**Certainly not when it will
be too late by then**



Nowadays, the only way to do **FRUIT BUSINESS** is to take care about the **QUALITY**.. in terms of..

Soil preparation and orchard layout
plants quality and varieties

Irrigation and fertigation

Frost systems

farsighted agronomic Consulting

Mechanization

Supporting systems

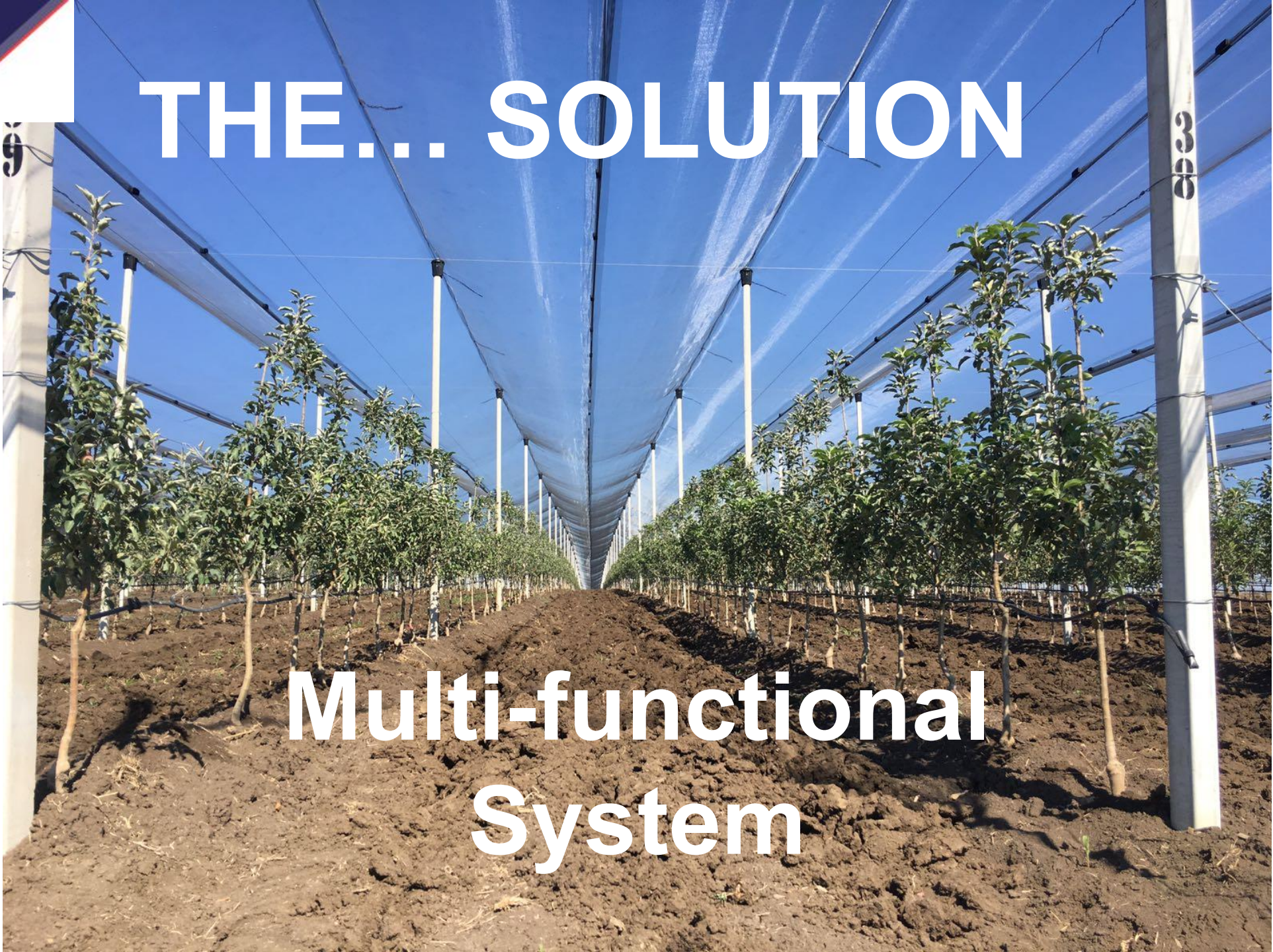
Active crops protection – covering system

Every grower knows.. to minimize risks, **every single step has to be properly done** and among a lot of proposals you have to choose the more practical, effective and innovative ones, always aiming in quality and innovation which allow you to reach your goal.



THE... SOLUTION

**Multi-functional
System**





MULTI-FUNCTIONAL SYSTEMS

Why using coverings?

**HAIL, RAIN, SUN, WIND,
INSECTS, BIRDS, ANIMALS,
BACTERIA-VIRUS, DESEASES,
MICRO-CLIMATE, ADVANCED AND
LATE SEASONABILITY**

















HERMENS
FRUITSYSTEM







VALENTE













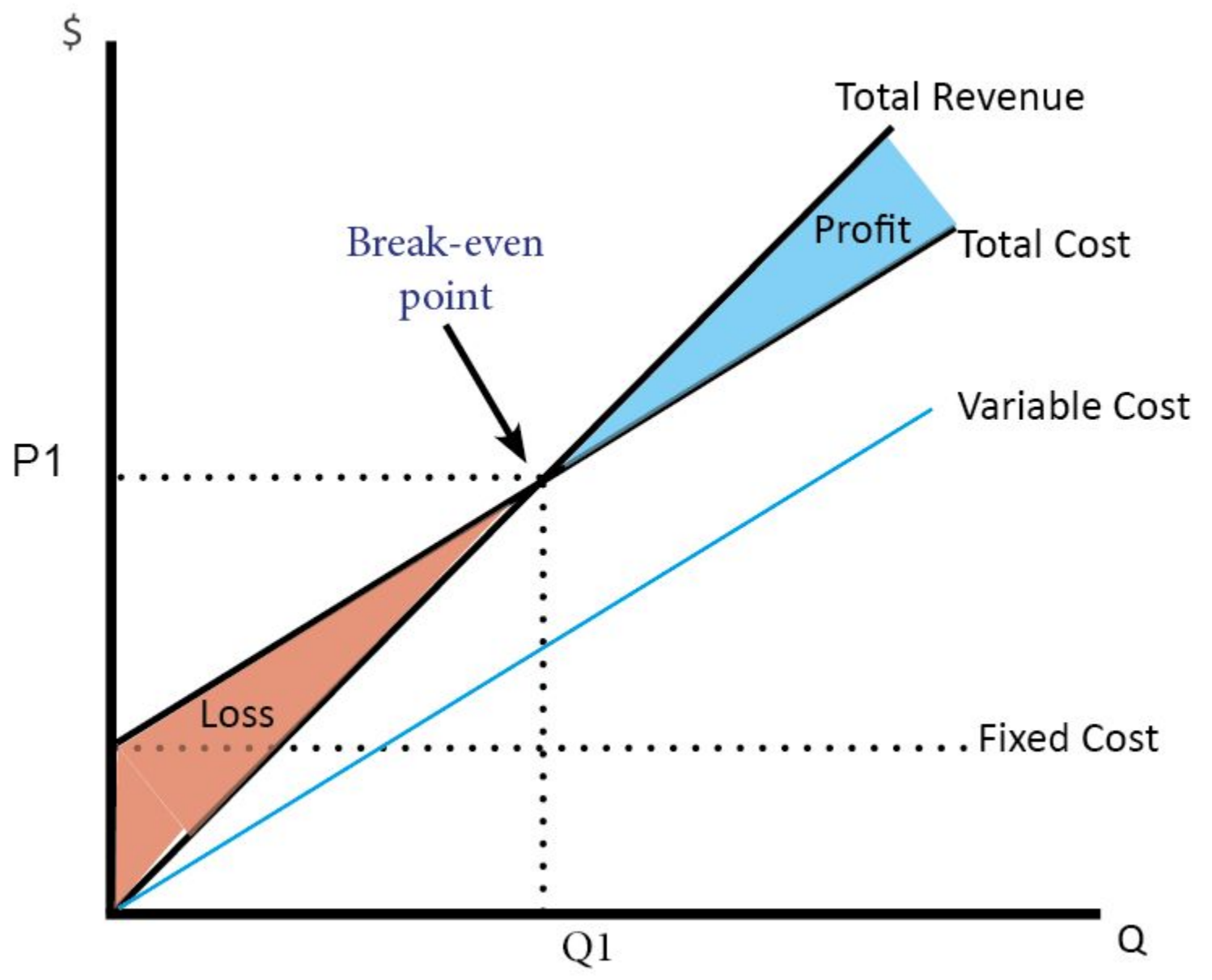




High QUALITY FRUIT

INVESTEMENTS

**TOTAL COST OF THE
OWNERSHIP**





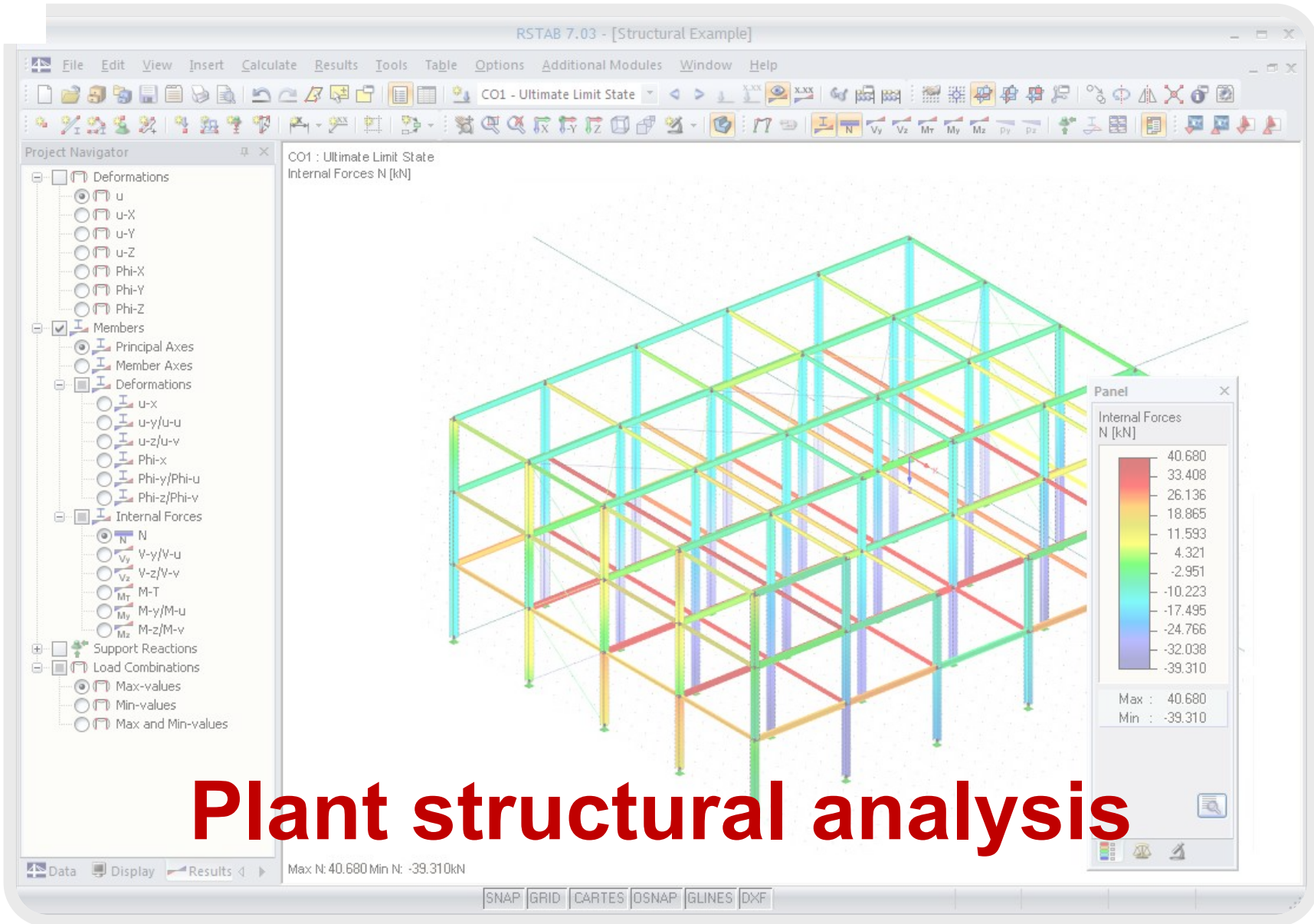
**WHAT to rely on to
achieve all this**



MIM: Projects, Materials, Installation, Maintenance

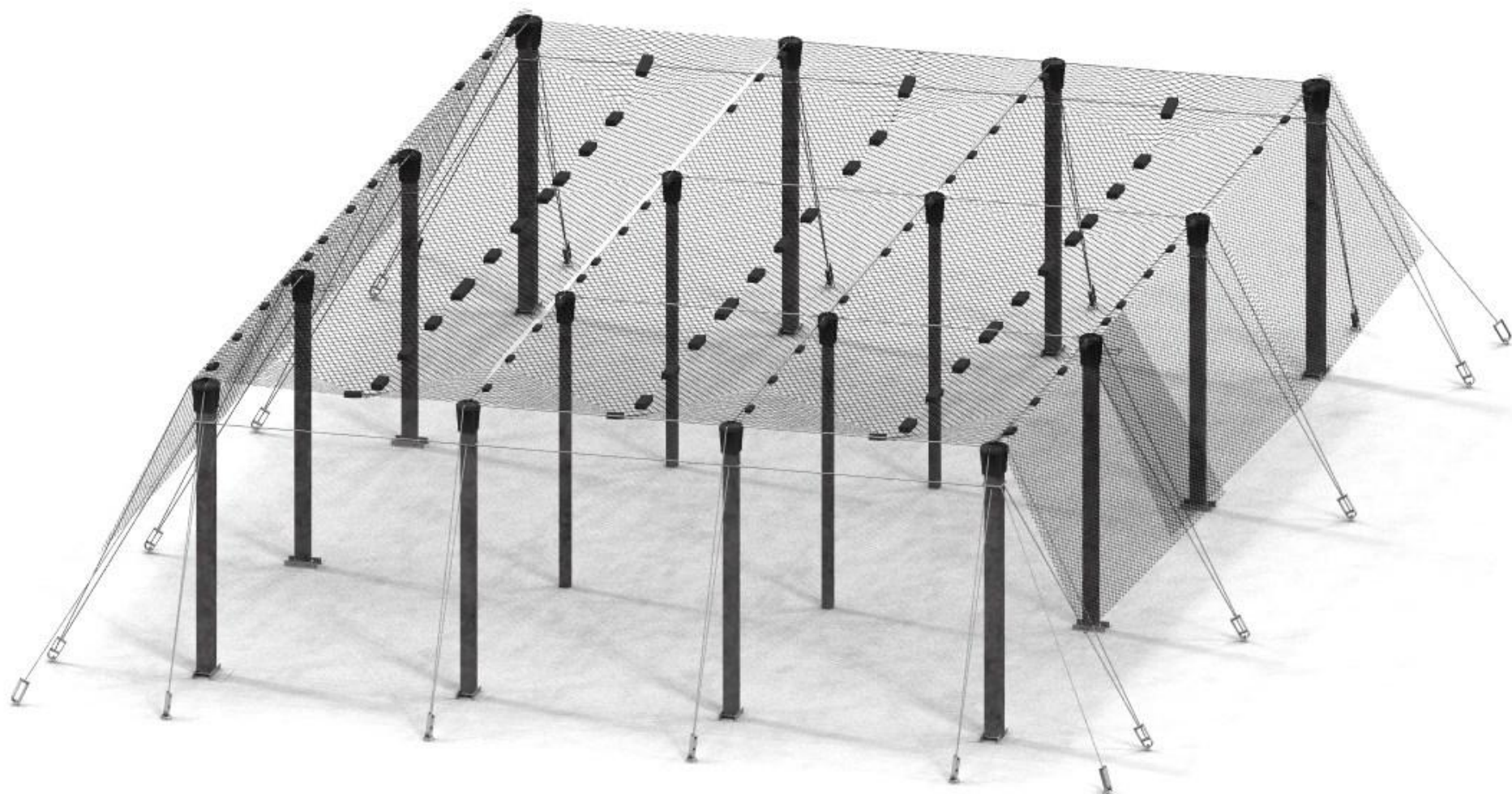


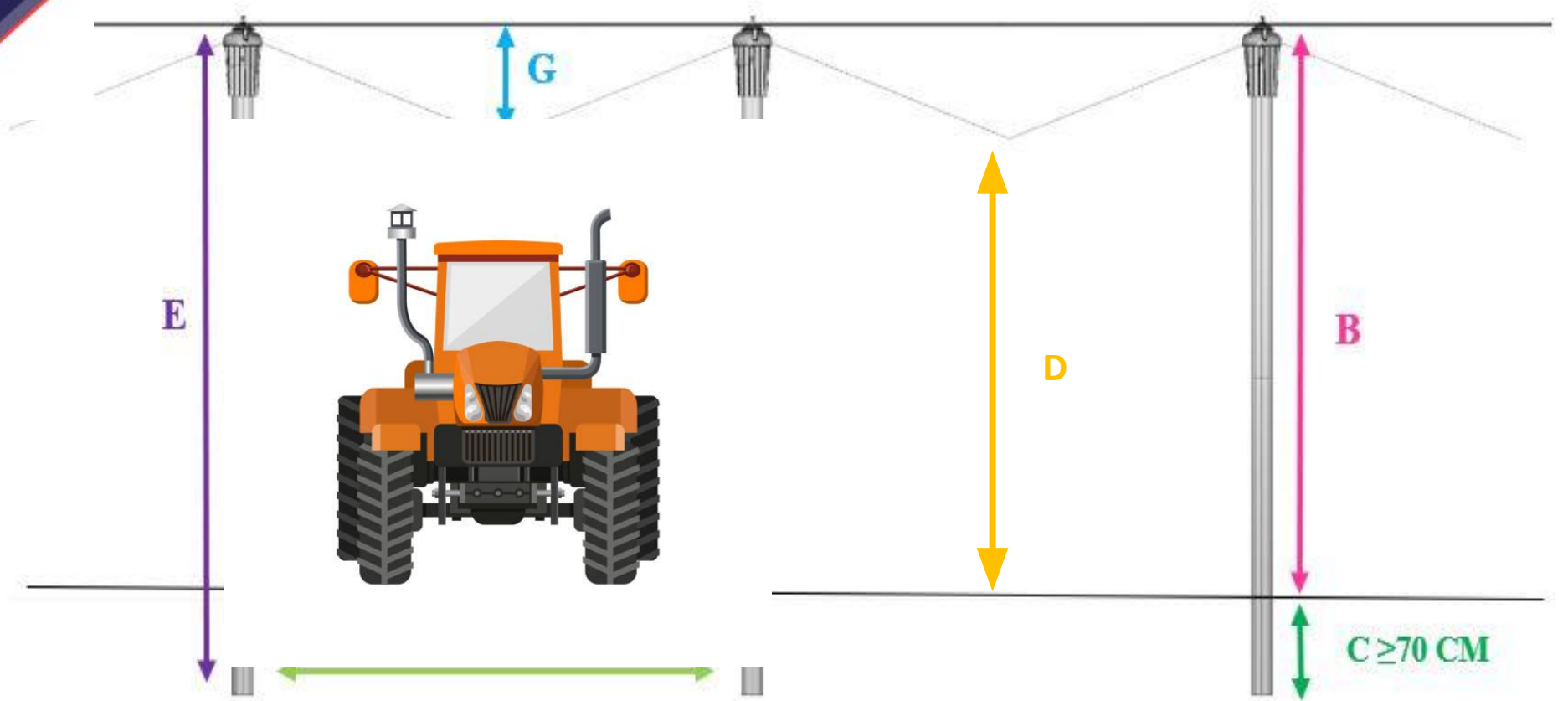
Static calculation



Plant structural analysis







Rules to follow

A = distance between piles = max 10mt
B = max **4mt**
E = C + tractor height + 0,50 + G
F = max 5mt
G = depends on F, according to Pitagora

Corner pile sec. 14x14
Head pile sec. 8x12 18 wires
Side pile sec. 8x12 18 wires
Inner pile sec. **7x8** 12 wires



**WHOM to rely on
to achieve all this**



V VALENTE®

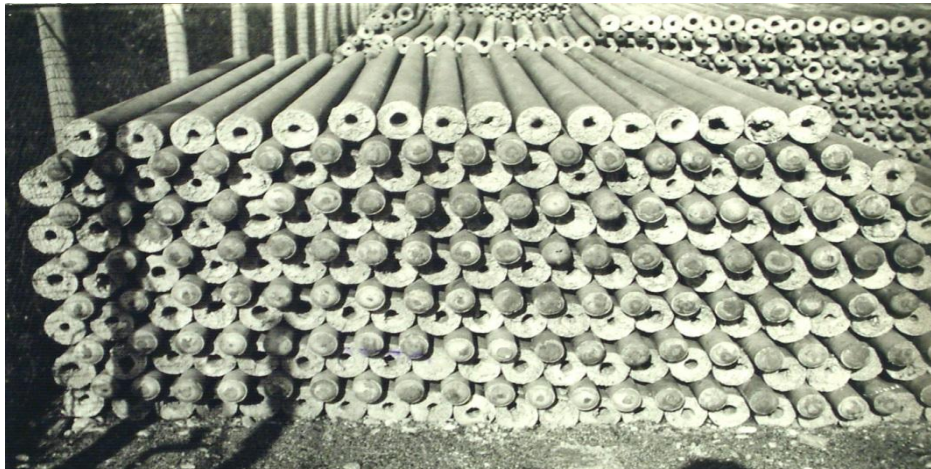
SOLUZIONI TECNICHE PER VIGNETI E FRUTTETI





963: Pietro Valente founded the Company

Our company was founded by Pietro Valente in 1960 and it's today recognized as a **benchmark company** in the design and manufacture of technical solutions for vineyards and orchards.





VALENTE[®]
SOLUZIONI TECNICHE PER VIGNETI E FRUTTETI









VALENTE
TECHNICAL SOLUTIONS FOR VINEYARDS AND ORCHARDS

CONCRETE PILES KLASSIC

KLASSIC Prestressed Reinforced Concrete pile are made using pre-tensioning technique, which ensures a **greater mechanical resistance**.

KLASSIC pile has a trapezoidal shape with four smooth sides and no edges. These details allow use of harvesting machinery in vineyards and does not cause wear hail net in orchard installations.

Our trademark is on the front: V for Valente!



DNV·GL

PRODUCT CERTIFICATE

Certificato No./Certificate No.: 144224-2013-PC-ITA-DNV Rev. 5.0 Data prima emissione/Initial date: 13 Gennaio, 2014 Validità/Valid: 14 Aprile, 2019 – 14 Aprile, 2022

Il presente Certificato è costituito da 2 pagine/This Certificate consists in 2 pages
In conformità ai regolamenti di DNV GL per la Certificazione di prodotto è stato constatato che il prodotto/
In compliance with DNV GL guidelines for the Certification of product, it has been stated that the product:

Klassic

Realizzato da o per/Manufactured by o for:

VALENTE S.r.l.

Via L. Galvani, 2/4 - 35011 Campodarsego (PD) - Italy

È conforme ai requisiti della Specificazione Tecnica di Prodotto/Complies with the requirements of the Technical Product Specification

STP-CE-PC-IND-08 Rev.3

emessa da/issued by

DNV GL Business Assurance Italia S.r.l.

Questa certificazione è valida per i prodotti caratterizzati come:

Pali in cemento armato precompresso per vigneti e frutteti
(ulteriori dettagli in appendice)

This certificate is valid for the products defined

Reinforced concrete piles for vineyards and orchards
(further details are given in the appendix)

DNV·GL

Certificato No./Certificate No 144224-2013-PC-ITA-DNV Rev.01
Luogo e Data/Place and date: Vimercate (MB), 12 Aprile, 20198

Appendix to Certificate

Sito produttivo/ Factory site:	Via L. Galvani, 2/4 - 35011 Campodarsego (PD) - Italy
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Sezione caratteristica	6x6	7x7 8 f	7x7 12 f	7x8	8x8	9x9 12F	9x9 18F	8x12	14x14
Coppia di Rottura Flessione ±20%	981 Nm	1.570 Nm	1640 Nm	2.158 Nm	2.747 Nm	3.335 Nm	4.022 Nm	5.886 Nm	11870 Nm
Resistenza alla compressione e durabilità della capacità portante a fronte della corrosione e del gelo/disgelo	> 50 Mpa								
Tolleranze Dimensionali	Lunghezza	±1 %							
	Dimensioni della sezione trasversale	±3mm							
	Rettilineità	≤0,5%							
Copriferro	≥10mm								
Caratteristica superficiale	Conforme EN 12839: 2012								
Assorbimento d'acqua	Conforme EN 12839: 2012								



Why using concrete posts technology?

Longevity: cement posts have more than 50 years lifespan, resistant with the increasingly weight of the production (50 tons and more). They don't present problems of rotting and wear and tear along the time conversely to other materials such as wooden posts whose treatments are/will be **prohibited** cause pollution.

Cement posts are **strong** and **flexible** to be the framework of stable systems

Cement posts systems **items** are studied, designed and conceived to resist at extreme extreme atmospheric phenomena

Correct design/layout = space optimization = save time and money

Netting used in cement posts systems are conceived and designed not only to **collect hail, but creating a favorable microclimate** where better farming without effecting crops production (**sugar content + color + fruit shape + harvesting**) and **improving fruit quality**, guarantee giving to final market a **constant** a high-quality fresh fruit



Why Valente...

- ✓ Complete **solutions** provided by only one supplier = ONE STOP SHOPPING
- ✓ Detailed project made according farmers' needs (tailor made project)
- ✓ The worldwide stronger pre-stressed cement poles
- ✓ DNV certification on pre-stressed cement posts quality
- ✓ ISO 9001 quality certification
- ✓ Ultimate breaking point tests on each item and system
- ✓ Turn-key system: installation support and technical post-sale
- ✓ Systems easy and quick to install;
- ✓ Easy yearly maintenance;
- ✓ 60 years experience, engineering and static calculations on systems



**The FUTURE is
already PRESENT**







VALENTE[®]

TECHNICAL SOLUTIONS FOR VINEYARDS AND ORCHARDS



THANK YOU AND GOODBYE