

## **Designing a Future Built on Expertise**

At Mahmi, we blend innovation with quality to deliver integrated solutions in desalination plants and greenhouses











### **Table of Contents:**

- Company Profile Page 3
- Project Portfolio Page 4
- Mahmi Trading Services and Products Page 5
- Design, Manufacturing, Supply, Installation & Maintenance of Water Treatment Plants – Page 6
- Feasibility Studies and Technical Assessments for Water Treatment Projects – Page 7
- Supply of Equipment and Spare Parts for All Types of Water Treatment Plants – Pages 8–9
- Mahmi Exclusive Agent of CNP Pumps Page 10
- Design, Manufacturing, and Installation of Cooled and Net Greenhouses, with Maintenance and Technical Support Pages 11–13
- Cooling Systems for Agricultural Greenhouses Pages 14–16
- Specialists in Designing, Supplying, and Installing All Types of Hydroponic Farming Systems – Pages 17–21
- Polycarbonate Sheets Page 22
- Polyethylene Films Page 23
- Shade Nets and Insect Screens for Agricultural Greenhouses Page 24



### **About Us**

Mahmi Qatar was established based on extensive cumulative experience in the fields of water desalination and treatment plants and protected agricultural greenhouses. Our mission is to serve the agricultural sector at the highest technical level with high quality standards at competitive prices.

#### **Water Desalination & Treatment Plants**

Desalination systems are at the core of our operations. We offer integrated solutions including:

- Design and implementation of desalination and treatment plants tailored for agricultural, industrial, and domestic needs.
- Deployment of advanced global technologies to ensure water quality and operational efficiency.
- Provision of flexible, scalable systems, supported by comprehensive maintenance and technical services.

### **Protected Agricultural Greenhouses**

We deliver complete solutions in modern agriculture through:

- Designing and manufacturing high-tech greenhouses, including cooled and net-covered structures.
- Supplying automated irrigation and fertilization systems, along with smart climate control technologies.
- Supporting hydroponic farming projects with the latest systems and equipment.

## **Excellence & Partnerships**

- We use premium raw materials and manufacture according to international standards in high-end facilities.
- We maintain strategic partnerships with leading international companies to ensure the highest level of innovation and performance.

## **Regional Presence**

We are a trusted supplier in:

- Qatar and the Gulf region
- North Africa

Serving a wide range of farms, agricultural companies, and investors through integrated solutions in water treatment and modern agriculture.



## **Execution and Supply Portfolio**

Mahmi Trading's key projects in water treatment and agriculture across the Gulf, delivered between 2022 and 2025, featuring turnkey systems and high-volume supplies.

### Water Treatment:

Over the past years, Mahmi Trading has played a prominent role in providing comprehensive water treatment solutions across the Gulf region. Our scope of work spans design, manufacturing, supply, and on-site implementation for a wide range of applications. Key achievements include:

- •Design, manufacture, supply, and installation of 160 groundwater treatment plants, implemented for agricultural farms, industrial facilities, residential complexes, and government projects. These systems were custom-built to address site-specific challenges, ensuring optimal water quality and operational efficiency.
- •Supply and installation of 2,600 reverse osmosis (RO) membranes from various international brands and specifications. These membranes were integrated into both new and existing treatment systems, enhancing water purification performance across diverse salinity and flow-rate conditions.
- •Design and supply of 280 custom-built electrical control panels, tailored for RO plants, filtration units, and smart irrigation networks. These panels featured programmable logic controllers (PLCs), real-time monitoring tools, and automated alarms to improve system reliability and reduce operational costs.

Mahmi's engineering team continues to provide technical support, commissioning, and training services for all water-related projects, maintaining long-term partnerships with clients through performance-driven service delivery.

## **Agricultural Projects:**

To date, Mahmi has implemented and supplied a total of 157 agricultural greenhouses of various types, including:

Cooled greenhouses Net (shaded) greenhouses for hydroponic farming

#### Total covered area:

Exceeding 194,148 square meters, all designed and equipped with advanced systems for cooling, automation, and smart farming.

#### **Agricultural Supplies:**

Mahmi has supplied a wide range of agricultural materials and components to support modern greenhouse and farming projects, including:

Over 130,000 cocopeat bags (29 liters each), a key component for soilless cultivation systems. More than 2,900 fans and 12,600 cooling pads for greenhouse climate control.

Over 650 electric control panels dedicated to managing and operating automated farming systems. Complete hydroponic farming systems, in addition to control panels and crop hanging wires. Essential coverage and protection materials such as shade nets, polyethylene films, and 6 mm polycarbonate sheets, along with all necessary installation accessories.



# **Mahmi Services & Products**

## **Water Treatment & Desalination Solutions**

- Design, manufacturing, supply, and maintenance of water treatment and desalination plants with all its accessories.
- conducting feasibility and technical studies for water treatment projects.
- Supply of all types of pumps tailored for manufacturing, irrigation, and infrastructure projects.
- · Supply of spare parts for all pump types.
- Design and supply of Ultra Filtration (UF) systems.

# **Greenhouse Systems & Modern Agriculture**

- Design, manufacturing, and installation of various types of greenhouses:
- Cooled greenhouses
- Net Greenhouses
- Nursery Greenhouses
- Supply of cooling pads (10 cm & 15 cm) with all its components.
- supply of hydroponic systems and all its accessories.
- Supply of double-wall polycarbonate sheets (6 8 10 mm).
- Supply of three-layer polyethylene films (200 microns thick).
- Supply of shading and insect-proof nets of various types.
- Supply of cooling fans in all sizes and models.
- supply of climate control systems, automatic fertigation systems, and greenhouse control systems.
- conducting of feasibility and technical studies for agricultural projects.
- Supply of custom electrical control panels for greenhouses.



#### Design, Manufacturing, Supply, Operation, and Maintenance of Water Treatment and **Desalination Plants with Full Accessories**

Mahmi provides integrated solutions in the field of water treatment and desalination, including technical studies, production, supply, installation and preventive maintenance programs. Backed by a specialized team and international partnerships with top-tier brands, we guarantee high quality, operational efficiency, and continuous support for industrial, agricultural, and governmental sectors.











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## Feasibility and Technical Studies for Water Treatment and Desalination Projects































## Supply of Equipment and Spare Parts for All Types of Water Treatment and **Desalination Plants**







































### Supply of Equipment and Spare Parts for All Types of Water Treatment and **Desalination Plants**















































Mahmi – Exclusive Agent of CNP. Pumps | Design, Supply, and Installation of **Complete Infrastructure Systems for Water Conveyance and Treatment** 









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Design, Manufacturing, and Installation of Cooling and Net Greenhouses, along with Maintenance Services and Technical Support for Greenhouse Systems

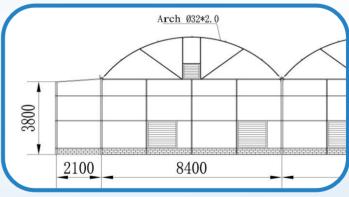
















Design, Manufacturing, and Installation of Cooling and Net Greenhouses, along with **Maintenance Services and Technical Support for Greenhouse Systems** 























Design, Manufacturing, and Installation of Cooling and Net Greenhouses, along with Maintenance Services and Technical Support for Greenhouse Systems















### **Cooling Pad System Details**

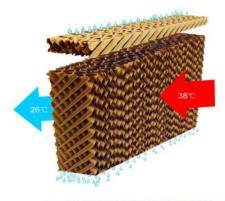
- 1. Cooling panels are insulated with black exterior insulation for enhanced thermal efficiency.
- 2. The cooling frame is made of 1.5 mm anodized aluminum, offering high resistance to corrosion and salt
- 3. The system allows quick disassembly and reinstallation of the cooling panels during maintenance or replacement.

### MAHMI COOLING PAD







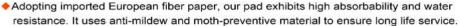


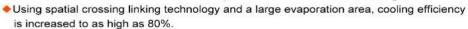
Black cooling pad

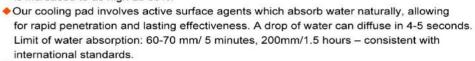
Green cooling pad

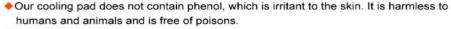
Brown cooling pad

#### Performance characteristics:









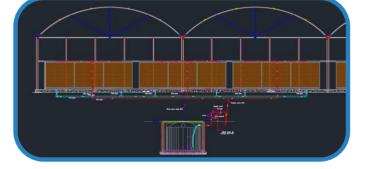




Stainless steel frame



Aluminum alloy frame







Horizontal water curtain cooling system

Longitudinal water curtain cooling system













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### **Greenhouse Cooling Fans - Data sheet**

#### MAHMI CENTRIFUGAL EXHAUST FAN





### Structure and principle:

The MHC High Class Fan is composed of a blade, motor, outer frame protecting nets and supporting frames and shutters. The shutters are opened by the Push-pull Centrifugal system. The major parts are made of galvanized steel sheets(180g/275g/m² zinc coating)and stainless steel sheets. Based on sound aerodynamic principles, wind resistance is minimized and efficient airflow is achieved. All products are used in a wide range of settings, including various types of farms, greenhouses and factory buildings.

#### Application examples:







**Technical parameters** 

Model specifications	Diameter biades (mm)	Biades rotational speed rpm	Motor rotational speed rpm	Air flow (m³/h)	(Pa) Total pressure	Noise decibels	Import power	(V) Rated voltage	(mm) Height	(mm) Width	(mm) Thickness
MHC-800	710 (28")	650	1400	18000	60	≤70	370	380	800	800	450
MHC-1000	910 (36")	650	1400	26000	60	≤70	550	380	1000	1000	450
MHC-1100	1000(40")	600	1400	33000	70	≤70	750	380	1100	1100	450
MHC-1220	1100(43")	440	1400	39500	50	≤70	1100	380	1220	1220	450
MHC-1380	1270(50")	440	1400	43500	56	≤70	1100	380	1380	1380	450
MHC-1530	1400(55")	420	1400	51000	56	≤75	1500	380	1530	1530	450















### **Greenhouse Cooling Fans - Data sheet**

#### MAHMI SERIES CIRCULATION FAN





#### Performance characteristics:

- Features the excellent "Haier" brand electronics.
- International advanced energy conservation technology tested.
- Light aluminum board punch press fan blazer: exhibits a wide angle, large air pressure and low noise.
- Outer covering is stainless steel. Steel spraying is also available.
- Equipped with beautiful and convenient button type hanging articles.
- Long service life: over 10 years.

### Technical parameters:

Туре	mm Diameter biades	m3/h AirVolume	(w) Power	(v) Voltage	(rev/min)	HZ
MH-300	300	2880	150	220 (380)	1400	50
MH-400	400	4180	250	220 (380)	1400	50
MH-500	500	5300	250	220 (380)	1400	50
MH-600	600	6500	370	220 (380)	1400	50



























Specialists in Designing, Supplying, and the Installation of All Types of Hydroponic **Systems and Accessories** 















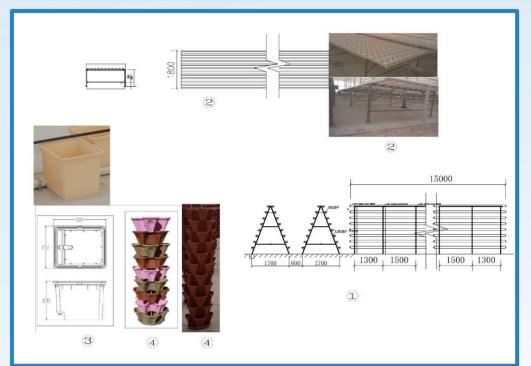






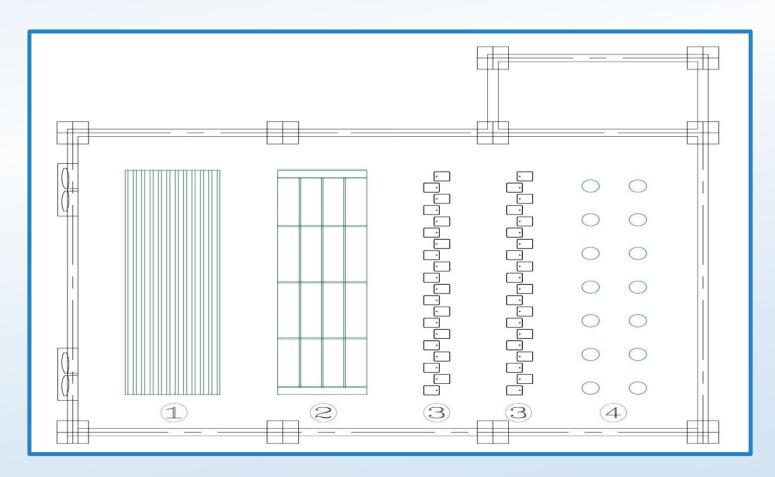


### Specialists in Designing, Supplying, and the Installation of All Types of Hydroponic **Systems and Accessories**







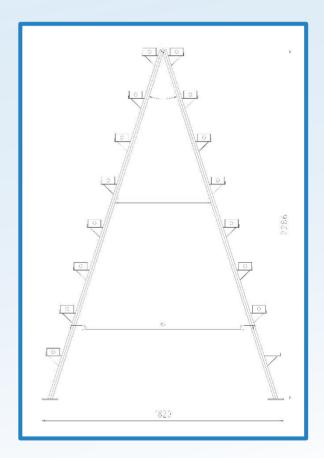




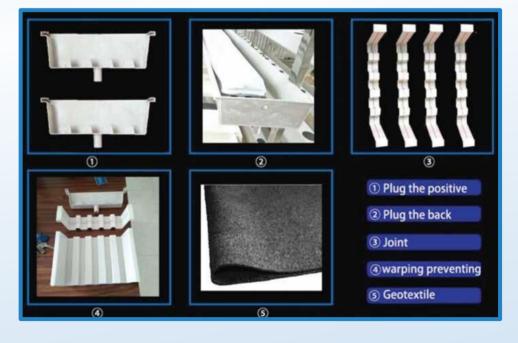




Specialists in Designing, Supplying, and the Installation of All Types of Hydroponic **Systems and Accessories** 

















Specialists in Designing, Supplying, and the Installation of All Types of Hydroponic Systems, Fertigation and Control Systems, and Related **Accessories** 







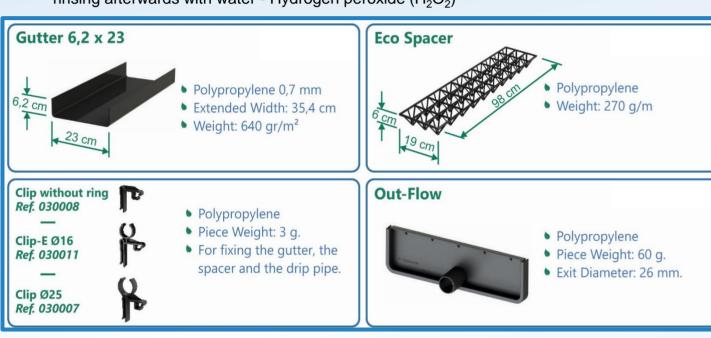




### Specialists in Designing, Supplying, and the Installation of All Types of Hydroponic Systems, Fertigation and Control Systems, and Related **Accessories**

### - Polypropylene Growing Gutter:

- co-polymer, white, 100% virgin material with UV protection
- Maximum load Spacer: (40Kg/m uniform Planar surface All legs work equally )
- Estimated lifespan, Gutter: 6 years Spacer: 4 years
- Disinfection of the gutter: We recommend 200 ppm Sodium hypochlorite (NaCIO), rinsing afterwards with water - Hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>)



### **Growing bags**













We are authorized distributors of polycarbonate sheets manufactured according to international standards. These products have demonstrated exceptional resistance to high temperatures and extreme humidity, making them an ideal choice for demanding agricultural and industrial environments.

## Typical Physical Properties

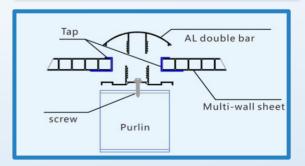
#### Thickness and Structures

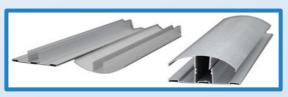
	Siz	:e	Weight U-value	UV Light transmission(%)		SHGC				
STRUCTURE	Thickness	Width		(kg/m²) (W/m²K)		Thickness	Clear	Opal	Clear	Opal
	(mm)	(mm)	(kg/III )		(µm)	Clear	Ораг	Clear	Ораг	
	4		0.9	3.96	50	80	47	0.83	0.30	
	6	2100	1.3	3.56	50	78	46	0.82	0.24	
Twinwall	8	1050	1.5	3.26	50	76	44	0.81	0.35	
	10	700	1.7	3.02	50	73	44	0.81	0.40	
	12		1.9	2.78	50	72	42			

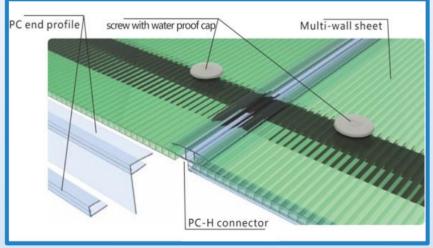
Typical Physical Properties	<b>Typica</b>	I Phy	/sical	Pro	perties
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Property	Test Method	Conditions	Units	Value
Density	D-792		g/cm <sup>3</sup>	1.2
Water Absorption	D-570	24 hr. @ 23°C	%	0.15
Tensile strength at yield	D-638	10 mm/min	Мра	62
Tensile strength at break	D-638	10 mm/min	Мра	65
Elongation at break	D-638	10 mm/min	%	>90
Tensile Modulus of Elasticity	D-638	1 mm/min	MPa	2,300
Impact Falling Dart	ISO-6603/1		J	40-400
Long Term Service Temperature			°C	-50 to +100
Short Term Service Temperature			°C	-50 to +120
Coefficient of linear thermal expansion	D-696		mm/mm°C	6.5x10 <sup>-5</sup>
Heat Deflection Temperature	D-648	Load: 1.82MPa	°C	135
Vicat Softening Temperature	D-1525	Load: 1 kg	°C	150
Practical thermal expansion/contraction			mm/m	3

## H channel (aluminum) & (PC)

















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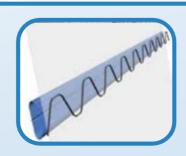
We are authorized distributors of polyethylene films manufactured in compliance with international standards. Our products have proven to offer high resistance to heat and humidity, making them ideal for agricultural and industrial applications in harsh environmental conditions.

# **PRODUCT DATA SHEET**

PRODUCER	Mahmi by HiTEC
PRODUCT TYPE	UV2982AD

PRODUCT DESCRIPTION	3-LAYER, LONG-LIFE, COLORLESS, HIGH DIFFUSING, ANTI-DRIPPING GREENHOUSE FILM LDPE/LLDPE				
RESINS					
NOMINAL THICKNESS ( mic)	200 ± 5% ON NOMINAL THICKNESS				
AVERAGE THICKNESS TOLERANCE					
MECHANICAL PROPERTIES	TEST METHOD	TYPICAL VALUES			
TENSILE STRENGTH @ BREAK (MPa)  -MACHINE DIRECTION  -TRANSVERSAL DIRECTION	ASTM D882	25 25			
ELONGATION @ BREAK (%)  -MACHINE DIRECTION  -TRANSVERSAL DIRECTION	ASTM D882	600 700			
TEAR RESISTANCE (gf/ mic)	ASTM D1922	10.0			
DART DROP (g)	ASTM D1709	600			
OPTICAL PROPERTIES					
LIGHTTRANSMISSION(%)(400-700 nm)	TN2155-5	≥ 88			
DIFFUSION (%) (400-700 nm)	TN2155-9	70-72			











We supply all types of shade nets, anti-insect (mosquito) nets, and insulating plastic sheets for greenhouse flooring, available in a wide range of technical specifications and colors. Our products are tailored to meet diverse agricultural project needs, ensuring high quality and durability.











