

**Hot is the new Cold**

# All That You Want To Know About ! Adsorption Chillers !

Log on to [www.bryair.com](http://www.bryair.com) for answers to your queries

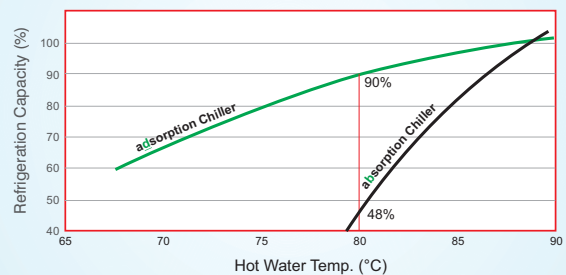
## FAQs Frequently Asked Questions

1. What are the **standard operating conditions** ?
2. What is the **start up time** ?
3. What is the **response time** of the chiller to the change of hot water temperature ?
4. What **capacity** cooling tower will be required ?

### Unbeatable Advantages

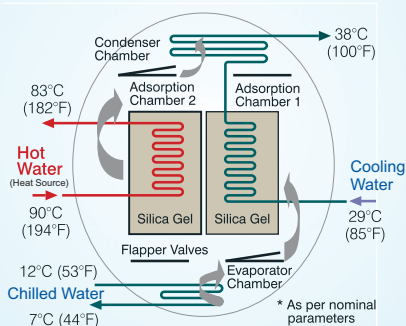
- Long product life (>25 yrs.)
- Low maintenance
- Regeneration temperature as low as 50 °C
- 'Green' refrigerant (water)
- Low electric consumption (one-tenth the conventional system)
- No noise and vibration

### Adsorption Versus Absorption



High Efficiency even at Low Hot Water temperature

### Working Principle



### Applications

#### Heat source:

- Power generation (exhaust gas)
- Solar (thermal)
- Food processing (oven exhaust)
- Gas engines and DG set (jacket water)
- Fuel fired furnaces (exhaust gas)
- Process heating (condensate waste)

#### Industries:

- Power plants
- Cement plants
- Pulp and paper
- Refineries
- Solar thermal
- Chemical plants
- Steel plants
- Food processing plants

# Adsorption Chiller for Power Plants

Low grade waste heat is produced in abundance and wasted in power plants.

This low grade waste heat can now be used efficiently for process cooling or air-conditioning, making optimal use of energy. The Bry-Air Adsorption Chiller can convert this heat into usable cooling.

The Bry-Air Adsorption Chiller is an advanced green technology using inert, very special Silica Gel BRYSORB 200 (adsorbent) and water (refrigerant) pair.

## Why Adsorption Chiller in Power Plant ?

- ✓ Lower your energy Cost
- ✓ Lower Co<sub>2</sub> Emissions
- ✓ Environment Friendly/Green Technology
- ✓ Possible source of getting carbon credit



## Sources of Low Grade Waste Heat in Power Plants:

- **Boiler Exhaust (150 °C-200 °C):** can be tapped by recovering waste heat to generate hot water for Adsorption Chiller
- **Boiler Condensate:** can be utilized in Adsorption chiller as heat source
- Some power plants generate hot water at 60 °C PRDS (Pressure Reducing and Desuperheating Systems) stations to cool down the steam, which can be used as heat source



Bry-Air Adsorption Chiller is available in the range  
**11 kW to 1180 kW (3.1 TR to 335 TR).**