

The Bry-Air Magic



Bry-Air®

Adsorption Chiller

Energysmart Cooling using Waste Heat



Bry-Air®

Leaders in Dehumidification... Worldwide

www.bryair.com

Recover Low Grade Process Waste Heat for Energy Smart Green Cooling

Industrial operations represent a significant source of greenhouse gas emissions and most of the waste heat is simply rejected via cooling towers to the atmosphere. It can be thought of as “dumped” heat.

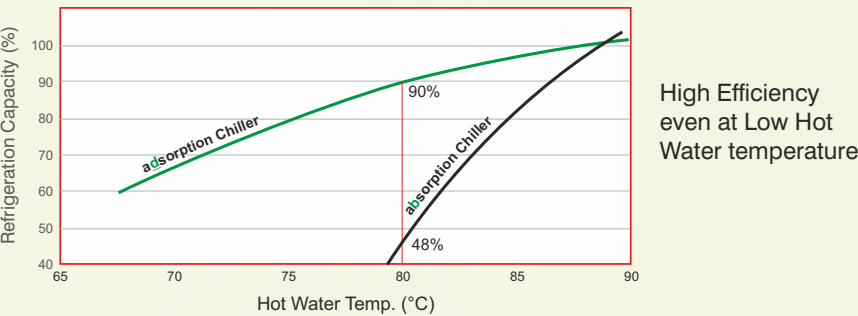
Waste heat is the by-product of system inefficiencies found in industrial and commercial process and represents a waste of resources, opportunities, and money. Waste heat is commonly generated during:

- Power generation;
- Fuel fired furnaces;
- Process heating.

Benefits

- Prevent tonnes of CO₂ emission from entering the atmosphere
- Chiller reduces electrical usage by 99%

Adsorption versus Absorption



High Efficiency even at Low Hot Water temperature

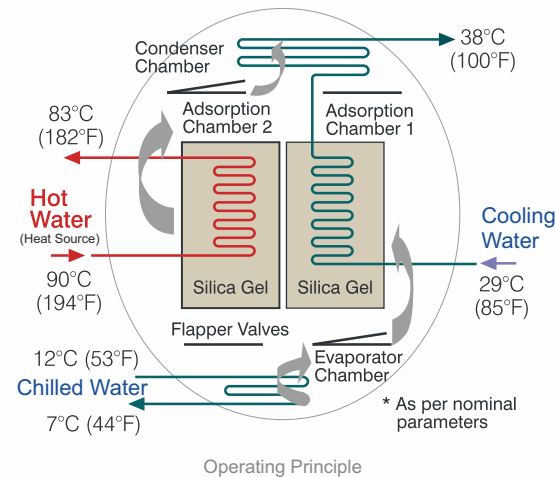


Why Adsorption is a Better Choice?

Adsorption versus Absorption Comparison

Factors	Adsorption Chillers	Absorption Chillers
Life Expectancy	Greater than 25 Years	7 to 9 Years
Maintenance	Negligible Maintenance	Require High Maintenance
Regeneration Temperature (Hot Water)	Down to 50°C (122°F)	Shuts down at 82°C (180°F), Needs Back-up Heater
Desiccant Used	Silica Gel (Inert)	Lithium Bromide (Highly Corrosive)
Replacement Requirements (Periodic Maintenance)	Not Required	Heat Exchangers, Boilers, Absorbent Replacement Required

How does our Adsorption Chiller Works?



The principle of **Adsorption** works with the interaction of gases and solids. With adsorption chilling, the molecular interaction between the solid and the gas allow the gas to be adsorbed into the solid. The **Adsorption** chamber of the chiller is filled with solid material, silica gel, eliminating the need for moving parts and eliminating the noise associated with those moving parts. The silica gel creates an extremely low humidity condition that causes the water refrigerant to evaporate at a low temperature.

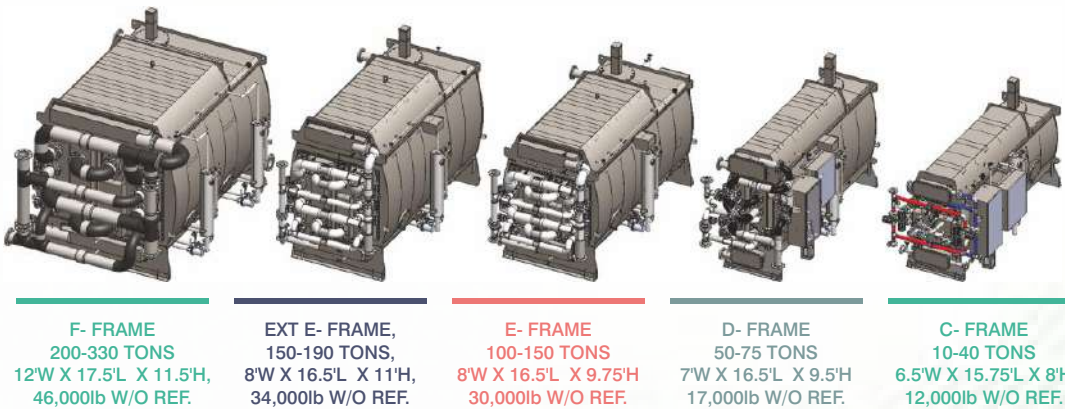
As the water evaporates in the evaporator, it cools the chilled water. The **Adsorption chiller** has four chambers; an evaporator, a condenser and two **Adsorption** chambers. All four chambers are operated at nearly a full vacuum.

Unbeatable Advantages

- Long product life (>25 yrs)
- Low maintenance
- Regeneration temperature as low as 50°C
- ‘Green’ refrigerant (water)
- Low electric consumption (one-tenth the conventional system)
- No noise and vibration

Range

70 - 1180 kw (20 - 335 tonnes)



Input sources

Process Waste Heat

Tri-generation (CHP)



Food & Beverage



Power Plant



Generators

Solar Heat



Solar Collectors

Applications

Process Cooling

Air-conditioning (HVAC)



Aluminum Anodizing



Mould Cooling



Acid Cooling



Food Processing



Cement, steel, plastic processing, hospitality, healthcare and many more....

Bry-Air

Leaders in Dehumidification... Worldwide

BRY-AIR (ASIA) PVT. LTD.

Corporate Office:
21C, Sector-18, Gurugram 122015
Phone: +91-124-4091111
E-mail: bryairmarketing@pahwa.com

Registered Office:
20, Rajpur Road, Delhi 110054
Phone: +91-11-23906666
E-mail: enquiry@pahwa.com
Web: www.bryair.com
CIN: U74210DL1981PTC012456

City	Phone	E-mail
DELHI	+91-11-23906666	enquire@pahwa.com
CHANDIGARH	+91-172-4678806/7	bryairchandigarh@pahwa.com
MUMBAI	+91-22-24935155/24947475	bryairmumbai@pahwa.com
VADODARA	+91-265-2351493	bryairbaroda@pahwa.com
KOLKATA	+91-33-22814841/22814877	bryairkolkata@pahwa.com
BENGALURU	+91-80-43025562/3/4/5	bryairbangalore@pahwa.com
HYDERABAD	+91-40-27154243	bryairhyderabad@pahwa.com
CHENNAI	+91-44-48606141/2/3	bryairchennai@pahwa.com
KOCHI	+91-484-2395940	bryairkochi@pahwa.com

Country	Phone	E-mail	Website
BRY-AIR (USA)	+1-740-965-2974 +1-740-965-5470	bryair1@bry-air.com	www.bry-air.com
BRY-AIR (MALAYSIA)	+60-3-89256622 +60-3-89259957	bryair@bryair.com.my	www.bryair.com.my
BRY-AIR (CHINA)	+86-21-34126537	info@bryair.com.cn	www.bryair.com.cn
BRY-AIR (BRAZIL)	+55-41-36982222	contato@bryair.com.br	www.bryair.com.br

Country	Phone	E-mail	Website
BRY-AIR (UAE)	+971-6-5574622	support@bryair.ae	www.bryair.com
BRY-AIR (PHILIPPINES)	+63-2-88078435/6/7	mail@bryair.com.ph	www.bryair.com
BRY-AIR (INDONESIA)	+62-21-79199023	indomark@bryair.com.my	www.bryair.com
BRY-AIR (THAILAND)	+66-2-117-9558	wimonvanvaree@pahwa.com	www.bryair.com
BRY-AIR (VIETNAM)	+84-28-39956498	vietmarketing@bryair.com.my	www.bryair.com
BRY-AIR (NIGERIA)	+234-9117341410	bryairnigeria@pahwa.com	www.bryair.com
BRY-AIR (SWITZERLAND)	+41-91-6830971	info@pro-kon.ch	www.bryairprokon.com
BRY-AIR (BANGLADESH)	+880-1819409100	bryairbangladesh@pahwa.com	www.bryair.com

PAHWA GROUP
Innovation is life

An ISO 9001:2015 and 14001:2015 Company
©, ® & 'TM' of Bry-Air (Asia) Pvt. Ltd.

Social Connect: