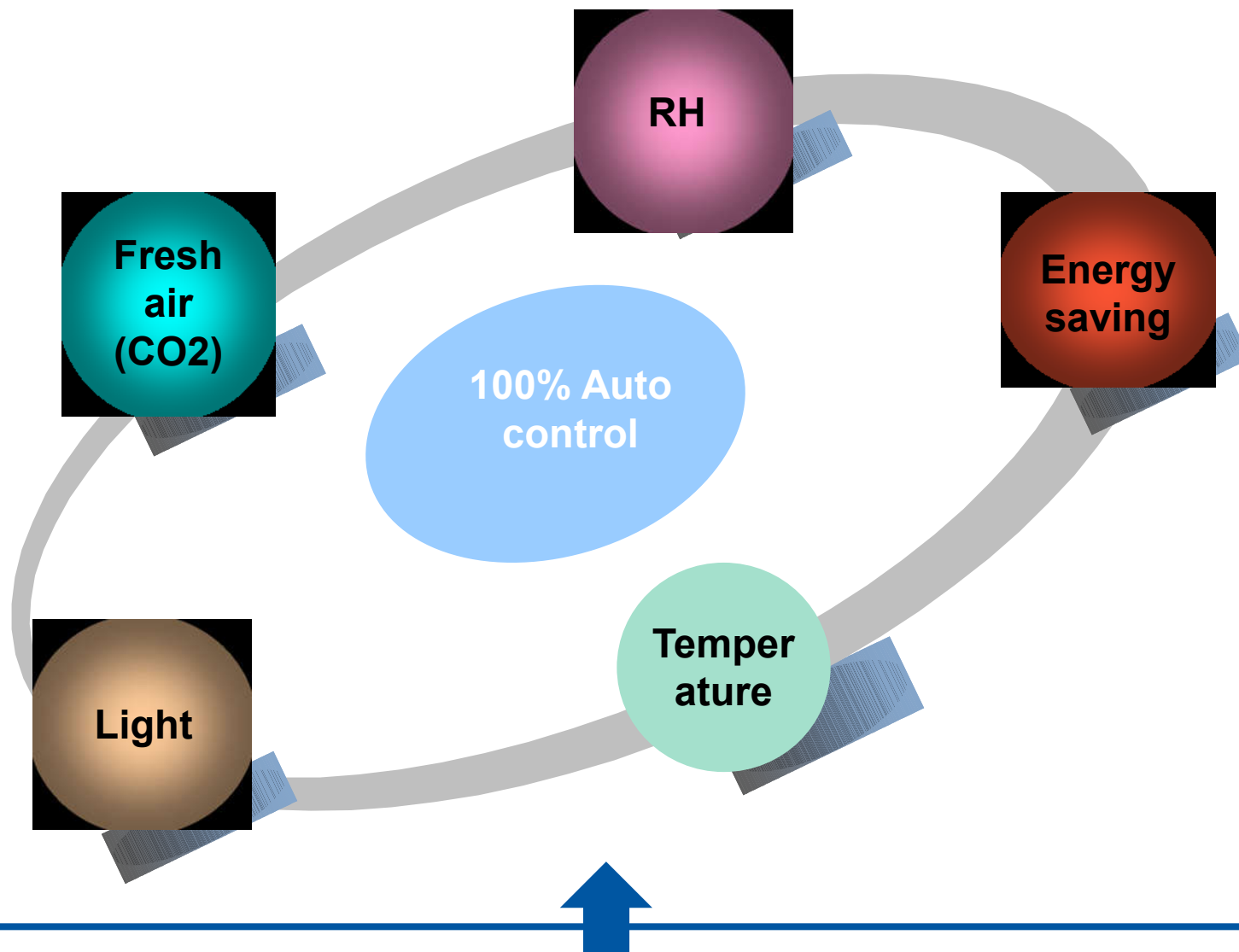


# MUSHROOM CLIMATE CONTROL MACHINE ALL IN ONE UNIT



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**What kind of functions this machine have?**



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## What kind of mushrooms can use this machine?



**OYSTER**



**WHITE BUTTON**



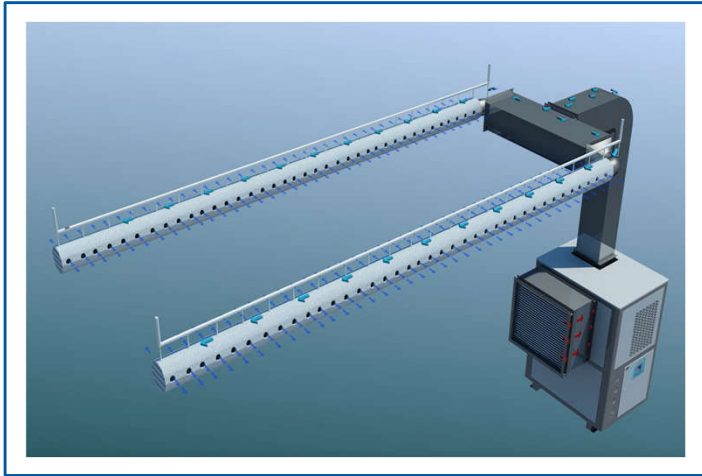
**KING OYSTER**



**SHIITAKE**



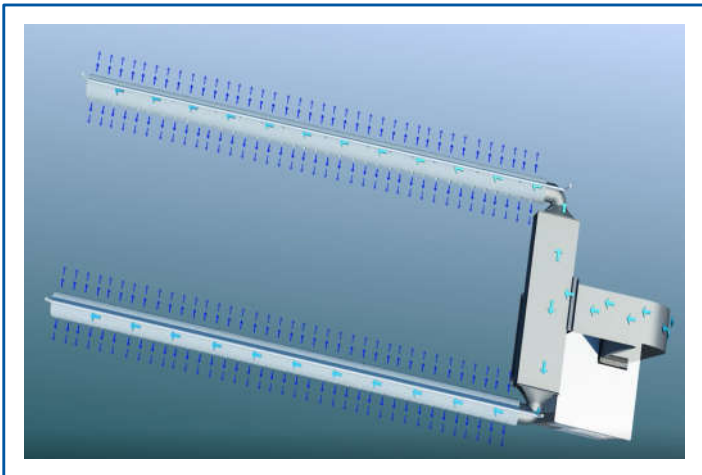
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## How is this machine works?

This machine is a R410A freon system unit, it doesn't need water system.

Main parts of this machine are compressor, condenser, Evaporator, Expansion valve and Fan.

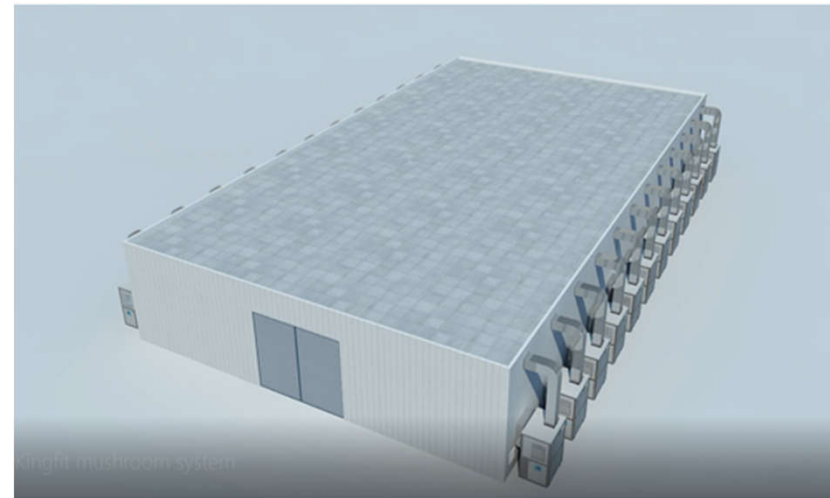
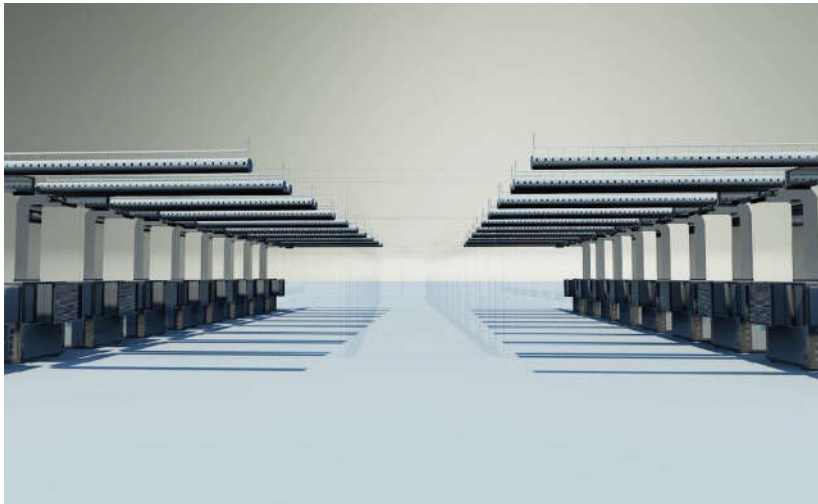


We will make 1, 2 or 3 bag type plastic air ducts for each grow room.

Numbers of air duct will be based on the size of grow rooms and shelves.



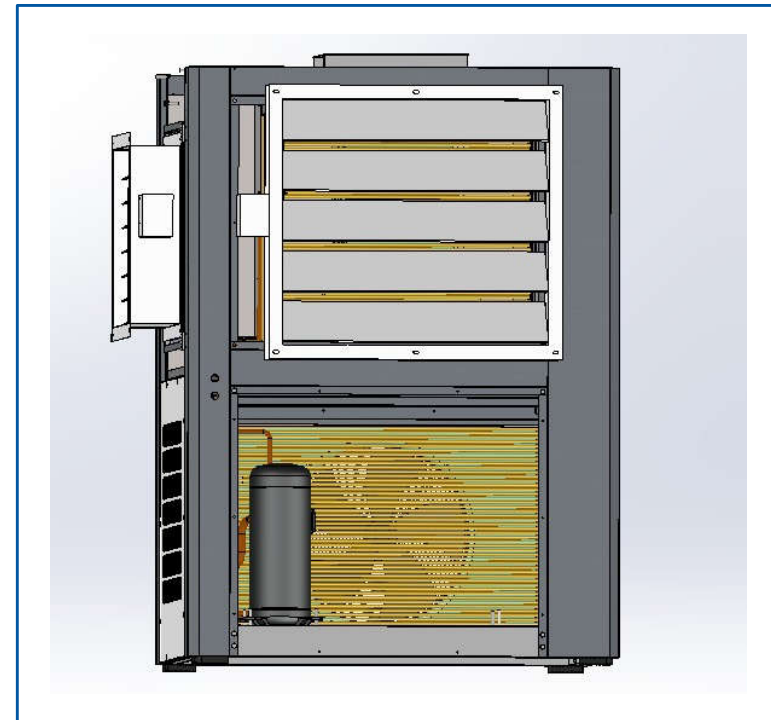
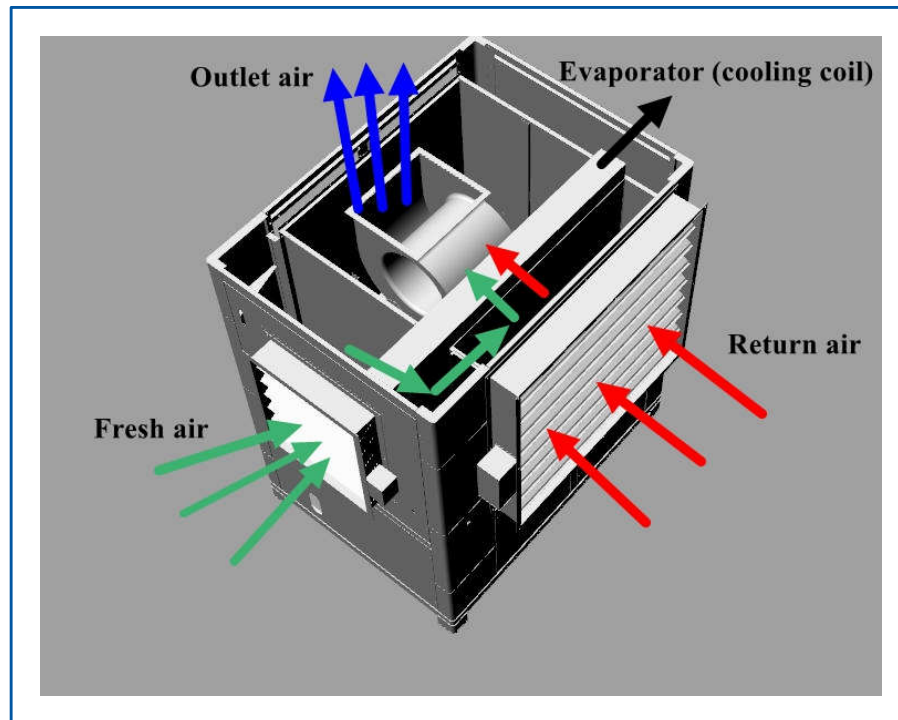
## Pictures of climate unit installation with grow rooms



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## Air flow diagram

Machine have fresh air damper and return air damper, use Belimo actuators to auto control fresh air and return air damper open percentage as CO2 level requirement.





## Touch screen control system

Functions:

1. Temperature control mode: Cooling, Heating and Auto
2. Humidity control
3. CO2 level control (fresh air)
4. Light control



Growers can set Max 20 growing phases in this controller.

If you only plan to set only Phase 1 parameters, please you can set other phases running time to 0 Hour.





## How many models of machine we have?

We have models as below:

3HP,5HP,6HP,10HP,12HP,15HP,20HP and 24HP Climate unit.

Cooling capacity range : 8kw~90kw (2RT ~26RT)

Fan Capacity range: 1800m<sup>3</sup> ~ 18000m<sup>3</sup>

**Control grow rooms size with wide range from 20m<sup>2</sup> to 300m<sup>2</sup>.**

### For Example:

1.Containerized grow room:6x3x2.8m (3HP unit)

2.Oyster greenhouse:35x7x4m (20HP unit)





# How to choose a right model of unit for grow room?

We can calculate the cooling capacity (watt) as below:

## 1. White button:

$Q = 140W/m^2 \times \text{Surface grow area } m^2$  (15~25C)

## 2. Wood fungi (Oyster, King oyster, Shiitake ect) :

Incubation room:  $Q = 15W \times \text{Room size } m^3 + 1.5W \times \text{Substrate weight kgs} / 1.25$  (20~28C)

Fruiting room:  $Q = 30W \times \text{Room size } m^3 + 1.5W \times \text{Substrate weight kgs} / 1.25$  (12~20C)



## Some of our projects in China:



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## Our project in Iraq



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## Our project in Algeria



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## Our project in Sri Lanka



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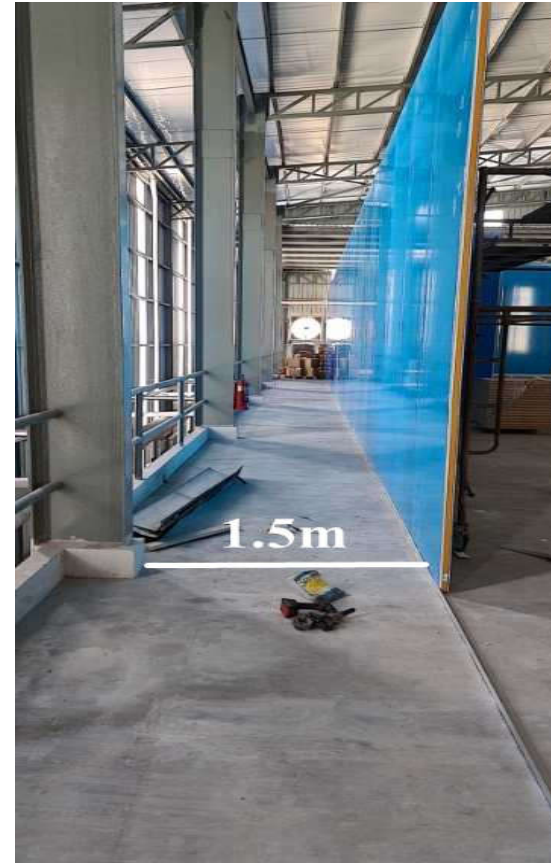
## Our project in UAE



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## Our project in Malaysia



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## Our project in Chile



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## Our project in Bangladesh



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## Our project in Nepal



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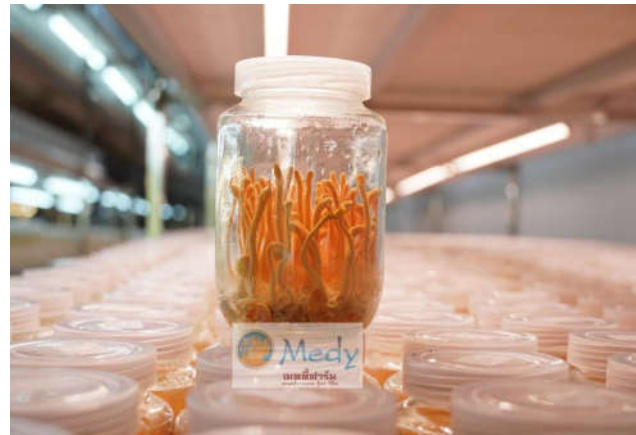


## Our project in Korea



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## Our project in Thailand



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## Our project in Australia



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