



上海德环实业有限公司 Shanghai Dehuan Industry Co.,Ltd

## **COMPANY INTRODUCTION**

Shanghai Dehuan Industry Co., Ltd was found in 2009, is top supplier of greenhouse and hydroponic systems & solutions. It is located in Minhang District, Shanghai. And it just takes 30 minutes to get to Pudong or Hongqiao Airport, which makes it very convenient for you.

Our factory was located at Zhejiang Province.

- More than 10 years experience with agriculture hydroponic products
- Leading professional hydroponic system manufacturer in China
- Private factory covering more than 20,000 square meter
- 110 skilled workers, 10 professional engineers
- All the workers with average 15 years' working experiences
- All key components are self-manufactured

With rich experience in both manufacturer and quality controlling, we supplied wide range of agriculture hydroponic products to over 50 countries worldwide.

There are two lines of our products: Agriculture and Horticulture. Please enjoy your visual journey of the catalogue. There is always one that suits you. Your choice is our greatest honor.











# Catalogue

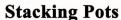




**Ebb and Flow Table** 

1-4





5-6





**Aeroponic Tower System** 

7-8



**Danish Trolley** 

9-10





**NFT Gully** 

11-15



**Dutch Bucket** 

16-17





**Bato Bucket** 

18









**Hydroponic Gutter** 

25



Saw Tooth Greenhouse

**26** 



### 1 Ebb and Flow Tray

- 1.1 4 sided Tray
- 1.2 Modular Glued Tray
- 1.3 Flood & Drain Tray

#### 2 Ebb & Flow Table

- 2.1 Ebb & Flow Tray with Rolling Bench
- 2.2 Flood & Drain Table
- 2.3 Multilayer Grow Table
- 2.4 Growtainer Table
- 2.5 Display and Sales Bench

#### 3 Parts & Accessories

- 3.1 Valve
- 3.2 Hoses
- 3.3 Filter
- 3.4 Glue

### Stacking Pots

**Stacking Pots** 

**Set Pots** 

**Self Watering Pot System** 

### Aeroponic Tower System

**Stacked Aeroponic Tower** 

**Hanging Aeroponic Tower** 

### Danish Trolley

**Danish Trolley** 

#### 1 Ebb & Flow Tray

The trays are ideal for use with clay grow rock, rockwool or pots filled with a soilless grow substrate.

We manufacture our hydroponics trays from thick, durable, high-impact ABS plastic, which prevents the trays from bowing or sagging under the weight of large plants or full capacity water.

The smooth plastic surface makes it easy to clean the trays, and large drain channels allow water to drain completely away from plants while giving extra structural support to the design.

#### 1.1 4 Sided Tray

The following trays are available in a 4-sided 1 piece format:



Width (mm)	Length (mm)
330	2000
630	1110-3660
915	1830-3100
1220	1830-3660
1500	1800-3300
1600	1800-3300
1700	4500

#### 1.2 Modular Glued Tray

The following trays are available as 3 Sided End Plates and 2 Sided Interconnecting Middle Plates. These plates can be glued together to make a table of any length. A small division plate can be installed in between the plates to suit any length of table.

Width (mm)	Length (mm)
330	2000
630	2000
915	2000
1220	2000
1500	1500
1600	2000





#### 1.3 Flood & Drain Tray

Width(Feet)	Length(Feet)
2'	4'-12'
3'	6'-12'
4'	6'-12'
5'	8'-11'
5.5'	15'



#### 2 Ebb & Flow Table

Ebb and Flow Table is the industry standard for propagating seedlings in a modern greenhouse.

The tables allow a large number of seedlings to be propagated in a confined space before they are transplanted into the main hydroponic system.

The Ebb and Flow tables use a flood and drain process to hydrate the growing media from beneath before draining the excess moisture away.

#### 2.1 Ebb & Flow Tray with Rolling Bench

Trays Depth	75mm
Aluminum Frame Height	130mm
Bench Height	700mm or Customized

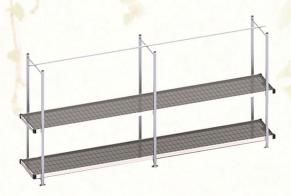




#### 2.2 Flood & Drain Table



### 2.3 Multilayer Grow Table



#### 2.4 Growtainer Table







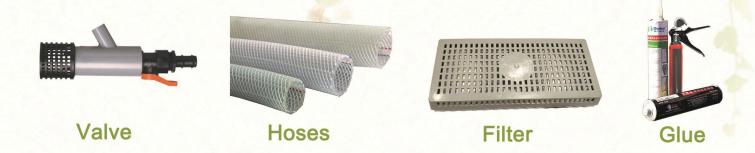
#### 2.5 Display and Sales Bench







#### 3 Parts & Accessories



#### **Ebb and Flow Table Advantages**

- Labor savings and cost effective
- Versatile system
- An entire acre or more can be watered automatically and efficiently
- Plants are watered evenly, reducing losses due to poor watered practices
- Plants can be fertilized as they are being watered
- Floors are dry, avoiding accidents
- System can water any of our wide line of retail EBB-FLOW benches
- Compatible with many computer control systems

### **Ebb and Flow Table Application Show**



# **Stacking Pots**

Stacking Pot is suitable for strawberry, lettuce, flower and other herbs plants.

#### **Stacking Pots**

Size	34*15cm (W,H)
Material	PP&UV
Weight	350g / pc
Color	Terracotta, beige, white, green, blue, yellow, pink or customized
Package	97x34x34cm / 50pcs
20FT	12500 pcs
40FT	25000 pcs
40HQ	29800 pcs



They can also be stacked as hydroponics tower, you can create your own combinations of fruit, flowers, vegetables or herbs. For large garden project, greenhouse used items.

#### **Stacking Pots Application Show**



## **Stacking Pots**

#### **Set Pots**

3 pots, 1 base, 1 chain combination is mainly for ornamental, small private garden. 3-layer of pots have a capacity of 12 planting locations allowing you to have all of your favorite fresh ingredients or flowers.



3 Layer Set	3 pots, 1 base, 1 chain
Inside Carton Size	31.5*20*31.5cm
Inside Carton Weight	1.85kg
Outside Carton Size	65*34*43cm / 4 sets
Outside Carton Weight	8.5kg
20FT	1407 sets
40FT	2814 sets
40HQ	3417 sets

### **Self Watering Pot System**

Self watering pot system is specially for home garden, suitable for flowers, herbs, and leafy plants, such as lettuce, spinach, strawberry, etc.

The biggest advantage of this system is that it is self watering, use a pump and timer to control the watering time and frequency, bringing you joy and happiness from home garden.

Pots Size	32.5x16cm (W,H)
Total Height	112.3cm
Carton Size	51*51*34cm
Carton Weight	7.5kg
20FT	310 sets
40FT	620 sets
40HQ	736 sets
Fittings	Pots, Pot Covers, Reservoir, Pump, Timer, Net Cups, Connectors





# Aeroponic Tower System

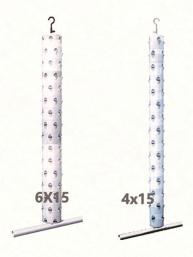
Aeroponic Tower System is the process of growing plants in an air or mist environment, without the using of soil. It is the most effective and efficient way to provide plants with the necessary nutrients, hydration and oxygen.

### **Stacked Aeroponic Tower**

Food-grade PP&UV
100L
12W
1500L/H
2.5", black
4*6, 6*6 or customized
78*78*48cm
Standing pipes, side plates, net pots, water tank, pump
84 sets
180 sets
225 sets



### **Hanging Aeroponic Tower**

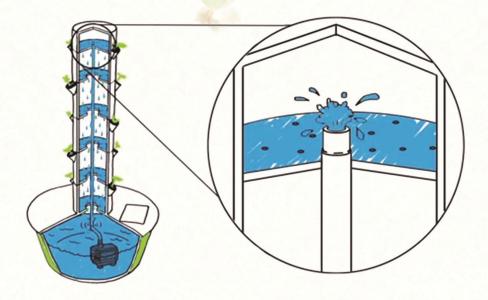


4*15 System	15 layers, each layer grow 4 plants
6*15 System	15 layers, each layer grow 6 plants
Fittings Include	Standing pipes, side plates, net pots, pothook

The Number of layers can be customized

# Aeroponic Tower System

#### **How Aeroponic Tower Works**



### **Advantages**

- Grow Faster--3 times faster and 30% greater yields
- Grow Healthier--better protection from pests and diseases naturally without pesticides
- Save More Space--10% of the land and water than traditional
- Easy To Assemble

#### **Commercial Project Show**



## Danish Trolley

Danish trolley multilayer plant stands have been a staple in horticulture for decades, they are also gaining ground in other industries.

Thanks to their great size and manoeverability, and the adjustable space between shelves, Danish garden flower trolley are not only perfect to transport flowers and plants, but they can also be very handy to use as a large shopping cart, moving cart, storage container, mobile rack, or in combination with our writing boards and handles, or be used as a low-cost order picking cart.





### **Danish Trolley Details**

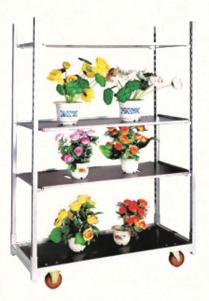
Size	1350*565*1900mm (53.1*22.2*74.8inch) 1500*565*1900mm (59.1*22.2*74.8inch) or customized
Product Structure	Platform, mesh, roll container
Board Type	Pull plate net, metal welding network, galvanized sheet, plywood
Surface Treatment	Cold galvanized, hot dip galvanized, powder coated
Shelves	2,3,4,5Customized
Wheels	PP, Nylon, Rubber, Pneumatic, PU, TPR Wheel
Load Capacity	500kg-800kg, heavy duty, light duty
Usage	Storage, plant nursery, garden center display, flower shop display, flower auction, logistics transport

# Danish Trolley

### **Two Types for the Danish Trolley**



Reversible Type



**Fixed Type** 

### **Danish Trolley Application Show**







## NFT Gully

**NFT Fixed Bench System** 

**NFT Sliding Bench System** 

Vertical NFT Hydroponic System

## **Dutch Bucket**

**Dutch Bucket** 

**Small Dutch Bucket System** 

## Bato Bucket

A Bucket

**B** Bucket

C Bucket

## Hydroponic Fodder System

**Small Fodder System** 

**Commercial Fodder System** 

**Container Fodder System** 

## Hydroponic Gutter

**Hydroponic Gutter** 

### Saw Tooth Greenhouse

Saw Tooth Greenhouse

# NFT Gully

Nutrient film technique(NFT) is a hydroponic technique wherein a very shallow stream of water containing all the dissolved nutrients required for plant growth is re-circulated past the bare roots of plants in a watering gully, also known as channels or gullies.

#### 100 x 50mm NFT Gully



Width	100mm
Height	50mm
Length	ANY
Hole Size	50mm or Customized
Hole Space	200mm or Customized
Material	Food grade PVC
Thickness	2mm

Latest Design: Ribs design on the Bottom !

### 100 x 100mm NFT Gully

Width	100mm
Height	100mm
Length	ANY
Hole Size	50mm or Customized
Hole Space	200mm or Customized
Material	Food grade PVC
Thickness	2mm



#### Accessories









**End Cap** 

**Drain Cap** 

Connector

**Net Cup** 

Elbow







## NFT Fixed Bench System

#### **NFT Fixed Bench System**

The Fixed Bench systems are most popular for Lettuces, Herbs, Leafy Greens, Strawberries.

The NFT Fixed benches typically use 100x50mm gully and are most usually 8 gullies wide (1.6m wide) x 5 meters or 10 meters long.

A bench which is 8 gullies wide means that the centre of the bench is easily accessible from both sides during planting or harvesting.



Size: 5.0 x 1.6 x 0.7m (L,W,H)



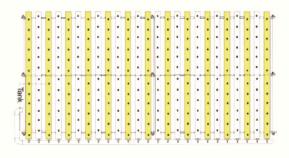
# NFT Sliding Bench System

#### **NFT Sliding Bench System**

NFT Sliding Bench System is the most efficient user of greenhouse space for any type of NFT system.

- It has the highest yield per m2 of greenhouse space for any type of NFT system.
- It's a manually operated system requiring two workers to plant, harvest and move the
- The nutrient solution is recirculated through the pump room and automatically dosed and re-oxygenated.







# Vertical NFT Hydroponic System

#### **Vertical NFT Hydroponic System**

Vertical NFT Hydroponic System is the technique used in big commercial hydroponics systems.

The vertical growing system can increase the harvest two or three times compared to the horizontal NFT system.

#### All Sizes of the NFT System Can be Customized!



Size: 2.4 x 0.85 x 2.1m (L,W,H)



I type

Size: 5.0 x 1.2 x 1.6m (L,W,H)



# Vertical NFT Hydroponic System

There are A type and T type NFT system for your choice. It can be used Square NFT Gullies or Round Pipes.

The standard system has 5 layers, each gully is 5 meters, you can grow at least 250 plants.



Size: 5.0 x 0.6 x 1.5m (L,W,H)



Size: 5.0 x 0.3 x 2.0m (L,W,H)



## **Dutch Bucket**

Dutch Bucket is an efficient drip irrigation system and is extremely suitable for larger, long-term crops such as vine tomatoes, peppers (capsicum), eggplants, cucumbers and even roses. You can use just about any type of growing media, including expanded clay pellets, perlite, and coconut coir. It is popular in drought area, or where the soil is not suitable for growing.

#### Siphon elbows to connect the bucket with the drain pipe



<b>Bucket Size</b>	30 x 25 x 23cm (L,W,H)
Volume	11L
Weight	0.4kg
Material	Food-grade PP&UV
Color	Beige, black or customized
Packing Detail	30 pcs per carton
Carton Size	25x 34x 162cm
20FT	6600 pcs
40FT	13200 pcs
40FT	16000 pcs

### **Bigger Dutch Bucket**

<b>Bucket Size</b>	35 x 35 x 35cm (L,W,H)
Volume	22L
Weight	1.15kg
Material	Food-grade PP&UV
Color	Beige, black or customized
Packing Detail	30 pcs per carton
Packing Detail  Carton Size	30 pcs per carton 37x 37x 172cm
Carton Size	37x 37x 172cm



## **Dutch Bucket**

#### Small type dutch bucket hydroponics system

This unit particularly suits in hydroponics tent, no need to set up a greenhouse, best option for small farming project, low cost, saving space.



6pcs bucket system

80\*70\*75cm (L, W, H)

Normally used in 1.2\*1.2m grow tent



24pcs bucket system

130\*160\*80cm (L, W, H)

Normally used in 2\*2m grow tent

Parts: dutch buckets, feed lines, drain pipes, metal framework, pump, timer as a complete system.

#### **Dutch Bucket Application Show**





## **Bato Bucket**

Bato Bucket is as the same material, same use as dutch bucket, both good choice for lettuce, tomato, cucumber, strawberry and other plants.

We have three types of Bato bucket for you to choose from: Bato A, Bato B, Bato C.





Bato A Volume	12.3L
Size	40.5 x 22.6 x 21.3cm
Weight	450g
20FT	5600 pcs
40FT	11300 pcs

Bato B Volume	13.9L
Size	48.3 x 20.9 x 18cm
Weight	550g
20FT	6300 pcs
40FT	12600 pcs









Bato C Volume	21.6L
Size	48×26.2×25cm
Weight	650g
20FT	3625 pcs
40FT	7275 pcs

### **Bato Bucket Application Show**





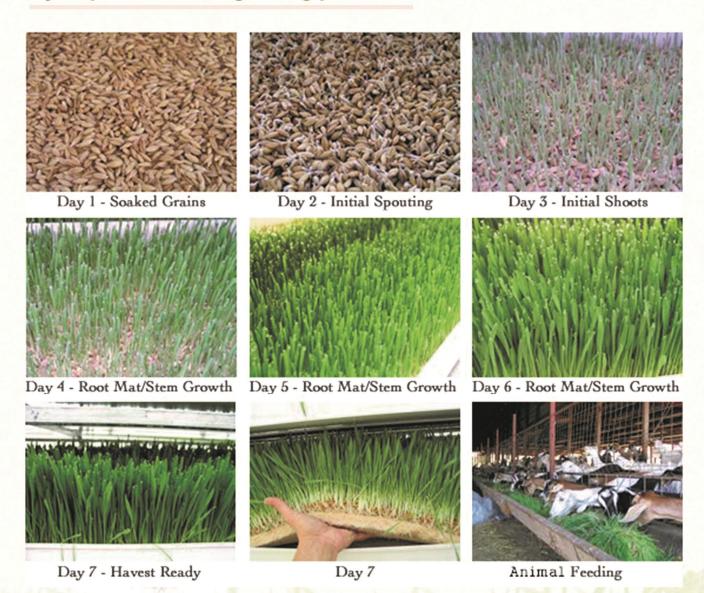




Hydroponics Fodder System is used for animal feeding and can be produced in great numbers within 7days from seed to grass for all livestock, such as sheep, cattle, horse, pig and even chickens.



### **Hydroponics fodder growing process**

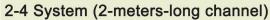


## We have different size of fodder system for your choices



1.5-4 System	(1.5-meters-l	ong channel)

Each Layer	4 channels (4 layers)
Daily Output	25kg
20FT	51 sets
40FT	104 sets



Each Layer	4 channels (4 layers)
Daily Output	35kg
20FT	41 sets
40FT	85 sets



nnel)
r

Each Layer	4 channels (5 layers)	
Daily Output	60kg	
20FT	24 sets	
40FT	50 sets	



#### 4-6 System (4-meters-long channel)

Each Layer	4 channels (6 layers)
Daily Output	100kg
20FT	17 sets
40FT	34 sets



### Without Cover--- You can grow Microgreens, Fodders ect.





Material	PVC
Color	White
Size	25*7cm(W, H)
Length	2 meters, 4 meters or customized



### With Cover--- You can grow big vegetables such as Tomatoes ect.





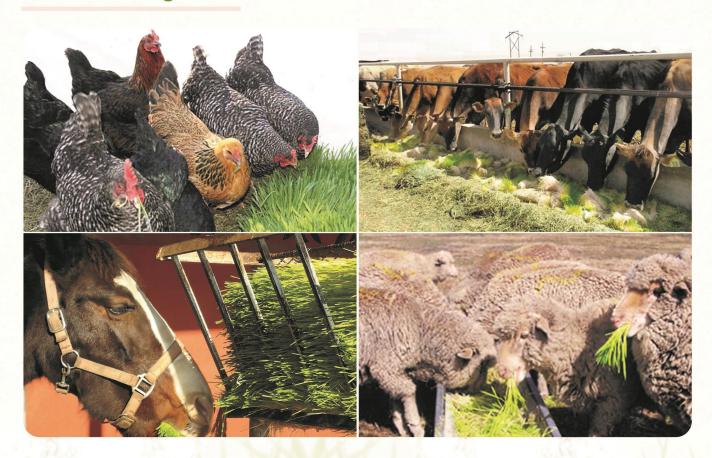
#### **Fodder Growing Tips**

- 1. 1kg seeds can produce about 6.5kg fodder.
- 2. Seeds for producing green fodder are mainly: barley, wheat, sorghum, corn.
- 3. Between 60°F and 75°F (15.6-24 degrees) with 40% to 80% relative humidity is the ideal environment for fodder production. It takes between 800ml to 1 liter of water to produce one kilogram of fodder.
- 4. After the seeds being soaked for 24 hours, they will sprout with 8-12 hours, and grow to 20-25cm high in 7 days.

#### **Hydroponics Grown Fodder Advantages**

- ✓ Highly rich in vitamins, minerals, enzymes.
- ✓ Hydroponic fodder is 80% to 85% digestible.
- Hydroponic fodder contains high quality protein.
- High energy content.
- High in moisture content that prevents colic.

#### **Animal Feeding Show**



# Commercial Fodder System

NatureHydro modular fodder production system is designed to scale from 100kg to 20,000+kg of fresh sprouts daily. All Sprouting Systems include everything needed to grow the sprouts, you just have to supply the climate controlled room and access to water and electricity.

Modle	Туре	Poduction (daily) /kg	Daily Seed Need(kg)	Water Consumption (m³)	Electric Consumption (kwh/day)	Labour	The Proposed
							Facility Area(m)
FS-300	Α	300	42-54	0.3m³	8		6x5x4
FS-500	Α	500	70-91	0.5m³	8	1-2	7.8x5x4
FS-1000	В	1000	140-182	0.8m³	10		12x6x4
FS-1500	В	1500	210-273	1m³	15		16x6x4
FS-2000	В	2000	280-364	1.5m³	20		6x4x20
FS-3000	В	3000	420-546	2.2m³	25		6x4x30
FS-5000	В	5000	700-910	3.5m³	35	2-5	6x4x50
FS-6000	В	6000	840-1092	4.0m³	38		6x4x60
FS-10T	В	10 TONS	1400-1820	6.0m³	55		12x4x50
FS-10T/50	)T		10TONS - 50TO	ONS UPON REC	QUEST		





# Container Fodder System

NatureHydro series of modular, containerized systems are designed to fulfill a specific set of customer requirements:



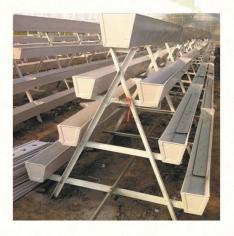
Container Type	Production (Daily)	Air Conditioner	Approx Daily Water Consump	Approx Daily Electric Consump	Dimensions (mm)
20RH	500KGS	1.5P	0.5M3	8W/day	6058*2438*2591
40RH	1000KGS	3P	0.8M3	15W/day	12032*2438*2896



# Hydroponic Gutter

The Hydroponic Gutter is suitable for growing strawberry, tomato, peppers and other plants.

Strawberry vertical cultivation in greenhouse can greatly save greenhouse land, improve greenhouse use area and space, reduce pests and diseases, and facilitate daily management. It is a new modern strawberry cultivation techniques.

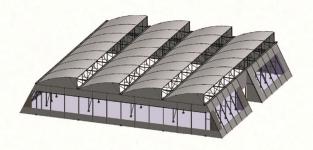


Material	PVC
Thickness	3-4mm
Gutter Size	18*19cm, 14*15cm, 25*27cm (W, H) or customized
System Size	5*1.4*1.6m(L, W, H)
20FT	21 sets
40FT	42 sets
Parts	PVC gutter, end caps, drain caps, connectors, metal framework.



## Saw Tooth Greenhouse

The Top Saw Tooth model greenhouse combines optimal ventilation with special strength for withstanding different loads. The roof ventilation alone provides 25% of the total ventilation of the covered area, in addition to the side ventilation. The shape of the arches allows excellent light transmission.



Width of Gable	6.4 m
Height of Gutter	4, 4.5 or 5 m
Opening of Roof Vent	Up to 1.60 m
Distance Between Columns	4 m
Trellising Load	Up to 25 kg/m2
Wind Load	122-147 km/h

All parts are made of galvanized steel ?

#### **Advantages**

- Easy to assemble, cover and maintain
- High roof openings for natural ventilation
- Optimal heat and humidity release
- Structure suitable for warm climates





Tel:+86-(0)21-68316850

Fax:+86-(0)21-68316216

Email:henry@dehuangroup.com

www.dehuan.cn

Add: No.805-808, Building 3, Lianhang Road 1505, Minhang District, Shanghai, P.R. China. 201100