

The background of the entire page is a dense, close-up photograph of saffron threads. The threads are a deep, vibrant red color, with some showing a slight yellowish-orange hue at the tips, likely from the stigma. They are tangled and layered, creating a rich, textured appearance. A white, torn-edge paper strip is overlaid horizontally across the middle of the image, containing the main title text.

Hi -Tech saffron cultivation chambers



ABOUT US

We use an advanced Controlled Environment Agriculture (CEA) system that enables year-round saffron cultivation, regardless of external weather conditions. This system allows for a continual and reliable production of saffron that is consistent in quality and quantity.

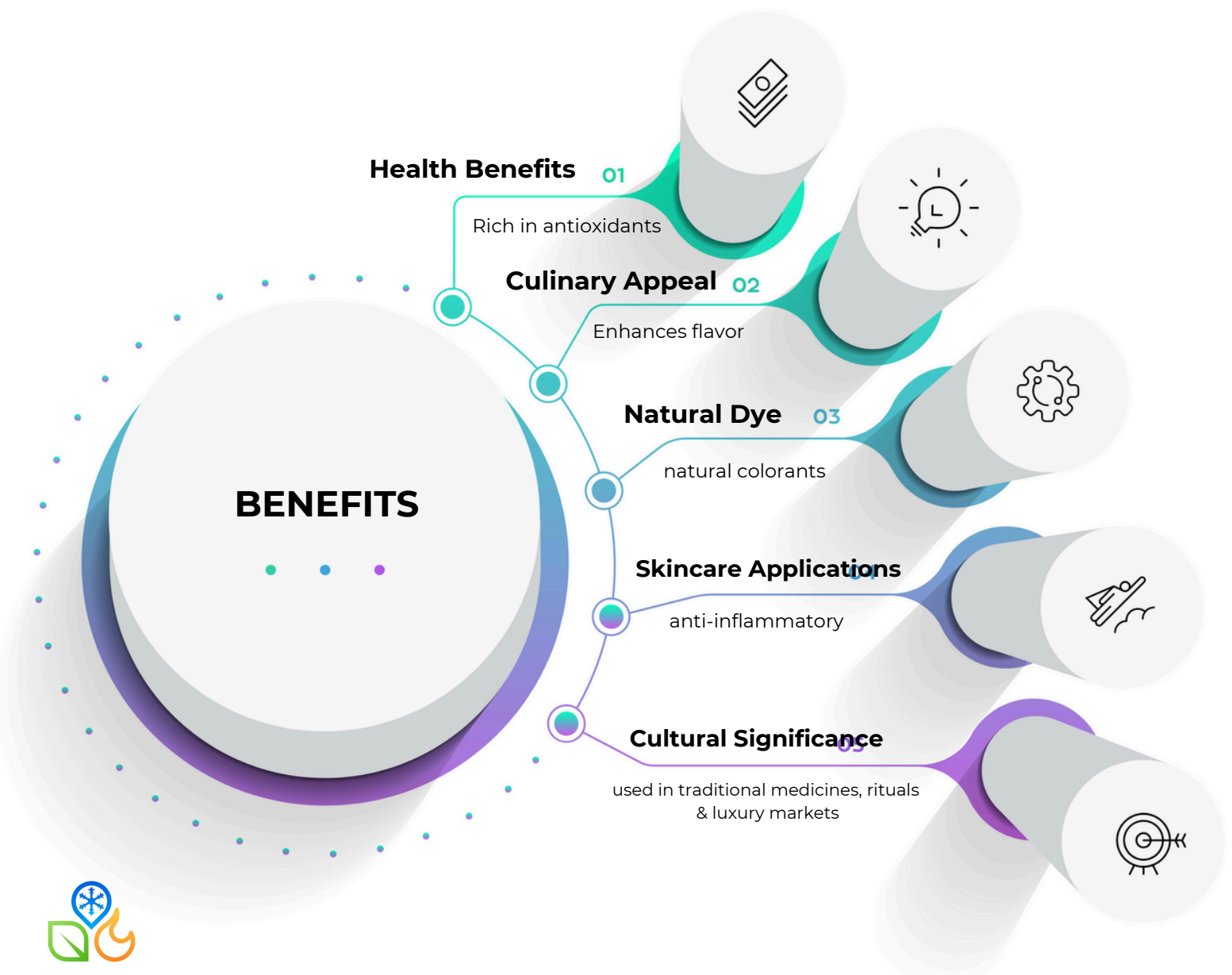
The system integrates **AI tools** to monitor and analyze environmental data in real-time, providing insights and making intelligent adjustments to optimize growing conditions.

We provide high-tech farms at an **affordable price**, ensuring that saffron cultivation is accessible and economical for everyone.



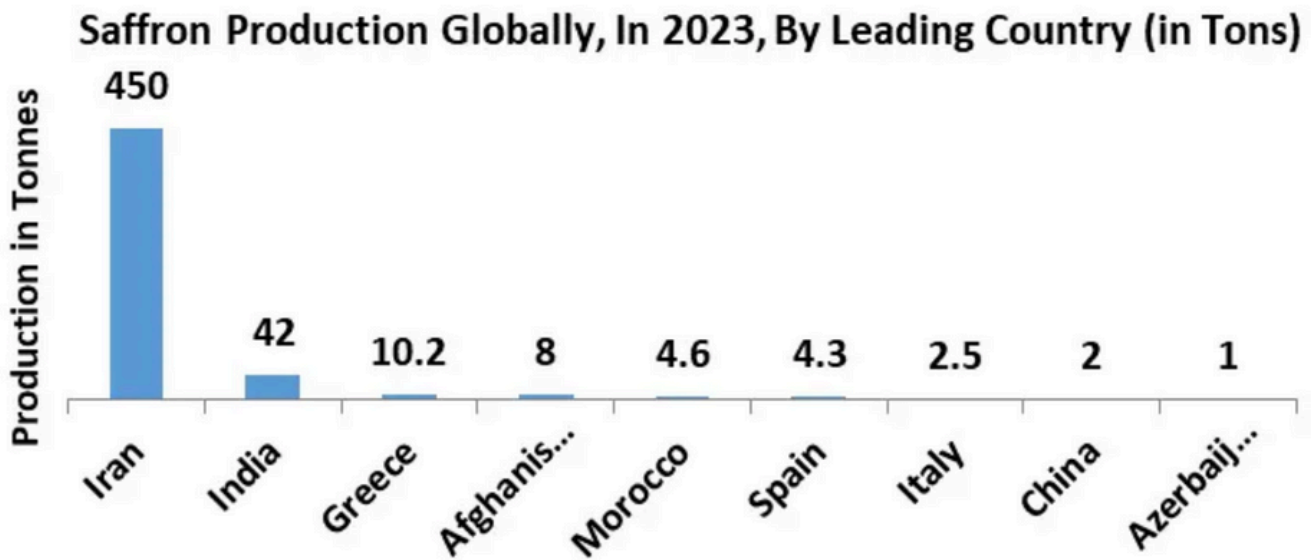
ABOUT KESAR (SAFFRON)

- Saffron, comprising of dried stigmas of the plant known as *Crocus sativus*, is one of the **most expensive** dietary spices in the world.
- Due to its exceptional commercial worth and relatively small production volume, saffron is also known as the "**golden crop**"
- Annual demand of saffron in India is 100 tons and production is only 6-7 tons
- Price of saffron ranges from **Rs.550-700 per gram**



MARKET OPPORTUNITY

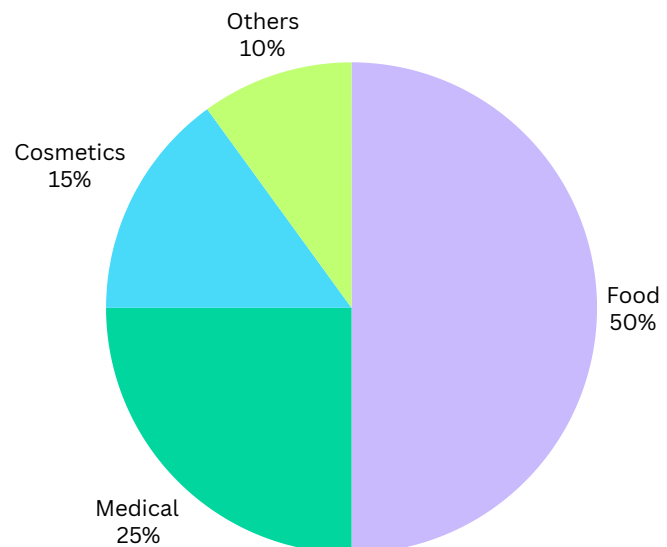
Among the saffron producing countries, 90% contribution is from Iran , followed by India (6%) ,Greece, Afghanistan, Morocco, Italy, Spain and China.



Market of Saffron

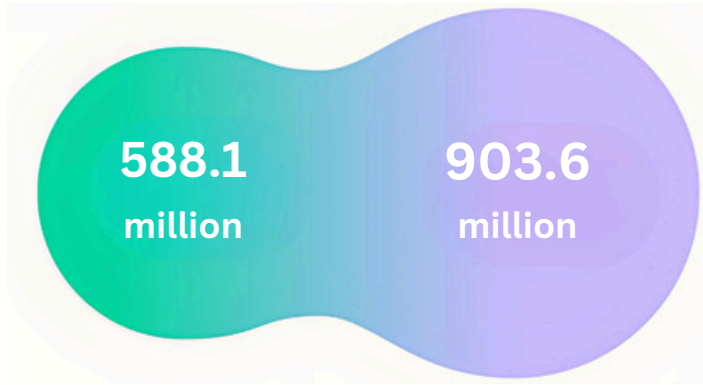
With growing awareness, demand surges for saffron-based supplements and extracts, like saffron-infused teas or capsules, tapping into the nutraceutical market. Saffron's antioxidant and anti-inflammatory properties drive its integration into:

- Skincare, haircare, and beauty products.
- Gourmet dishes, desserts, and beverages.
- Nutraceutical supplements for mood and wellness.
- Natural dye for textiles.
- Traditional medicine for digestion and inflammation.
- Religious rituals and offerings.
- Weight management supplements.
- Premium foods for enhanced quality



Global Demand

Domestic Demand



2023 → 2030

Reasons for Growing Saffron using Aeroponics



Growing Market Demand



High Profitability Potential



Less Time Consuming



KEY PARAMETERS

Temperature



Factors that influence growth of saffron

Autumn (Start): Keep the temperature at about 25°C when you plant the bulbs.

After 3 Weeks (Sprouting): Slowly reduce the temperature to 20°C. This helps the bulbs sprout and grow healthy.

Flowering Stage: When the flowers start to appear, lower the daytime temperature to 12°C and nighttime to around 10°C.

Humidity



In autumn : when bulbs are planted, keep the humidity at 80% to help them sprout well.

As they grow and flowers begin to bloom, increase humidity to 85% to keep the flowers healthy.

Avoid sudden changes in humidity to prevent stress on the plants.

CO2 Levels



During the first few weeks of growth, gradually increase the CO2 levels to about 4000 ppm. This helps the plants grow strong.

As flowers bloom, drop CO2 levels to about 700 ppm.

Maintain consistent airflow to ensure even distribution of CO2.

Lights



When you first plant saffron bulbs, keep the lights off to mimic natural dormancy.

Turn on the lights after sprouting begins to support healthy growth.

Once flowers start to bloom, maintain a regular day-night cycle by turning the lights on during the day and off at night.

Ventilation

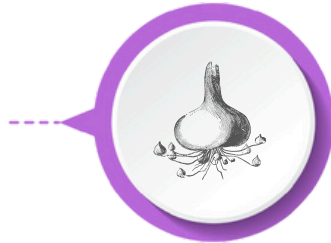
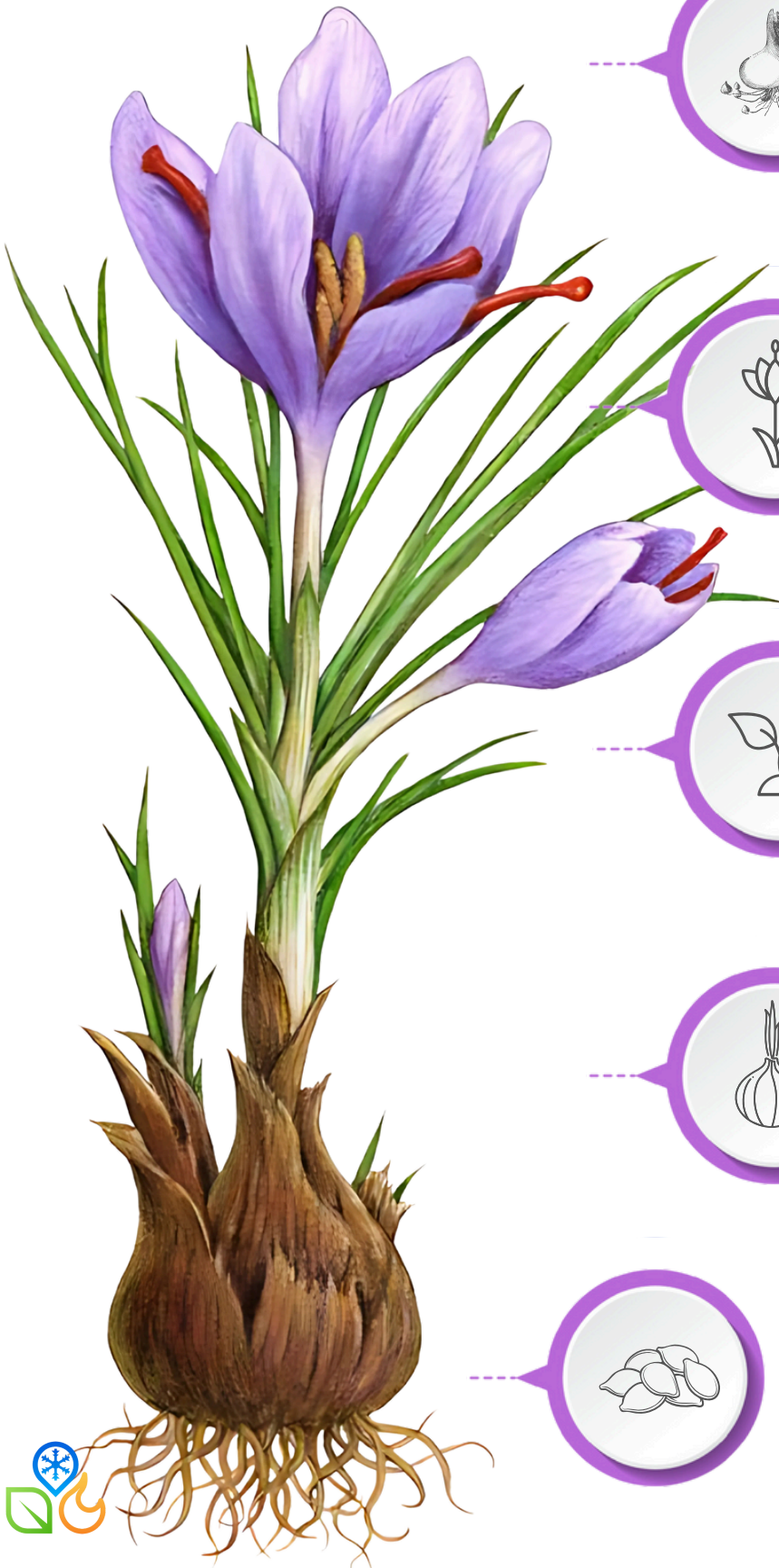


Ensure good airflow around the bulbs to prevent moisture buildup and rot.

As the plants grow, maintain moderate ventilation to support healthy development.



GROWTH CYCLE OF SAFFRON



Corm Development

Corms multiply and mature.



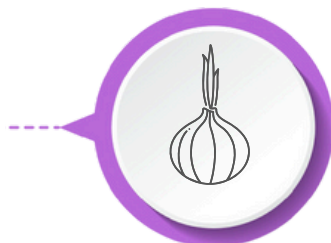
Vegetative Growth

Leaves grow for energy storage



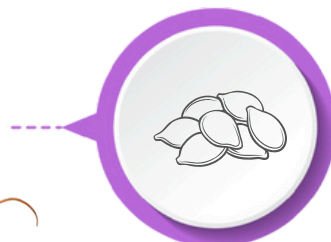
Flowering

Flower bloom; saffron is harvested.



Sprouting

Shoots start to emerge.



Dormancy:

Corms remain inactive

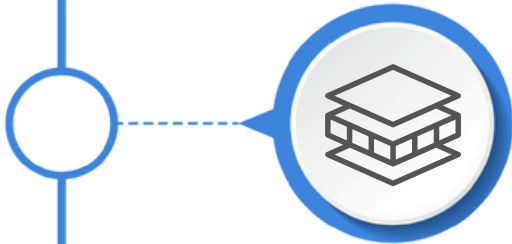


OUR SOLUTION



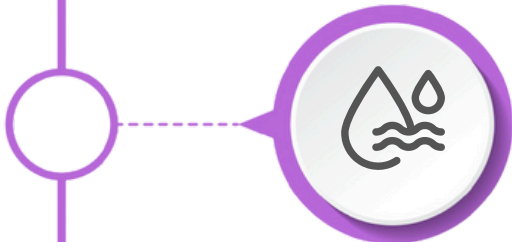
Refrigeration Equipments

Customised as per the cooling requirements



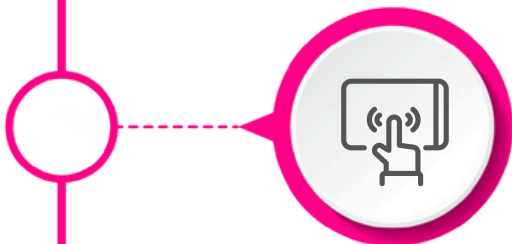
Insulation Panels

Customised as per room dimensions



Humidifier / Fogging System

Inbuild/external depending upon the requirements



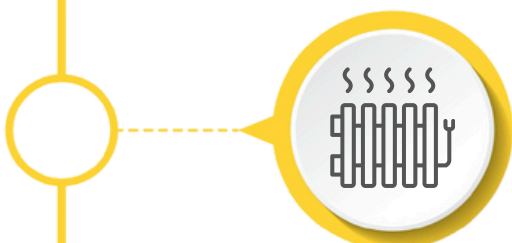
7 Inch Touch Screen PLC Control

With advance automation and real time monitoring & Analysis



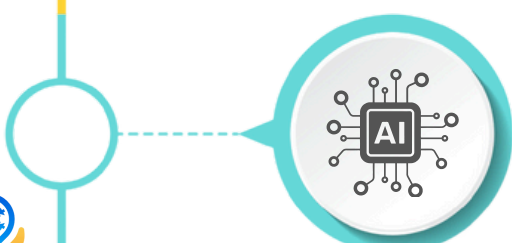
Complete Sensors

Temperature, Humidity, CO2 - 30,000 ppm



PID Based Heating System

For maximum energy savings and long life



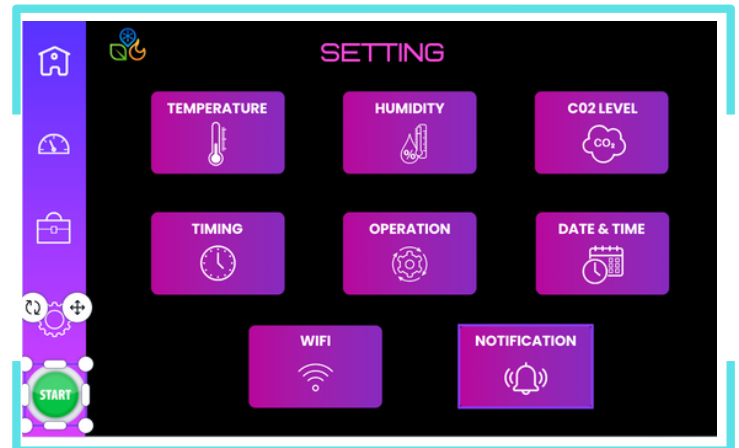
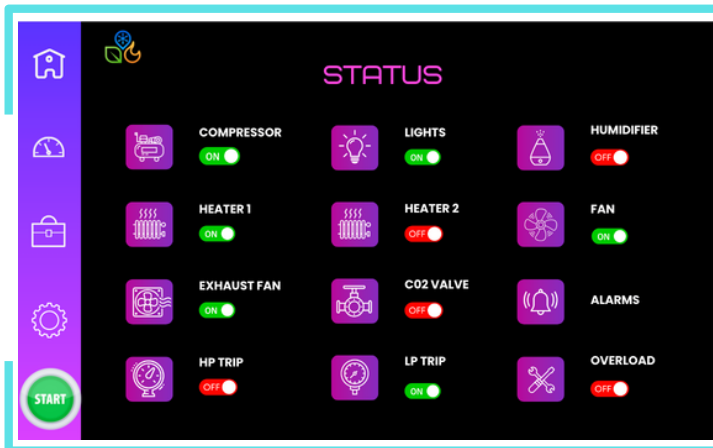
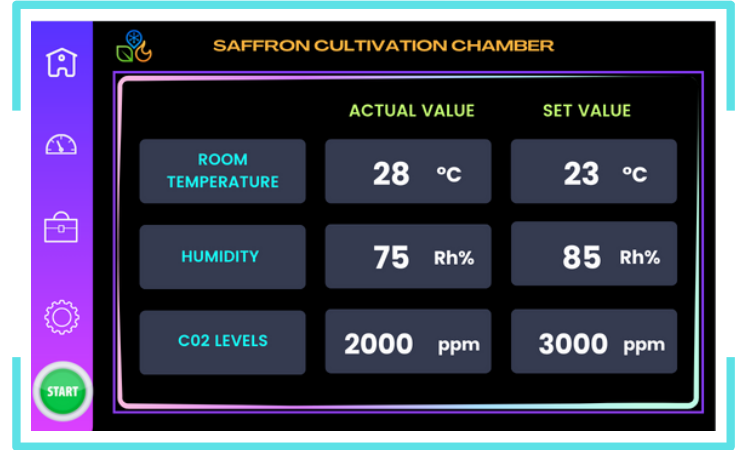
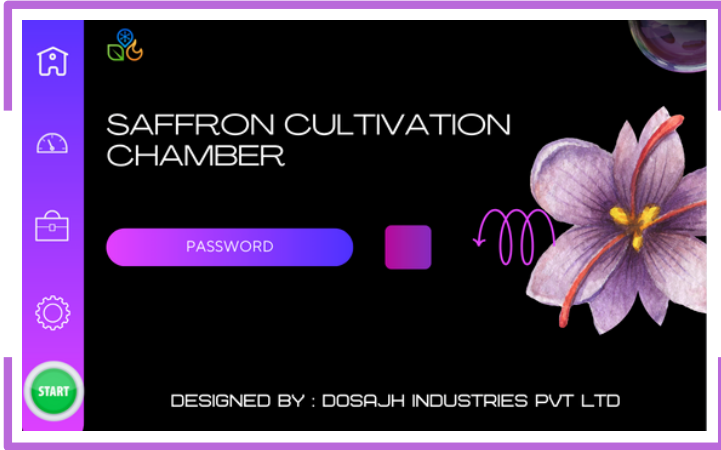
Complete Automation

Automatic control of systems like Indoor units , Humidifier , Lights , CO2 Valve , exhaust Fan etc





OUR SYSTEM





CONTACT US



Phone

+91 9811590436
+91 9625777543



Website

www.dosajh.com



Email

info@dosajh.com
dosajhindustries@gmail.com



Head Office

C-6 , Dsiidc Engineering Complex
Mangolpuri Industrial Area , Ph-1 New
Delhi - 110083



Factory

1519 , IMT Kharkhoda Industrial Area
Haryana - 131402

