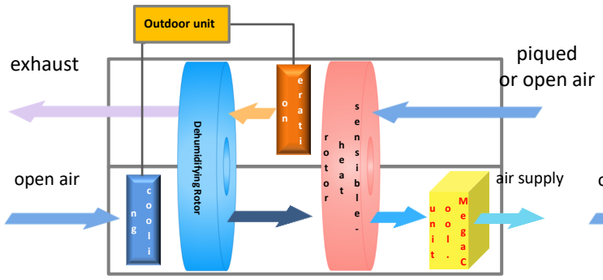
Desiccant Air Conditioners, Megacool
Expand the market by combining with "Total Heat Exchanger"!

Large commercial facilities, hospitals, elderly care facilities
Production Plant / Dry Room Semiconductor Plant

As an outside air conditioner, it requires dehumidification/cold air supply.
For your use!

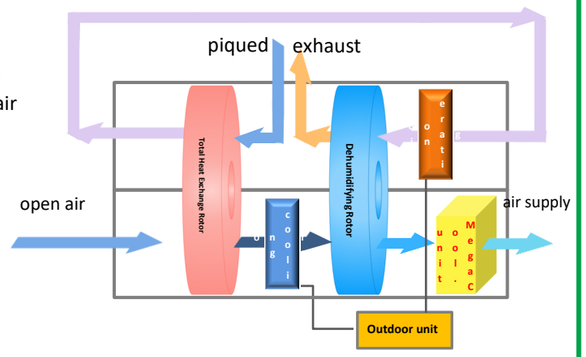
Regeneration method: Heat pump exhaust heat utilization
Regeneration temperature: 50° C
Cooling system: heat pump and megacool



General building air conditioning, public facilities, school gymnasiums

Renewable Energy Utilization, and Energy savings and improved IAQ!

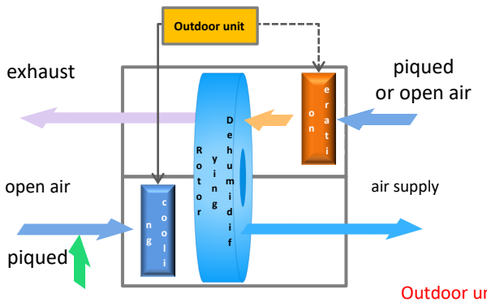
Regeneration method: Heat pump exhaust heat utilization
Regeneration temperature: 40° C to 50° C
Cooling method: Megacool



Food processing plants and supermarkets

The introduction of a heat-pump desiccant system has resulted in Energy saving and improvement of in-store environment!

Regeneration method: Heat pump outdoor unit exhaust heat utilization
Regeneration temperature: 40° C to 60° C



Usage	Advantages of introduction
Large commercial facility Hospital Elderly care facility Production plant Dryroom Semiconductor factory	●Energy saving by stopping the supercooling and reheating ststem ●Achieving comfortable air conditioning and suppressingodors ●Enargy saving by using waste heat
General building air conditioning Public facilities/school gymnasiums	●Use of renewable energy ●Realization of zero-energy air conditioning
Food processing factry	●Improve productivity by maintaining low humidity ●Condensation and mold prevention by humidity control ●Realization of HACCP by realization of dry kitchen
Supermarket	●Elimination of cold aisles and prevention of mold condensation ●Prevention of frost on products and showcases ●Enargy saving for air conditioners and energy saving for showcases

Outdoor unit: Unused waste heat and renewable energy can also be used instead of outdoor units.

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Earthclean Tohoku Co.

Earth. gentle | to a person gentle | CO2 reduction | Social Environment consideration | energy conservation effect | chlorofluorocarbon

The "Dream Air Conditioner" for the 21st Century

Desiccant Megacool ® radius

Desiccant mega-cool air conditioning system for tomorrow's indoor air, global environment, and energy conservation

MegaCool. Megacool®

Indirect multistage evaporative cooling heat exchanger

Trademark registered

Patented

4 major features of MegaCool

1st The temperature is lowered without humidifying the air using only the vaporization phenomenon of water.

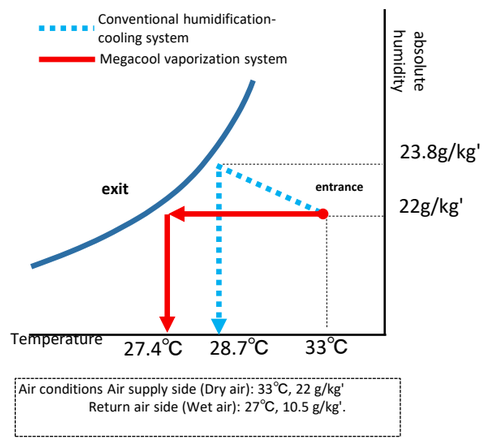
2nd Refrigerant gases, such as chlorofluorocarbons/alternative chlorofluorocarbons, are Not used at all.

3rd Electricity, gas, and other energy Not used at all.

4th It can accommodate both large and small capacities.

L2-Tech 2019

Ministry of the Environment LD-Tech 2021 Certification



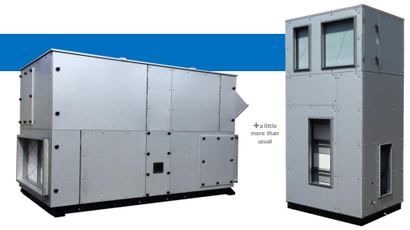
Air conditions Air supply side (Dry air): 33℃, 22 g/kg'
Return air side (Wet air): 27℃, 10.5 g/kg'.

*MEGACOOL can also be integrated into a desiccant air conditioner.
It can also be used as a separate placement.
*Antimicrobial agents are used to prevent the formation of mold and bacteria.
Water is generally tap water, but depending on the quality of the water, a water softener or similar device may be used.
*Humidification is also possible in winter.

desicant MegaCool Desiccant Megacool®

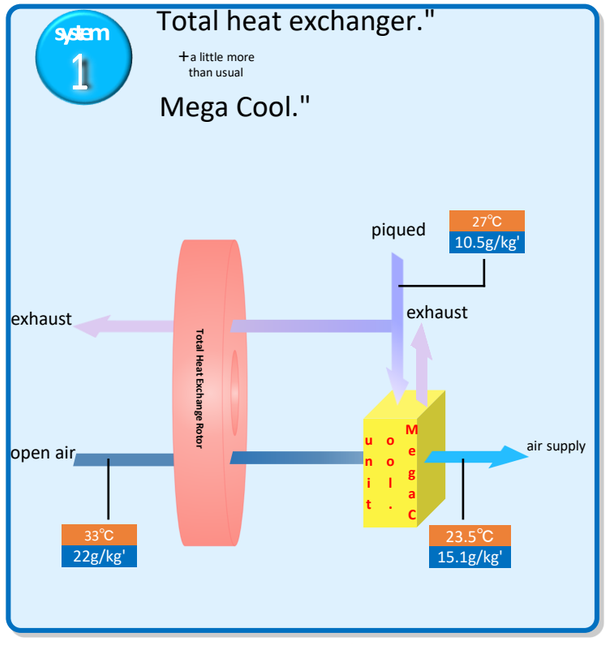
Trademark registered

System patented

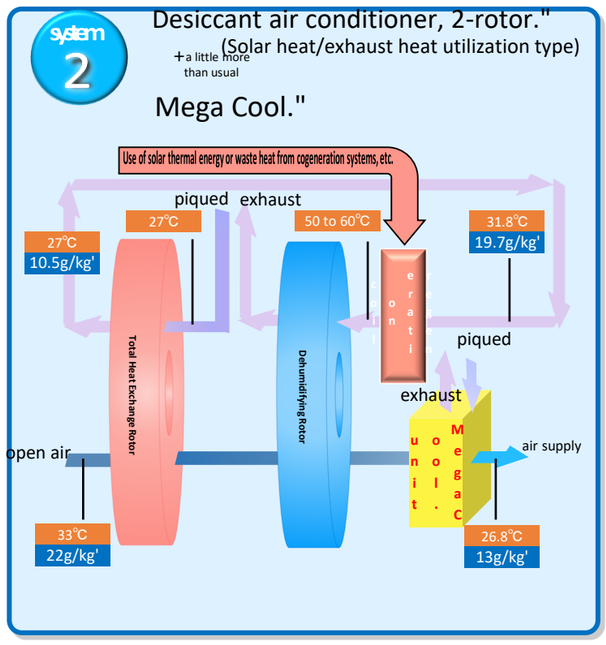


By sharing "Desiccant Air Conditioners" "Megacool" or "Total Heat Exchangers As 100% outside air treatment (outside air conditioner), net zero energy is realized!

system 1 Total heat exchanger." +a little more than usual Mega Cool."



system 2 Desiccant air conditioner, 2-rotor." (Solar heat/exhaust heat utilization type) +a little more than usual Mega Cool."



Heat pump systems are also available.

desicant MegaCool. Desiccant Megacool® can meet all the needs of an air conditioner in a single unit.

energy-saving

Compatible with all energies

Electricity ●Gas
Solar Energy
Hybrid Energy
Wind power

Utilization of waste heat to eliminate all kinds of waste

Various generators
Showcase
Fuel cells ● Solar water heaters

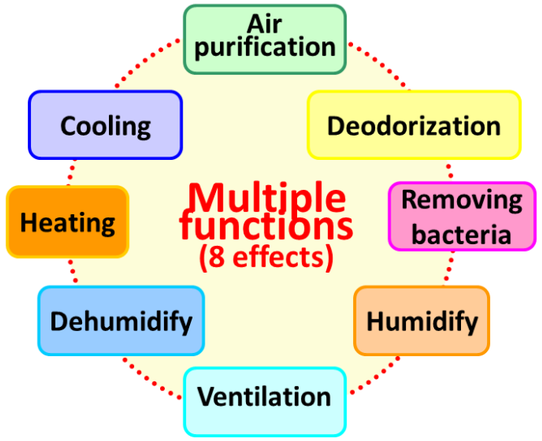
environmentality

Environmental Contribution

Non-fluorocarbon air conditioning
Significant reduction in CO2 emissions

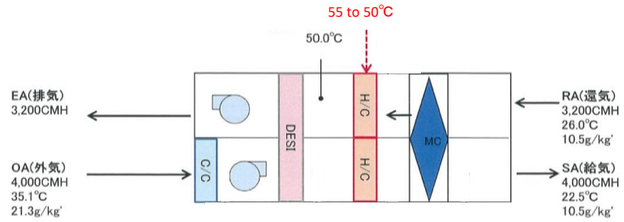
comfortable space

No supercooling of the human body
Creating the Best Healthy Air



Office Building Case Studies

Introduced a latent heat-sensible heat separation air conditioning system in conjunction with the introduction of gas cogeneration.
The Zero Energy Building Project has achieved LEED Platinum certification.
Peak power consumption was lower than during the emergency power saving measures.



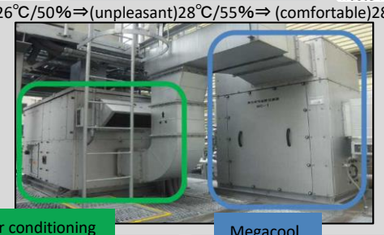
Desiccant Mega Cool" air-conditions with unused waste heat and water!

For non-fluorocarbon and carbon-neutral measures!

Improving the environment during Cool Biz (comfortable)26℃/50%⇒(unpleasant)28℃/55%⇒ (comfortable)28℃/45%

Desiccant air conditioning

Use of cogeneration waste heat



Desiccant air conditioning

Model: sponge titanium oxide rotor
DC-25(Made by Earth Clean Tohoku)
Processing air volume:2500㎥/h
Dehumidification capacity:16.2L/h
(inlet air35.3℃ 56.7%)
External dimensions:2440L×1400W×1520H

Megacool

Model: double stream
（Freonless・Compressorless cooling system
Processing air volume:2500㎥/h
cooling capacity: 9.9kw(water supply0.36L/min)
External dimensions:1400L×1060W×2097H