

ΈΑΘΑΌΈΑΘÇ & ΆÎ Ì ΔΈΈΌÌ Ì Ó
ΈΑÑÌ Ì ΈÇΔΈÛÍ

GREENHOUSE
CONSTRUCTIONS & EQUIPMENT



Άοι ε ΆΜΜΑΪ Ϊ ΟÇΕΕΆÇ Ϊ .Ά.



ΑΟΙ Ο ΕΑΝΘΟΟÇΟ 1981



Ç áðáεñá Άοι ε Άι ι άίι οçέεάç Ϊ .Ά. εάñγεçέα οί 1981 οόç Ϊ . Ϊ άάίçόá Εάοόάει ίεçò. Ϊ ε άγί εάñòòÝò οçò, ðòò-εί γ-ί ε άòáñι ι οóÝò, ι á ι άάÜεç ðáññά οóεο ι ç-άίι εί εέÝò εάοάóεάòÝò, ίάεβί çóái ι á ι άñÜεε εάε εÝεçόç áεά άί ðεάεÜ, εάοάóεάòÝò οί ò áá-άί óái οóú-ι οçί άί ðòçñÝόçòç οúι ááñι öπí οç ááεòáóóç οçò ðáññááüáðò οί òò εάε οçί οί ò áεüòεει γ οί òò áðεòÝáι ò. Άðü áεάβί ç οç οóεáι Π ίάεεί Ü ι έά áει áóðáçò ðñüι άί ò οóçί áòáεñá οί ò οί 1985 εάòú-òñπíáε ááðεüι á áοñáòεά-ίááò áεά άγί ι ç-άίΠι áοά ðί ò άί çει γóái óá ι άάÜει ááει ü οί òò ðáññááüáι γò οοί άγóει εί Υñáι οί ðò.

Ϊ á -ñüιί áñáúòáñá ç áòáεñá áεóÝñ-áòáε οοί -πñι εάοάóεάòò εáñι ίεçòáüι áðι óáóεοί Υίç ίά ðáñÜááε ðεçεðò ðι εüòçóáò ðáññááüáεÝò ι ίίÜááò ι á ι άάÜεç άίει ðεóóá. Öπñά ðεά ι á εάείί γñááò εοεñεάεÝò ááεάóáóóÜóáεο εάε óýá-ñι ίι ίι ç-άίι εί áεü άίί ðεοί ü, áβι áóóá óá εÝόç ίά εάεýðοί οί á áñπáι ñά εάε Üι áóá üεáò ðεò áíÜáεáò οί ò ðáññááüáι γ óá εάοάóεάòÝò εάε άίί ðεοί ü οί ò εáñι ίεçòáüι ò. ðáñÜεεçέα ι á Üñοεά áεðáεááοι Υίί ðñι óúðεεü, ðáñÝ-ι οί á óá-ίεð óòπñείç óá üεç οçί ΆεεÜáá εάε'üεç οç áεÜñεάεά οί ò -ñüιί ò ι á εýóáεο áεά εÜεá ðεεάί ü ðñúáεçι á ðι ò εά ðáñι ðóεάóóáβ.

The greenhouse construction company "Emmanouilidis Bros Co." was founded in 1981 in N. Magnisia Thessaloniki.

The two founders, qualified fitters with a lot of experience in mechanical construction, started the business with one purpose in mind, to provide machinery for better crop yields which would in turn better the farmer's standards of living. From that moment on starts a rapid progress for the company. In 1985 two special machines that help the producers in their hard working efforts, are patented.

A year later the company enters the Greenhouse production domain, determined to produce high quality and reliable crop producing units.

Now many years later, in new plant buildings and with the latest technology in machinery available, we are in a position to fulfill fast and directly the producer's every need in Greenhouse designing, producing and equipping.

Our fully trained service technicians are available to provide technical support all year around in every part of the world with solutions to any problem that might come up.

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It is evident that in the new millenium the demands of the market have strongly increased in all aspects.

Only those posessing a vision and a business spirit will be able to survive in this race which is called on by our competitive society. Our company, through detailed planing, has set specific goals to the prompt and reliable service of our clients.

Ioannis & Athanasios
Emmanouilidis

Åñí åé óáöÝð ðüð ì å öí ðÝñåóí á öí ö åí èñþðí ö óç íÝå ÷ééååðß, ì é åðåéöþóåð óå üéåð öèð ååí ñÝð éåé óå èÛèå åðßðååí, Ý÷ì öí åóí çèåñ ñåååååå. Μύñì üóí é åéåéÝöí öí ùñåí å éåé åðè÷éñçì åóèèü öí åýì á éå ì ðí ñÝóí öí íå åðèèèþóí öí óççí èí ýñóå ðí ö Ý÷åé åðèåÛèèé ç åí óååüí éóóéèèþ ì åð èí èí üíßå. Ç åóåéñßå ì åð ì å åí åéöðèèü ðñì åñåí ì åóéóì ü, Ý÷åé èÝóåé óóåéåñèè Ýñì öð óóü÷ì öð ì å óéí ðü öç åñþåí ñç éåé åí èüðéóóç åí öðçñÝóçç öüí ðåéåöþí óçð.

ÉüÛíçð & ÅéåíÛóéí ö
Åì ì åí í öçèåçð

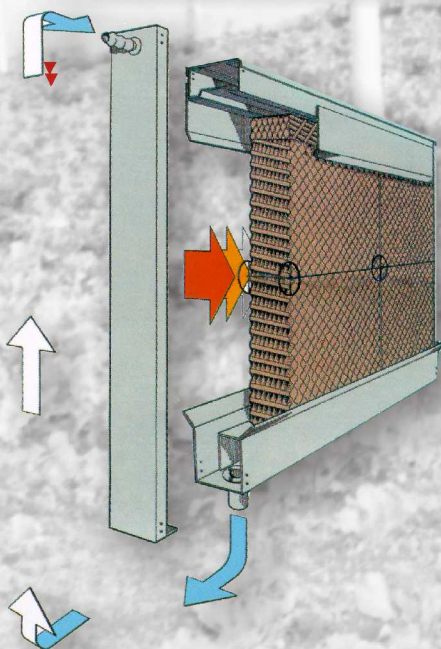
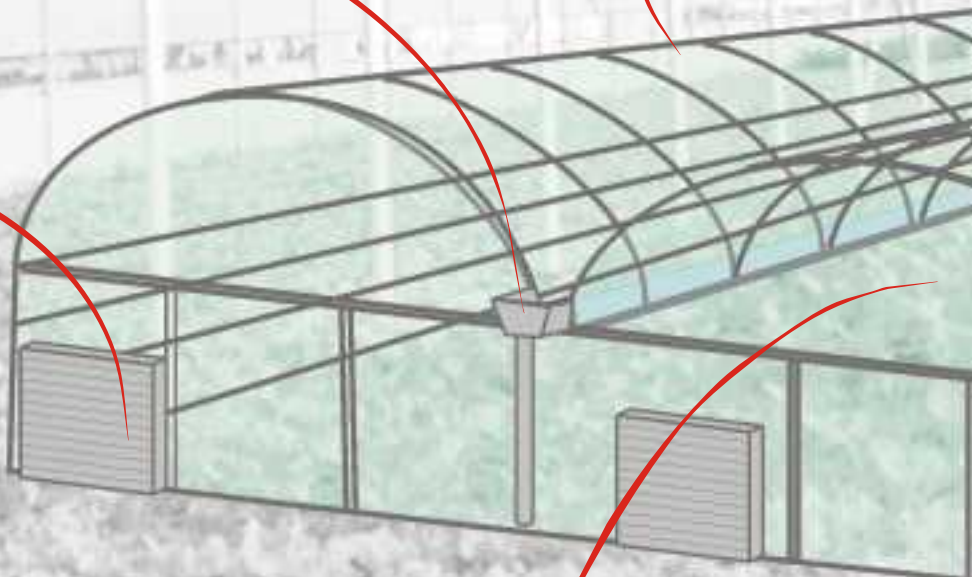
Ι ά όçí áγí çόç θçð εάνι ι εñάόλαð ðι ð
 =πñι ð ðύι ù áðu áðεεοι çού áðιðάαá,
 ðεáðáε óá εάεοι ðñάá ðι óγóοçι á
 áεάñι =Þò ðι ð ðáñι γ ðι ε=πι áðι ð
 (panel) εάε ðι óγóοçι á ðύι
 áí ááñεóðñυí. Ç áí ύοι εόç ðι ð íáñι γ
 εάóύ ðçí áñοι áñ ðι ð áγñá ι γóá áðu óá
 panel εάε ç ðòÞóç ðçð εάνι ι εñάόλαð
 ðι ð áγñá ðι ð ðñι εάεáñ, óá óοι áðáóι ù
 ι á ðç óοι á=ύι áí ç áí áεεάáÞ ðι ð óοι
 =πñι (55 áí áεεάáγò / Þñá) , γ=áε óáí
 áðι ðγέáóι á ðçí ι ááύεç ðòÞóç ðçð
 εάνι ι εñάόλαð εάεáðáñá óεð áóóóγò
 ðáñεύáι ðò ðι ð εάει εάεñεí γ.

Çεáεòñεύ
 áí ι εάυι áí ç
 ι ðñι ðÞ
 Electric roof
 opening



Θáñι ðñι Þ áðu ááεάáí εέγ
 εάι áñιí á ðύ=ι ðò 2 mm

Áí εó=οι γί ç áυιíá óòÞñε-
 ί çò ðáááύι



COOLING SYSTEM

When temperature rises over the desirable value, the system that sprinkles water over the panels goes into effect along with the ventilator system.

Water evaporating as air enters the panels and the lowering of the temperature which results in combination with the constant air exchange (55 times/hour), effectively drops temperatures, especially during hot summer months.



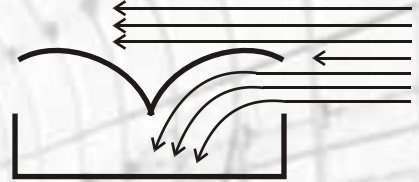
Ç εάνι ι εí ðñοιí á áñι áε ðι óγóοçι á ðι ð áðι áεγðáε
 óóçí :

Áí ι εεí ι ύι εόç áí γñááεáð
 Éáεγðáñç εάε ðεí áðι ðáεáóι áóεÞ εγñι áí óç ðύι
 εάνι ι εçðβύι
 Óεááóç εάε áñι ðεοι ù ðι ð =πñι ð ðι ð εάνι ι εçðβι ð

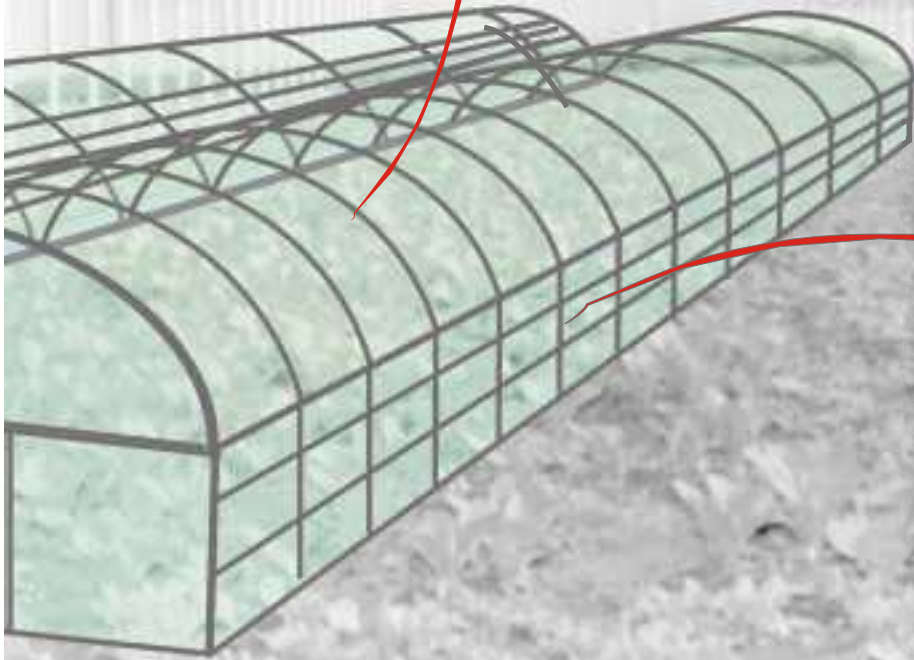
Heat capturing curtain is the system who's purpose is:
 To save energy
 Better and more effective heating for the greenhouse
 To shade and better cooling of the greenhouse.



◀ **ΨαρόνηεU** άίί έαυί άίç ί ηί όP. ΆλαεP ό=άαλαόç ηέα έαέyοάνί άάνεοί ή έαé άνί οοί ή ήί ό έάνί ί-έçðñί ό.
Electrically operating opening roof. Special design for better ventilation and greenhouse cooling.



ΘέαοñεU θάνyεοñά, çάάεοñεU P =άέñί έñί çοά
Side window with electric or manual opening.



◀ **Ί** άί άί ί έñάyοόçò άñί άέ Yί ά όά=ί çοU άί θυάέί όί ό έαοάοέαοUηάοάέ οοί ί θάνεάUέέί ί όά +ηñί όύί έάνί ί έçðñί, άðu όçί θέαοñU όύί άοί ά-όPί άί Yί ήί. Όί yοί ό όί ό άñί άέ ί άάάέyοάνί άðu άðu όύί έάνί ί έçðñί Pόά ί ά άθέοα=U-ίάέ άί άί ί θñί οοάόλα όά ήέί όί ί Pέί ό έάέ όέUοί ό άόόPί. ×ñçόέί ί όί έάñόάέ άί όέάί άί έέU άέόό άðu όέέU άί έάέόέU όέό άί άί ί όέYόάέ έάέ άέάθάνάόUόçόάό άί Uέί άçò όύί όοί έçέPί άί άί ί θñί οοάόλαό όί ό άθέάέPέί ί όάέ.

The windbreaker is a man-made obstacle that is positioned on the surrounding the greenhouse area, especially the side of the prevailing strong winds. Its height is bigger than the greenhouse so that wind protection can be successful throughout the length and width of the greenhouse. We use a wind resisting net made from long-lasting material with a wind permeability according to the wind protection that we wish to have.

ΆΑΙ ΉΕΑ × ΑΝΑΕΟΨΝΕΟΟΉΕΑ

ΟΉΕΕΑ ΉΑΕΟΨΟ ΉΑΝΙ Ϊ ΉΨΔΉΪ

Ψ εΪεοΨο οΪ εαηι Ϊ εΨΔΉΪ Ϊ οΪ ηαβ Ϊ α αβΪ αε αΪ αεΪαΪο οΪ δαηεδοβραΪ Ϊ α:

Α. Ϊ αεαεΪ δεαοΪεΪ οΪ εοαεοεαΪβΪ ο.
Ψ εΪεοΨο οΪ ο εαηι Ϊ εΨΔΉΪ ο Ϊ α Ϊ αεαεΪ δεαοΪεΪ Ϊ αε οαΪ ααοΪεΪ δεαΪ Ϊ ΪεοΨΪ α οΪ αΪ ςεΪ εΪοοΪ ο.

Α. Ϊ α οεεΨη δεαοΪεΪ (οΪ εοαοοΪηα, οΪ εοεαηαΪ Ϊ εΪ PVC)
ΟοΨΪ δαηηδοΪοΨ αοοβ αεΪ αοαεεαοΪ αοοα οα δεαΪ Ϊ αεοβΪ αοα οΪ ο αβΪ αε οΪ οεεΨη δεαοΪεΪ οαΪ οεεΪ Ϊ αααεΪοαηΨ αεΪηεαεαο αΪοβ οα οοΪ αοαοΪ Ϊ Ϊ οΨ Ϊ ααΪεΨ οΪοΪ δαηαοΪοΨα οΪ ο αβΪ αε αδαηαβΨοΨ αεα οΨΪ Ϊ Ϊ αεβ αΪ ΪδοοΪΨ οΪ εαεεαηααεβΪ.

ΟΉΕΕΑ ΉΑΝΙ Ϊ ΉΨΔΉΪ Ο - ΑΪ ΑΝΟΨΪ ΑΟΑ ΟΟΪ ΑΑΟΪ Ϊ ΉΪ ΑΉΑΟ

Ϊεα οα οεεΪ οΪ ο οεαεαοΪ οΪ ο εαηι Ϊ εΨΔΉΪ ο αβΪ αε αδΪ αεΪααεΪΨ οΪεβΪ α Ϊ α ααεαΪεοΪ α αΪ εαηι βΪ αεα οΨΪ Ϊ αααεΪοαηΨ αΪ οΪ αΪ οοεο οοΪεβραο οΪ ο αβΪ ο οΪ ο εαηι Ϊ εΨΔΉΪ ο

- Ϊ ηεΪ οοΪοαο: Α60 (2") x 2,2mm
- Αοβααο: Α60 (2") x 2,2mm
- Οααβααο: Α21 (1/2") x 1,8mm
- ΑΪ οεαΪ ΪΪ αο: Α33 (1") x 2mm
- ΉαεεΪηααεαο: Α33 (1") x 2mm
- ΑΪ αηοβηαο εαεεΪηααεαο: Α21 (1/2") x 1,8mm
- Ψ οαηι ηηι β αβΪ αε αδΪ ααεαΪεοΪ ΪΪΨ εαΪ αηβΪ α δΪΪ οδ 2mm.
- Αεα οΨ οοαεαηβ οΪΪ ααοΨ οΪ ο οεαεαοΪ οΪ αηΨοΪ Ϊ οΪ εΪ οαε οΪΪ ααοΪ Ϊ ε (αΪ οοαο) 2"εαε 1/2" εαεβο εαε οΪΪ ααοΪ Ϊ ε (εΪ εΪηα) 2", 1" εαε 1/2".

Οα αεαεΪ αΪ αηοβΪ αοα οοΪ ααοΪ Ϊ εΪ αηαο οΪ ο εαοαοεαοΪεΪ Ϊ οαε δηι οοΪηι οΪ:

- Ϊ ααΪεΨ αΪ οΪ αΪ οοΪ αηΪΪ
- ΟοΨεβο αεηηααεαο εαε αΪ οΪ αΪ οοΪ αΪ οαεο οΪ οεεεβΪ Ϊ αοαΪ οΪ οδ
- ΑΪ οΪ αΪ οαΪ ααΪεαο αΪ αΪ Ϊ δεΪοαεο
- ΑεαεΪ εαοαοεαοαοΪ ΪΪαο αοΪ αΪ οαε Ϊ α Ϊ Ψ οεαηηι οΪ οΪ ααεαΪεοΪ α αδΪ οΪ οεεεΪ οοΪ Ϊ οΪ βΪ εα αοαηι Ϊ οοΪ οΪ
- Ϊ α οΪ Ϊ Ϊ οδΪΪ οααεαοΪ Ϊ οΪ οδ εαοαοΪηηι οΪ Ϊ αΪ αεαβΪ οΪ οΨΪ ςεαεοηηι οοαεΪεεΨοΨ εαοΪ οΨ οοΪ αηηι Ϊ εΪαΨοΨ οΪ ο εαηι Ϊ εΨΔΉΪ ο



GENERAL SPECIFICATIONS

Greenhouse covering material

The covering of the greenhouses can be done depending on the situation with:

A. Soft plastic polyethelenium. The main advantage in covering the greenhouse with soft plastic is the low cost.

B. Hard plastic (polyester, polycarbonate or PVC). In this case we take advantage of the benefits that hard plastic gives us due to being a longer lasting material in conjunction with its light passage properties, for normal cultivation growth.

Greenhouse materials- Coupling parts

All materials for the greenhouse framing are made of steel piping hot galvanized for the biggest possible strength for greenhouse conditions.

- Posts: $\text{Æ}60$ (2") x 2,2mm
- Arches: $\text{Æ}60$ (2") x 2,2mm
- Frames: $\text{Æ}21$ (0,5") x 1,8i i

- Wind protectors $\text{Æ}33$ (1") X 2mm
- Cultivators: $\text{Æ}33$ (1") x 2mm
- Cultivation hangers: $\text{Æ}21$ (0,5") x 1,8mm
- Spouts are made of galvanized steel sheet 2mm.
- For firm frame connection, connectors ("handfuls") 2" and 0,5" are used, along with connectors ("wrap around") 2" and 0,5"

The specially made connecting parts offer:

- Durability over a long period of time.
- High accuracy and strength connections between the materials.
- Strength against high wind pressures.
- Especially made depressions to protect galvanization from wear while fitting of the materials.
- Due to their smart design, no welding is needed to put the greenhouse together.



ÄĒĒĪ ŐĪ Ī ŪŐĪ ĒÄĒĪ Ī ĒÇĒĪ DUAL ARCH GREENHOUSE



ŐĪ äĒĒĪ ŐĪ Ī ŪŐĪ ĒÄĒĪ Ī ĒĒĒĪ ōÄĪ ÄĪĒÄĪ ð ðĒĪ ð äĒĒĪŪŐÄĪ ŐŪŐĪ ōÇ Ī Ī Ī ĒÄĒĪŪŪÄĒÄĪ ŪŐĪ ĒÄĪ ōÇĪ ĒĪ ĒŐÄĒĒĪŪŪÄĒÄĪ ĒÄĪ ŐŐĪ ÄŪĒÄĪ ŐŐĪ ÄĪ ŐÄŐĒĪ ĒĪ ĪÇŐÇ ĒÄĪ ŐÇĪ ÄĒŐĪ Ī ÄĒĪ ĒĪ ĪÇŐÇ ŐÇŐ ĒÄĪÄĪŪÄĒŐ. Ī ĒÄĒĒĪÄĒÄĒŐÄĒŐŪŐ ÄĒÄĒŐÄĒŐ ÄĒŐÄĒĪ ŪĪ ŐÄĪ ĒŪŐŪ ÄĒŪ ĒĒĒĪÇ ŪĒÄÄĪĪ , Ī ÄĪĒĪ Ī Ī ĪÄĪ ðĒŪĪĪ Ő ĒÄĪ ðÄĪ ÇĒŪŐÄĒĪ ĒŪŐŐĪ Ő. ŐĪ ŪŐĪ ð ŐĪ Ő ŐÄ ŐŐĪ ÄŐÄŐĪ Ū Ī ÄĪ ŐĪ ĒÄĒĪŪĒŐĪ Ī ĪĪ ŐĒŐ, ŪÄĪ ŐÄĪ ÄĒĪ ŐŪĒÄĒĪ ÄĪ ŐĪ Ī ĒÄĒŪŐÄĒĪ ÄĒÄĒĪŐ Ū ŐĪ Ő ðĒĪĪ Ő ĒÄŐŪ ŐĒŐ ĒÄĒĪ ŪŐ ĒÄĒĒĪÄĪŐ ŐŐ ŐĪ Ő ĒÄĒĪ ĒÄĒĒĪ Ū.

The dual arch greenhouse, as a uniform space allows monocultivation, as much as multicultivation and contributes to the automation and increase of production. Cultivation work is being carried out under total control, saving energy and money. Structure height, in combination with the roof window, results in a better area ventilation during the hot periods of summer.

ŐÄĪ×Ī ĒÄĪ ×ÄĒÄĒŐÇĒĪŐŐĒÄĪ		
ĒĒŪŐĪ ð	(m)	15-17
ŪŪÄĒŐĪ ŪŐĪ ð	(m)	4,10
Ī ĒĒĪ ð	ÄĒÄĒĒŪŪŐŐĪ	
ÄĒŪŐŐÄŐÇ Ī ĪĒĪ ŐŐÄŐĪĪ ĒÄŐÄĪ Ī ĒĒĪ ð	(m)	2,00
Ī ŪÄĒŐĪ ŪĪĪĒÄĪ ÄĒÄĒŐĪĪĪ ĒÄĒÄĒŪŪĪ	(m)	1,50 - 2,0
ÄĪŐĪ ðĒ ŐÄĒÄĒŐĪ Ū ŐÄĪ ŪĪÄĪ Ī	(Ēm/h)	120
ÄĪ ÄĒŐĒÄĒŐ ÄÄĒĒĒŪŪÄĒÄĒŐ	(Ēg/m ²)	20
ÄŪŪĪ ð ðĒĪ ĪĒĪ Ū	(Ēg/m ²)	25
ÄÄÄŪÇŐÇ ŐÄĒÄĒŐĪ Ū ÄĒÄĪ ÄĒŪÄĒŪŐÇ	(, ŐÇ)	5
ÄÄÄŪÇŐÇ Ī ÇÄĪĒĒĪĪ Ī ÄĒĪĪ	(, ŐÇ)	1

TECHNICAL DATA		
Width	(m)	15-17
Height	(m)	4,10
Length		unlimited
Distance between poles (lengthwise)	(m)	2,00
Distance between side windows	(m)	1,50 - 2,0
Frame's wind resistance	(Ēm/h)	120
Cultivation hangers	(Ēg/m ²)	20
Snow weight strength	(Ēg/m ²)	25
Frame guarantee against corrosion	(years)	5
Mechanical parts guarantee	(years)	1

ΑΙΕΛΟΕ Ι Α ΔΕΕΑΤ ΑΟΑ ΑΙ Α ΑΔΙ ΟΑ ΕΑΝΙ Ι - ΕΧΔΕΑ Ι ΑΟ;

Αί άέ ι άέαοçi Υί ά έάέ ο-άάέάοι Υί ά άδύ άί έηρδρι οο ι ά ι άάÜέç άι δάέηλά οοά έάηι ι έβδέα.

Αί άέ οοδρι δρι έçι Υί ά έάέ άάέάέηει Υί ά άδύ οçί Άάηι οέεP ΟηÜδάæά οçò ΆέέÜαι ò.

Άάί Υ-ι δρι οοάέι έεPóάέò έάέ ι δρι ηι γί ί ά άέάέοει γί έάέ ί ά άδái άοοί άηι ι έι αçει γί.

Ç οι δρι εΥόçοç ουί ράέέάεPί οι οδ άβι άόάέ άί Ü 2 ι Υόηά.

ΔαήΥ-άόάέ δέPηçò οδρι οόPηει ç οοι ί δαήάάüάü ι άοÜ οι δΥήάò ουί άηάάόεPί.

Δηρι οόΥηι οί 5 +ηύί έά άάαγçοç έάόÜ οçò άέÜάηüοçò.

WHY CHOOSE OUR GREENHOUSES?

They have been designed and prepared by people with a lot of experience in greenhouses.

They are standardized and they are approved by the Greek Agricultural Bank.

They have not been welded together so they can be assembled and dismantled at any time.

Frame installation is every 2 metres.

Full aftersale technical support to the producer.

We offer a 5 year guaranty against corrosion.



ΔΙ ΕΞΑΔΕΙ ΟΙ ΤΟΥ ΕΑΝΙ Τ ΕÇΔΕΙ MULTI ARCH GREENHOUSE



Οι δι εξαδευ οι του εανι τ επδει οαί ατεαί ο πνη ο αδονΥδαε ουοί ος ι ι ι εαεεεΥηναεά υοί εαε οςί δι εοεαεεεΥηναεά εαε οοι αΥεεαε οοσί αί οαοεεί δι ιςος εαε οςί αδοί ι αοι δι ιςος οςο δαηάαυαρο.
 Ι εαεεεαηαοεεΥο αηααοάο δεοαει γί οαε εΥου αδυ δεπης Υεαα=ι , ι α ι εει ι ι ι λά πηυί ι ο εαε πάλ σευοαηι ευοοι ο. Οι γοι ο οι ο οά οοι αοαοι υ ι α οι δαηΥεοηι ι ηι ορο, Υ=αε οαί αδι οΥεαοί α οι ι εαεγδαηι ααηεοι υ οι ο πνη ο εαοΥ οεο εανι Υο δαηεαί οο οι ο εαεί εαηεί γ.

The multi arch greenhouse, as a uniform space allows monocultivation, as much as multicultivation and contributes to the automation and increase of production. Cultivation work is being carried out under total control, saving energy and money. Structure height, in combination with the roof window, results in a better area ventilation during the hot periods of summer.

ΟΑΧΙ ΕΕΑ ΧΑΝΑΕΟÇΝΕΟΟΙΕΑ	
ΔεΥοι ο	(m) 8,10 x αηεει ü εαεΥι υί
ΜΥαοοι γοι ο	(m) 4,10
Ι πει ο	αδαηευηεοοί
Αδυοαος ι ηει οαοοί εαοά ι πει ο	(m) 2,00
Ι Υαοοι Υί ι εαί α δεαοηεπí δαηαεγηυί	(m) 1,50 - 2,0
Αί οι π οεαεαοί γ οά Υί αι ι	(Εm/h) 120
Αί αηοπηαο εαεεεΥηηαεαο	(Εg/m ²) 20
ΑΥηι ο =ει ιεί γ	(Εg/m ²) 25
Ααγςος οεαεαοί γ αεά αεΥαηυος	(, ος) 5
Ααγςος ις=αίεεπí ι αηπí	(, ος) 1

TECHNICAL DATA	
Width	(m) 15-17
Height	(m) 4,10
Length	unlimited
Distance between poles (lengthwise)	(m) 2,00
Distance between side windows	(m) 1,50 - 2,0
Frame's wind resistance	(Εm/h) 120
Cultivation hangers	(Εg/m ²) 20
Snow weight strength	(Εg/m ²) 25
Frame guarantee against corrosion	(years) 5
Mechanical parts guarantee	(years) 1

MISTING BENCH

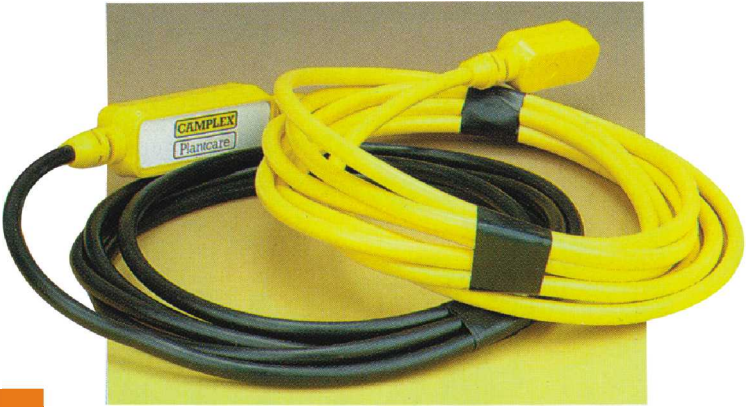


Ç εάεοί οαβα οί ο δΰαεί ο
 θάνι γΰουόχο άθεοά=ΰίάε όçi
 āñpāi ñç εάε άθεοά=þ æέΰόόçç
 οδύññις ύεϋις οϋις ογδύις οδóþι
 (άίει έι ι έεþι εάε εçðáοθέþι) εάεþο εάε
 όçi άίΰθóοιç ι ι ó=άοι ΰοϋις ύεϋις οϋις ογδύις
 οδóþι εάε άάíññέϋις. Αοίΰίάε όçi óá=γóçά
 ðāñáαϋáþο, εάε ááεθέþιάε όçi ðιέϋóçά εάε
 ðι ούοçóϋ όçο εάεþο ðñι οάáογáε óá οδóϋ áδϋ ύεáο
 θεο áοοι άí áþò ðāñέááεει ι θεέγò οοί εþεáο.
 Ç εΰñι άί όç οί ο δΰαεί ο θάνι γΰουόχο άθεοά=ΰίάοάε ι á
 εάñι έεϋ εάεþáει ááϋοις οδ (εάεϋάεάεþ άíθλóοάóç ááϋοις οδ)
 οί ι ðι þι áðéþι áοάε ι ι ιέϋι ι ñóá οοι ι δΰαεί εάε οοί άγáοάε ι á
 εάñι ι οδύοç ááϋοις οδ áεá áóοϋι áóç γíññιç εάε ðáγóç
 εάέθι θññάáò οί ο οδóθþι áοι ò. Οί ογóóçι á εΰñι άί όçο γ=άε ϋò
 οέι ðϋ όçi ñγέι θóç όçο άðέοι çþò εάñι ι έñáοθáò áεá όçi
 άίΰθóοιç οϋις οδóþι þ ι ι ó=άοι ΰοϋις εάε όçi áεáðñççóþ όçο óá
 óáεáñϋ άðñðááá áεá όçi εάáι έεþ άίΰθóοιç áóθþι.
 Άεá όçi άí áóóϋέθóç όçο ðāñáοθáò óóçι áðέóϋι áεá άίΰθóοιç
 áñι áοάε áεáέáϋóóáóç οδóθþι áοι ο θάνι γΰουόχο áðι óáει γι άí ι

Operation of the misting bench
 secures the fast and successful growing
 of seeds of every type of plants floricultural or
 horticultural as well as the set growth of all types of plants
 and saplings. It succeeds in innovating production rate and
 volume and protects plants from all unfavourable environmental
 conditions.

Heating of the mist bench is effected by a heater ground cable
 (cabled ground resistance) which is evenly spread on the bench
 and is connected to a ground thermostat for automate system
 operation.

The heating system is indented to regulate your desirable
 temperature for plants or set growth along with keeping it steady
 for their ideal growth. In order to ensure moisture of the growth
 surface we install a misting system which consists of misting
 injectors connected to a moisture sensor (automated ground
 moisture system)

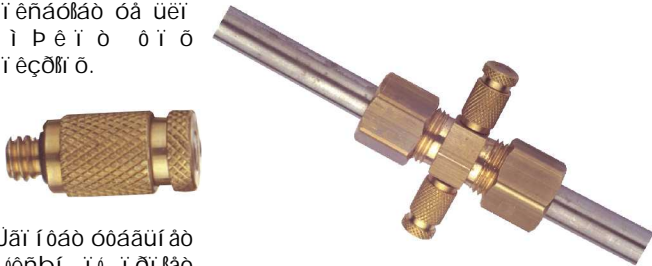


12 áδϋ ι ðáε θάνι γΰουόχο, οοί ááááι γí á ι á ογέει ðāñáοέϋι áòñι
 (ι ι ιΰáá áóοϋι áóçο γāñáí όçο ááϋοις οδ),
 ááí áι άí þι γέεí θεáοθέϋεϋ θάνι =þο íññι γ.

ΟΪΟΪΑΙ ΑΪΙ ΞΕΨΟ - FOG SYSTEM

ΟΪΟΪΑΙ ΑΪΙ ΞΕΨΟ (fog system)

Είς αέρι δεΪίρί αδαήαλόκοι ο αΪί δεοί υο αέα εΪεα οΪα-νίίί έάνι ίεΪοί, αοΪΪ άΪί έί οηάβ οεο εαοΪεεΪεαο οοίεΪεαο άΪΪδσοίΪο οί ο οοοίΪ, οοίόϫηΪοαο οί έαάΪέεϪ αδΪδαίί ο αή α ο β α ο ε α έ έάνι ίεναοβλαο οα υεί οί ίεΪί ο οί ο έάνι ίεΪοίί ο.



ΔανΪαί ίοαο οαααΪί αο 10 ίεηΪί ίε ίοίί λαο άΪάοί λαί ίοαέ ανΪαί ήα, οί FOG SYSTEM ανί οβλαέ εαέ οανί οίεαβ οίί αΪήα αοί οηΪοί ίοαο Ϊοοέ οα οοοΪ αδΪ οβλαί οηϫ αοοαΪοΪοϫ εαέ Ϊεεαο αοέΪί έααο εοηβϪο οα δανΪαίί οδ ηλαί άί έβλαο, οί έεαδεαοέαοί ίΪΪ εαέ έεΪοοϫοϫο οί ο οί οοοΪ Ϊ-άε ί ααέΪοαήαο άΪ Ϊεεαο.

Greenhouse Environmental Control System provides ideal levels of humidity and temperature in both mechanically and naturally ventilated greenhouses. The Fog's 10-micron size

water droplets quickly evaporate to cool and humidify the air, preventing plants dehydration or diseases especially during renting, propagation, germination when it needs it more.



ΟΪΑΪ ΨΟΪ ΑΪΪ ΞΨ - ARTIFICIAL RAIN SYSTEM



Οί οΪοοΪί α οα-ίΪοΪο ανί -Ϊο ί α -ηΪοϫ ίεηίί έεοί ίαοοηΪίί, -ηϫοί ί οί έαβλαέ οαί ίεα άΪέεαεοέεΪ ίΪέί άί ο Ϊηααοοϫο. Οα δανΪεδοΪοαέο εϫδαοοέεΪ Ϊ ΪεεΪί έαέεεαηαέεΪ ία ίαΪΪέί οΪέεϪί α. Ξηϫοίί οί έαβλαέ αέα οϫί έααοοέεεΪ έβλαίόϫ οΪί έαέεεαηαέεΪ έαεΪο εαέ αέα οίί ανί οεοί Ϊ οΪί έαέεεαηαέεΪ έαοΪ οεο έάνι Ϊο δανΪαίί οο οί ο έαέί έαεηέί Ϊ.

Artificial rain system utilising injectors, is an alternate way of irrigation where horticultural or other types of cultivation with large foliage takes place . It is used for through leaf fertilization and the cooling of cultivation during hot periods of summer.

ΑΪΪΑΪΟΪ - CROP IRRIGATION



Ψ Ϊηααοοϫ οΪί έαέεεαηαέεΪ αβΪάοαέ ία οαέεαέοϫοΪηί οο οΪεΪίαδ έααοΪηΪίί έαεί ΪοηΪίί εαέ αοί οοΪοαΪί οαέΪεοϫ. ί α οί οο οΪα-νίί ίΪο έαααοέααοΪο οαέεαέοϫοΪηί οο οΪεΪίαδ, οϫί -ηΪοϫ δηίηανί ίαοεοΪί Ϊηααοοϫο εαέ οϫί οί οί έΪοϫοϫ έεδαοί αοί έαάΪίίΪΪΪ Ϊ άί οί ίαοηέεΪί άΪέεΪί, Ψ Ϊηααοοϫ αβΪάοαέ ία οίί δεΪίίί αοοΪί αοί οηΪοίί εαέ δανΪ-αοαέ ϫ αοί αοΪοϫοα έβλαίόϫο οΪί έαέεεαηαέεΪ ία οίί έαέΪοανίί εαέ αοί οαέαοί αοέεϪοανί ί Ϊοί έαα οϫί ί ηεϪοαηϫ άΪ αδσοί ϫ αοοΪί.

Ψ δανίί -Ϊ ίανίί Ϊ αδαοέαβλαο οοϫ ηβλαέ οί ο οοοί Ϊ, αδεοδ-ΪΪ έε οϫί ί έεί ίί ί βλα οί ο ί ανίί Ϊ εαέ οϫί έαέΪοαηϫ αεί αοΪεαοοΪ οί ο αδΪ οί οοοΪ.

Crop irrigation is done with slow dripping pipes of different diameter and length. Using latest technology slow dripping pipes, automated irrigation systems, and installation of fertilizer spreaders or portion control pumps the irrigation is fully automated and this results in the best possible type of crop fertilization and correct growth of all plants. Supplying water straight at the root of the plants gives us best water economy and plant water management.

ΕΑΝΤΙ ΑΪ ΟΨ - HEATING



Το αού αού γνάοι α όι ο γ-αε αλρ αε οοί ρ οί ι γά οço εγνι αί οço ούι εανι ι εçðβύι, ç áοαηκλ γ-αε εγώαε οοçί ðαηάαυαεερ οço αεάαεεάοκλ όçί εάοάοεάοβ αί εüðέοóυι áαηι εάαβούι ðοçεðò áðυαί όço ι á -αί çεü εάεοι όηάεü εüóοι ð ουοί óá çεάεοηεερ αί γηάεεά υοί εάε óá εάοάι υεüόç εάοοβι ι ó. Ι ε εγáçóáò γ-ι όι όç áοί áουόçóá ι á εάεοι όηάβοι όι ι á ðáοηγέαει, óαηαγνεί εάε ι áει γó, ι ðυóá ððύη-αε ç áοί áουόçóá áðειρ áðò όço εάαί εéüóáηçò εγóçò áεά εüεά ðáηηðóυóç. Ç αί ηι ðεéóκλ ούι ι ç-αί çι υóυι εάε ç υοί áç áóυι áóç εάεοι όηάκλ όι ðò óá áεηάκλò όοί επεάò, γ-ι όι εάηαλόαε όçί áι ðεéοι ογί ç όι ó ðαηάαυαί γ áεά όçι ðηι óοαοκλ ούι εάεεεάηάεερ όι ó.



Following a research in the field of greenhouse heating, the company has included in the production lines the making of reliable high efficiency air heating boilers with low operational costs, both in electric energy and fuel consumption. The boilers can work using diesel, gas or crude oil, so there is the option for

the customer to use whatever energy source is available. The reliability of the machinery and the faultless automated operation under extreme conditions, have earned the confidence of the producer for his culminations' protection.

ΟΑ×Ι ΓΕΑ ×ΑΝΑΕΟÇΝΕΟΟΓΕΑ			
ΟΟΔΙ Ó		A0105	A0155
Áðυαί όç	(Kcal)	105.000	150.000
εεάι υóçóá εγνι αί όço εανι ι ε.	(m ²)	500	1000
Óυόç	(V)	380	380
Δεύοι ð	(mm)	1100	1100
Μπει ð	(mm)	770	870
¾οι ð	(mm)	1900	2100
Άαγçóç	(, όç)	1	1

TECHNICAL SPECIFICATIONS			
TYPE		A0105	A0155
Efficiency	(Kcal)	105.000	150.000
Heating capacity	(m ²)	500	1000
Voltage	(V)	380	380
Width	(mm)	1100	1100
Length	(mm)	770	870
High	(mm)	1900	2100
Guaranty	(Years)	1	1



Γ ΑΟΑΕΙ ΘΑΕΑΟΟΕΕΥ L.V.M.

Οι έει ρού θαεάοοεεύ MEGATHERM-LVM όοηκλάοάε όοηί άη+P όοη όαηάοι ι όι ηόοόη όι ό θαεάοοεεί γ όεεει γ όά θUηά όι έύ ι έεηU όόααί ι βάεά, 4-5 ι έεηU, άηί έι όηάηίόάθ Υίά όύγίάοι όι ι όι βί άθεύεαόάε ι ι έυι ι ηόά όά υεά όά ι Υηό όι ό όοοι γ.

- 1. Φηέόόη όι έυόοά έάε ι άαύεαό άόι άυόάεθ όι ό έαηι ι έόθβι ό.
- 2. Άεά-έοοι όι βόόη όυι άι ύαύι ι άεβί ι ιόάθ όι ι άηεει ύ όυι θαεάοι βί έάε όηί όι όυόοά όυι όοοι όαηι ύευι.
- 3. Ι ήαί έοι ύ όυι έέι άγί ύι άεά όηί όαάβά όι ό όαηάαυάι γ, άόι γ έάεθι όηάάβ άόουι άόά +ύηθ όηί άί έηβόέις όαηι όόθά. Άόου όοι άαβί άε άεάθ όι LVM άβί άε άόι άεάοι Υίι ι ά ήεάεθι ι έέυ άι ι όεέοι ύ όι ό άθεθηΥόάε όηί άόουι άός Υί άηίς έάε έβίς όι ό θαεάοι ι γ, έάεβθ έάε όι ι έάεάηέοι ύ όυι άεηι όόοβύι έάε όυι όυέηί βόάύι. Άθβόόη όι θαεάοοεεύ όύόόηί ά άόι έι ύεάόάε άόουι άόά άεά όι άόυι άί ι θΥεάοι ά.

The MEGATHERM-LVM mobile spraying system is based on the atomisation of the chemical formulations into ultra tiny droplets, 4-5 micros. These droplets form a "fog" which is equally distributed in all parts of the plant. Therefore we can achieve:

- 1. Excellent quality and great performance of the greenhouse.
- 2. Drastic cost reductions as there is less need for spraying and minimal quantity of chemicals used.
- 3. There is absolutely no danger for the user since LVM has automated operation. This happens because it is equipped with an electronic controller which sets the starting and finished times of the spraying and also cleans the atomizing nozzles after the application. LVM also automatically resets for a new application cycle.



ΕΑΕΙ ΘΟΧΝΑΟ - SULFURATOR

Οοι +άγάε όοέθ άόεΥίάεαθ έάε όόά Υίόι ι ά. Άόουθ ι έάει όβηάθ ι όι ηάβ ι ά άόαηι ι όόάβ άεά όεθ άευέι όεαθ άόεΥίάεαθ έάε Υ-άε άί άεηάοεεύ άόι θΥεάοι ά όοι ι ά άεΥά+άε έάε ι ά άι όι άβέάε όηί άί ύθόοις όυι άεάαηβί άόεάι έβί.

ΑΟΑΝΙ Ι ΟΕΙ ΑΟ ΑΕΑΙ ΑΕΑΟ
 Υβάει, όαηι ι ύόοι ηι ό, άί έηύευός, άι όηύόόη, όόεει ηύεοαθ έάε έυι όεαθ, όαθηΥίε+ι ό, άόεΥίάεαθ έάε άί όι ι ι όάει άυι ά έ.έ.θ.
 ΑΟΑΝΙ Ι ΟΕΙ Α ΟΘΟΑ
 Όηεάι όύόόεει, +ηόόΥίεάι ι, άόουόόεεά, όι όεθδά, ι όι ι ύόά, όάόυίε, όηΥίε όεά, έαηθι γάε, όι ηόι έύεε, άααί γηέ, όεθΥηέ, έ.έ.θ.

It targets diseases and insects. This sulfurator can be applied for following diseases and has an excellent effect to control and prevent the growth of harmful insects.
 Powdery mildew, downy mildew, anthracnose, dust mold, germs & mildews, moth and all kinds of insect's eggs (mite)

ΑΙ ΑΙ Ι Ι ΑΟΝΙ - AIR METER

Άεά όηί όηι όόάόά όι ό έαηι ι έόθβι ό άδύ όι όθ έό-όηι γθ άί Υι ι όο όι όι έαόάβάε όοι ι ήεάεθνεύ όβί άεά όι άί άι ύι άοηι, όι ι όι βί ι άοηύάε όηί Υίόάός όι ό όι Υι ι όι ό άί Υι ι ό. Όά Υίόάός άί Υι ι ό ι άαάεγθάης άδύ όηί άάεθι γι άίς (ηόέι έευι άίς), όι άί άι ύι άοηι άόάί άηάι όι έάβ όι άόουι άόι όύόόηί ά όαηάεγηύι έάε όά όαηύεοηά έεάβι ι όι άεά όηί άόι όόάης έβί.

Όόηί όαηθόουός όι ό άθεηάοι γι όοηέΥθ έαηι ι έηάόάθ όά όοι άόάοι ύ ι ά άόι άόι γθ άί Υι ι όο, όθUη+άε ή άόι άόυόόά άί ι βάι άόι ό όυι όαηάεγηύι ι ά ήεάεθνεύ +άεηέοι ύ άδύ όι ι όαηάαυά βόά ι ά άθεάε+Υίάόάε ι ι άηεέυθ άαηέοι ύθ όυι έαηι ι έόθβι.



ΟΑΝΑΟΕΙ Ι ΑΟΝΙ HUMIDITY METER

Άβί άε όι έύ άγέι έι όός +ηβός όι όι έεηU όά ύάει άάεύαηι +ι έάε άβί άε ι άοηβόάεθ ι ά άεηβάεά 0,1 ης Αάι ι όι ηάβ ι ά +ηόέι ι-όι ήεάβ ι Υόά όά άεάεγι άόά άδύ ι ι γ έάεθβ όηι έάεάβ άεύάαθ όοι ήεάεθνύάει.



DIGITAL WATERPROOF pH TESTER
 It is easy to use, small in volume, waterproof and gives us accurate measurements to 0,1 PH. It cannot be used with acid solutions because it damages the electrode.



Αἰθέ Ἀἰ ἰ Ἀ ἰ ἰ Ὀ Ὀ ἰ ἰ Ὀ Ὀ ἰ ἰ Ἀ.
57008 Ἰ Ὀ ἰ ἰ Ἀ - Ἐ Ἀ Ὀ Ὀ Ἀ Ἐ ἰ ἰ Ἐ Ὀ
Ὀ Ὀ Ἐ.: 0310.782.140, 0310.783.870
FAX: 0310.778.275

EMMANOUILIDIS BROS CO.
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FAX: 0310.778.275

INTERNET: www.greenhouses.gr
e-mail: info@greenhouses.gr