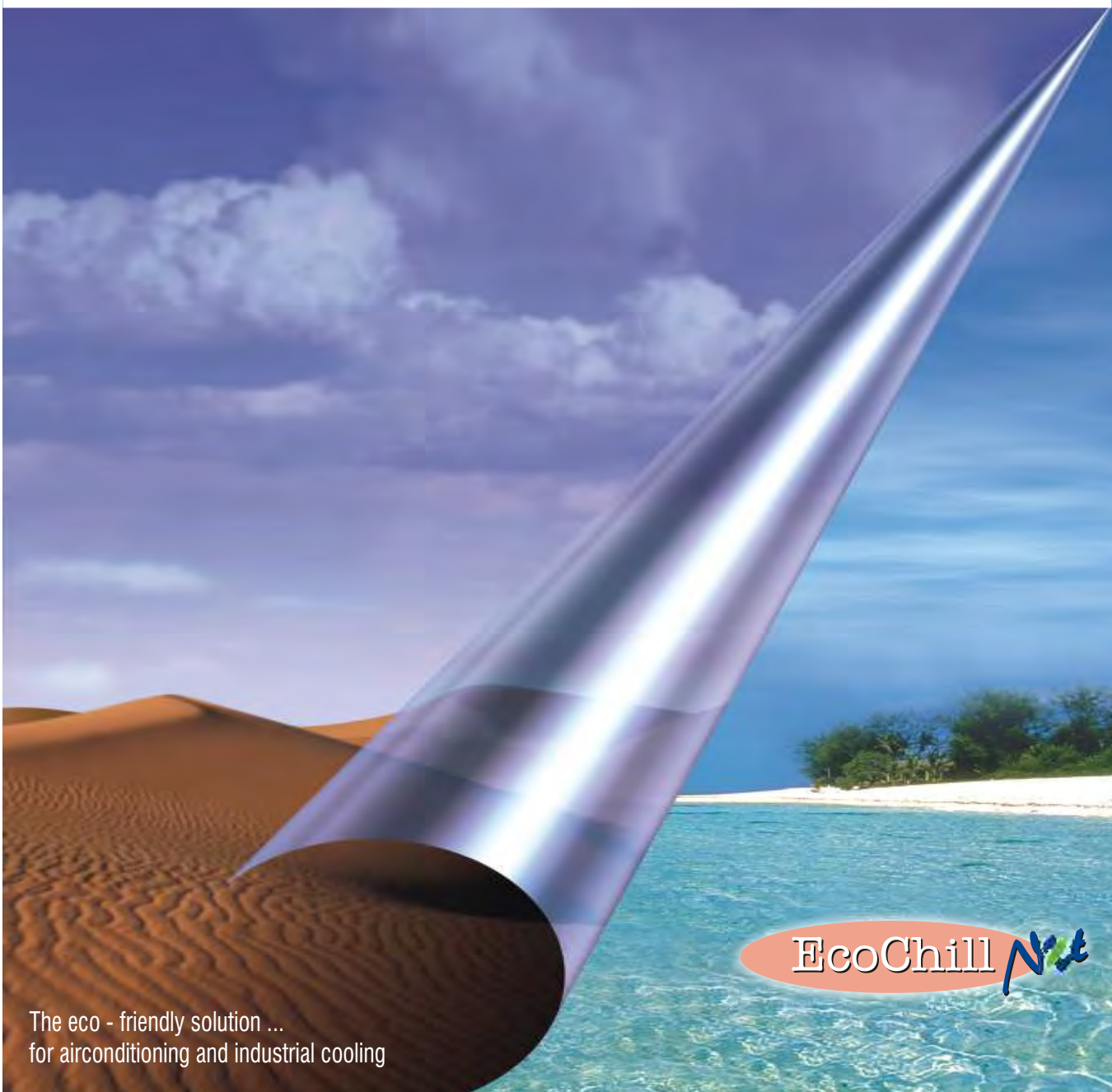


# Cooling & Heating Division



The eco - friendly solution ...  
for airconditioning and industrial cooling

EcoChill 

Fuel Driven Absorption  
Chillers-Heaters

**Improving your business  
is our business**

**T**hermax offers services, products and solutions in the field of energy and environment to industrial and commercial segments around the world. Our business expertise covers heating, cooling, waste heat recovery, captive power, water treatment & recycling, air pollution control, waste management and performance chemicals.

THERMAX brings to customers enriched experience of industrial applications, and expertise through technological partnership and strategic alliance.

Operating from its Headquarters in Pune (Western India), THERMAX has built an international sales & service network spread over South East Asia, Middle East, Africa, Russia, UK and the US. It has a full-fledged ISO 9001 : 2000 and ISO 14000 accredited manufacturing setups.

#### **Cooling & Heating Division - Cooling SBU**

Cooling unit of C&H Division offers expert solutions in Process Chilling & air conditioning for industrial as well as commercial applications. We also provide customized solution as per the requirement.

Vapor Absorption technology from THERMAX is at work for clients in Pharma, Chemical, Fertilizer, Textile, Petrochemicals & Automobile industries as well as in Hotels, Cinema halls, Shopping Complexes & Office Buildings, round the globe.

## **THERMAX - Conserving Energy Preserving The Environment**



THERMAX, a technology driven company has been in the core sectors of Energy & Environment for more than 4 decades and has defined its business objective as *“Conserving energy and preserving the environment”*. THERMAX has established itself as Numero-Uno in its field by providing comprehensive solutions to industry.

THERMAX's manufacturing capabilities are confirmed by the fact that, over the years, THERMAX has installed numerous chillers in all major countries like USA, Germany, Spain, UK, Italy, Middle East, South East Asia with the product conforming to the respective country standards like ETL, CE, TUV, DNV, ASME, etc. Today, THERMAX is doing business of vapour absorption chillers in all major countries of world. THERMAX Inc. in USA, THERMAX Europe Ltd. in UK, THERMAX do Brasil in Sao Paulo & THERMAX Hong Kong Ltd. are fully owned subsidiaries of THERMAX.

THERMAX believes in efficient and responsive services to our client and we exhibit it in our way of business, by giving most optimal and quality solutions, and to achieve customer delight. THERMAX has a worldwide network of its Sales, Service & Distribution Network offices to fulfill the needs of its valuable customers.

# ■ Technology Leadership Our Core Competency

We, in THERMAX nurture innovation and encourage development at all levels of working, which has contributed significantly in raising the performance and efficiency parameters of our technology & products. Dedicated Research and Development Group has achieved spectacular breakthroughs in absorption cooling technology over the years. Our Cogenie series of Hot Water Absorption Chillers received the prestigious “**Energy Product of the year**” Award in the UK. Our Trigenie series of Multi energy driven absorption chillers bagged the first prize in the most innovative product design category in “**Bry Air Awards for Excellence in HVAC & R 2006**”.

THERMAX engineered products have created many delighted customers in India and all over the world including markets like Europe and USA . Some of the most prestigious names in the world have chosen THERMAX Absorption Chillers to meet their cooling requirements which includes **Mercedes - Germany, Bosch - Germany, Astra Zeneca - UK , Henry Ford Museum - USA , State University of New York, BBC - UK** and the like.





## ■ Features & Benefits

The **EcoChill<sup>NEW</sup>** series represents a major advance in Absorption Chiller-Heater performance. The earlier generation of Absorption Chiller-Heater offered significant advantages over conventional compression machines, and gained a substantial presence globally. These new generation Absorption Chiller-Heaters offer even greater economies, eco-friendliness and various additional benefits further enriching and expanding their usage.



# C h i l l e r



### Capacity

**EcoChill<sup>NEW</sup>** are available in the range of 75 - 1150 Nominal USRT ( 265 kW - 4025 kW ), and can achieve chilled water temperature upto 3.5 °C (38.3°F).

### Multi - fuel Capability

**EcoChill<sup>NEW</sup>** can use various type of liquid and gaseous fuels like Light Oil, SKO (Superior Kerosene Oil), Natural gas, CNG, LPG and other gaseous fuels.

### Sturdy and Reliable Generator Design

**EcoChill<sup>NEW</sup>** have rugged generator, designed to handle gaseous fuels as well as light liquid fuels.

### Monobloc Burners

**EcoChill<sup>NEW</sup>** use monobloc burners of Modulating type. Gas burners are provided with standard gas train.

### Auto De-crystallisation

**EcoChill<sup>NEW</sup>** are provided with the unique auto de-crystallization circuit to eliminate crystallisation.

### On-Line Purging

The factory mounted and tested purging unit consists of an electrical motor driven purge pump, storage tank, necessary piping and valves. Any non-condensable gas generated in the Chiller-Heater during operation, is purged continuously into the storage tank, thereby maintaining low vacuum in the shell.

### Crossover Piping

Crossover pipe is factory installed avoiding the work at site or at rigger's yard and hence maintaining high quality of work.

## Gravity Feed System

EcoChill<sup>™</sup> use gravity feed, non-pressurised super-spraying system, for spraying refrigerant and absorbent. The use of nozzles is avoided as they have problems of clogging and wear & tear.

## Side Exit Nozzles

The absorber, evaporator and condenser headers are provided with side nozzles for ease of maintenance and lower down-time. The absorber and condenser headers are hinged type, for easy access to the tube bundle and eliminates need for heavy lifting arrangements.

## PLC based Control Panel

EcoChill<sup>™</sup> are provided with PLC based control panel with 4 line display, user friendly interface and data-logging system.

## Isolation Valves for Pumps

Isolation valves provided on the pumps, facilitate on-line pump maintenance, without breaking the vacuum in the Thermax Absorption Chiller-Heater.

## Corrosion Inhibitors

Thermax uses the new generation corrosion inhibitor, Lithium Molybdate, which is more effective than conventionally used Lithium Nitrate and Lithium Chromate.



H e a t e r

## Optional Features & Benefits

- **VFD Control for excellent Part Load Performance**  
During part load conditions, modulation of the absorbent pump by VFD control, allows optimum flow of the absorbent to the high temperature generator. This in turn optimises the input energy, resulting in superior part load performance.
- **Online standby Canned Motor Pumps**  
When specified, Thermax can offer on-line standby solution and refrigerant pumps.
- **On-line bearing monitoring**  
As a special option Thermax can provide a TRG meter for on-line bearing monitoring of the pumps. By continuously measuring the bearing clearance, through eddy currents, the TRG reading proactively lets the user know the condition of the bearing at any given instant.
- **Special tube material for Evaporator / Absorber / Condenser**  
The selection of tube material is done purely on the basis of the water quality available at the jobsite. Accordingly, Thermax can offer following special tube materials:
  - CuNi (95:5) • CuNi (90:10) • CuNi (70:30) • SS - 316 L • Titanium
- **Dual Firing Burners**  
For flexibility in use of use of fuel, Thermax can provide burners which can fire either on Gas or Oil.
- **Low NO<sub>x</sub> Burner**  
As a special feature, Thermax can provide Low NO<sub>x</sub> burner.  
Standard 90 ppm (can also provide 20 ppm and lower).
- **Multi - sectional Shipment Arrangement**  
For convenience of shipping and rigging, the Absorption Chiller-Heaters can be shipped in two or more sections depending upon the site requirements. This is particularly convenient for retrofit jobs.
- **Factory Performance Test**  
After assembly, Absorption Chiller-Heater can be individually tested for performance at the conditions specified by the customer.  
During Performance Test, readings are taken for various parameters like (Testing is done on oil):
  - Chilled water inlet / outlet temperatures • Capacity • Oil Consumption • Cooling water inlet / outlet temperatures

# ■ Controls

## ➔ Improved Reliability

Incorporates a state-of-the-art programmable logic controller, which incredibly enhances the flexibility and reliability of the machine.

## ➔ Elaborate Diagnostic Facility

Information such as Chiller-Heater trip causing sensor error, hardware related faults, pump errors, etc. are recorded and displayed. These help in faster and easier trouble shooting and routine maintenance.

## ➔ Easier Operation and Maintenance

Unique display screen, feather touch key pad and the software constitute a user friendly operator interface. The operator can easily control functions with self explanatory messages displayed automatically on the screen. Any abnormality is communicated through an audio visual alarm making it easier to initiate necessary action.

## ➔ Data Acquisition and Logging with Adjustable Sampling Time

## ➔ Also available as optional feature



### (Remote Access for Chillers)

Modem Connectivity

PC Connectivity

**DCS / BAS / BMS Connectivity**



# ■ Safeties

## Antifreeze Protection

- L-cut refrigerant pump
- Antifreeze thermostat
- Chilled water flow switch
- Chilled water DP switch

## Crystallisation Free

- HT Generator temperature cutout
- Cooling water low temperature cutout

## Pump Cavitation Safety

- Absorbent pump level relay
- Refrigerant pump level relay

## Alarm Cycle

- Dilution cycle alarm
- Total shutdown alarm

## Motor Protection

- Absorbent pump overload relay
- Refrigerant pump overload relay
- Purge pump overload relay



# World Class Technology for World Class People

Our customer list spans most of the major industry verticals, each with its specific requirements and operating parameters.



## Hotels

Sheraton Towers, Brazil  
P T Bali Nirwana, Indonesia  
Marriot, USA



## Commercial Centers

BBC Studio, UK  
Henry Ford Museum, USA  
Bicycle Casino, USA  
33<sup>rd</sup> Precinct NYPD, USA



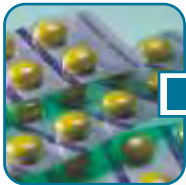
## Educational Institutes

SUNY, Albany, USA  
Monash University, Australia  
Roosevelt Magnet School, USA



## Super Market

Mundial Super Market, Brazil  
Prezuni Super Market, Brazil  
Raleys Deptt. Stores, USA



## Pharmaceuticals

Astra Zeneca, U.K.  
Pfizer India Ltd.  
Boehringer, Germany  
Jhonson & Jhonson, USA



## Medical Centers

Royal Free Hospital, UK  
VA Medical Center, USA  
Gemilli Hospital, Italy



## Refineries & Petrochemicals

Exxon Mobil, Saudi Arabia  
Saudi Formaldehyde and Chemicals, Saudi Arabia  
Reliance Industries Ltd., India  
Gas Authority of India Ltd.



## Chemicals

Asian Paints, India  
Eka Chemicals, Brazil  
Lyondell Equistar Chemicals, USA



## Electronics

Bosch, Germany  
Moser Baer, India  
Temic Heilbronn, Germany



## Dairy & Confectionary

Nestle, Philippines  
Cadbury, Nigeria  
Chitale Dairy, India



## Engineering

Daimler Chrysler, Germany  
Larsen & Tubro, India  
SKF Bearing, India  
Medway Plastics, USA



## Steel

United Gulf Steel, U.A.E.  
Bhilai Steel Plant, India  
Rourkela Steel Plant, India

## ■ Installations

### Minds at work

In 2000, when the State University of New York (SUNY) at Albany was considering replacing its 25 year old single stage Absorber, we approached them with a very efficient solution. Our two stage high temperature hot water fired chillers enabled SUNY to now generate the same chilling capacity 1500 TR (5274 kW) with half the heat input. This means a straight saving of close to 50% in the cost of chilled water. And of course, the new generation Two stage Absorbers do not compromise on reliability, as compared to a single stage. 4 levels of safeties against crystallisation make the units ideal for 24 x 7 operating condition.



### Silence Please... Hospital ahead

Reliability of equipment is always the first criteria, when it comes to selecting an equipment for Hospitals. Air-conditioning is mandatory and a continuous requirement in some parts of the hospital. In 2000, these factors played an important role in the decision making at the Veterans Admin. (VA) medical facility at Rhode Island. Three 180 TR (633 kW) two stage steam Absorbers were installed for the critical application at this facility. Although the plant room is one level below ground, rigging was made easy by the conveniently sized modules in which the chillers were shipped.



### Capacity Expansion without extra power demand

Torrent Pharma, a large integrated pharmaceutical company in India, after detailed evaluation of both electrical and vapour absorption technologies, adopted Thermax Absorption Chiller technology. 770 NTR (2700 kW) X 3 Nos. Prochill Absorption Chiller were installed considering the minimum power requirement and lesser operating cost of these machines. To maximise the benefits Thermax also introduced VFDs in the system. The power thus saved was utilised by Torrent towards capacity expansion.





### Safety and Security

NYPD's 33rd Precinct : When the City of New York built this new Police Precinct uptown Manhattan, Two Gas fired Absorption Chillers, 150 TR (527 kW)each were a natural choice giver the low summer time gas cost as compared to the high electric tariff. After seeing through two summers, NYPD is pleased with the saving in running cost and also the ease of maintenance and operation.



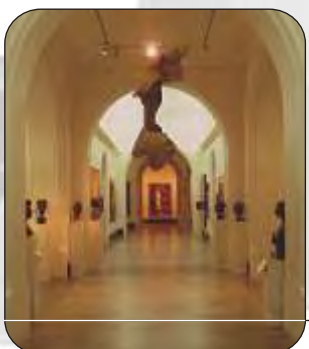
### The Power of Knowledge

Roosevelt Magnet School, MA being very concerned about maintenance and down time of their chillers, selected two 180 TR (633 kW) Gas fired Absorption Chillers for their campus in 1999. In addition to easier and pre-planned maintenance schedules, they are also seeing the benefits in running cost reduction.



### Beating the heat at BBC

When the world's premium television center, BBC, launched a survey to reduce its energy cost and the environmental degradation, they chose to go in for a Combined Heating, Power and Cooling System. After a thorough appraisal of product performance, compatibility with specifications, delivery time and back up services, BBC along with their consultants unanimously decided to award the contract to Thermax.



### The stroke of a Genius

The cold and wet climate of London requires the heating of air to keep temperatures up. The National Portrait Gallery at Trafalgar Square found that their boilers could meet both heating and cooling demands. They opted for a 125 TR (440 kW) Thermax Absorption Chiller, which uses steam from the boilers and are also environment friendly as they are CFC free. Today, Thermax Chillers cool the most famous faces housed in the Gallery.




## Customer Care

Thermax Absorption Cooling Division has a global network to ensure quick response to customers. The network consists of over 100 highly trained Absorption Chillers service personnel. With a cumulative service experience of close to 2500 Absorption Chillers operating for more than 15 years in over 40 countries, Thermax service personnel are equipped to deliver the right solution to the users. Thermax has developed specific service modules for different types of users depending on their usage pattern, conforming to our proactive approach.



### For the benefit of its customers

Thermax offers various value added services like :

-  (Remote Access for Chillers)
- Preventive maintenance contract
- Operations & Manning (O & M)
- Localised customer training programs.

## Global Quality Standards



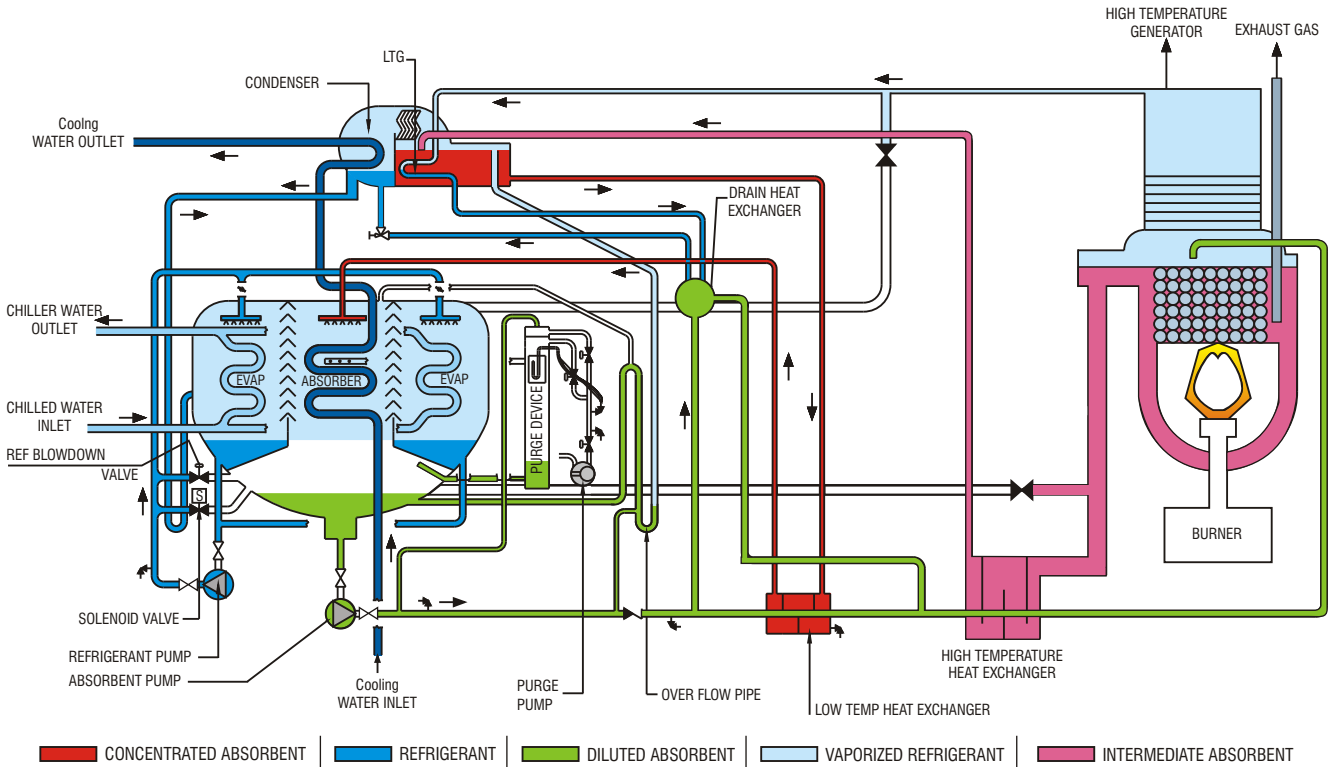
Thermax Absorption Chillers are exported to more than 40 countries worldwide. Our quality standards are confirmed by the fact that over the years we have installed many chillers in USA, Germany, UK, Spain, Italy, Middle East and South East Asia, with the equipments conforming to the respective country standards — ISO 9001:2000, ISO 14001, ETL, CE, PED, TUV, DNV, ASME to name a few. They even conform to the Kyoto Protocol and are in absolute tandem with Clean Development Mechanisms Code (CDM) which is becoming the order of times.

A critical parameter in our Quality assurance processes is testing procedures to ensure vacuum tightness. The tests include :

- Nitrogen test at 18.5 psig (1.3 kg/cm<sup>2</sup>g) pressure on the shell side.
- Helium Spray test.
- Helium Shroud test.

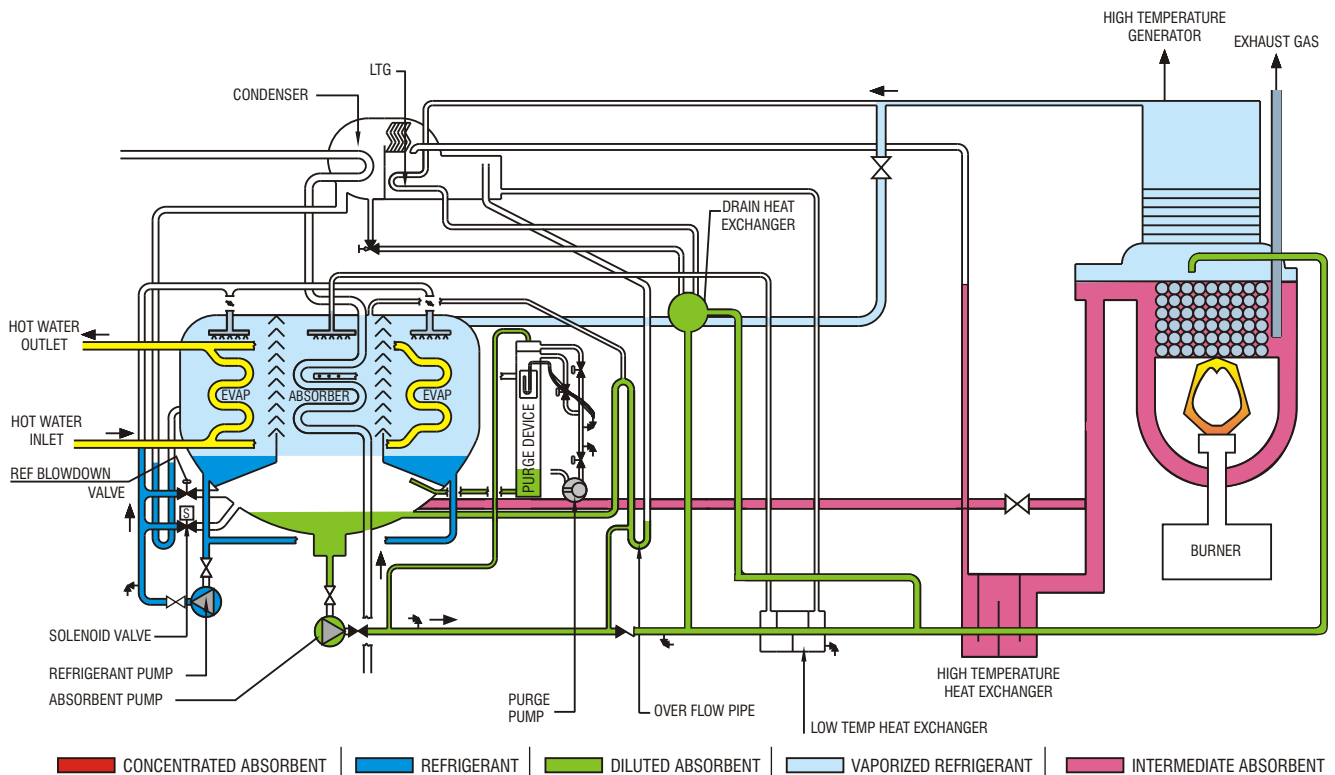
# Cooling Cycle

Double Effect Direct Fired Chiller-Heater



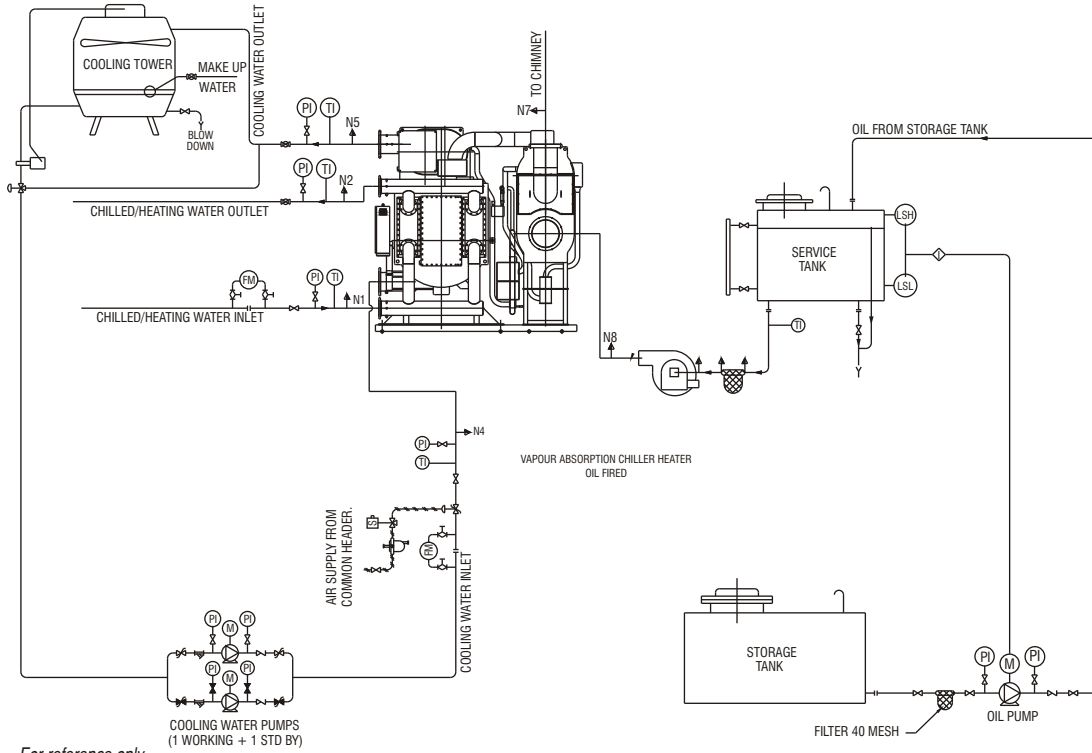
# Heating Cycle

Double Effect Direct Fired Chiller-Heater



## TECHNICAL SYSTEM P & I DIAGRAM

Light Oil Fired



For reference only

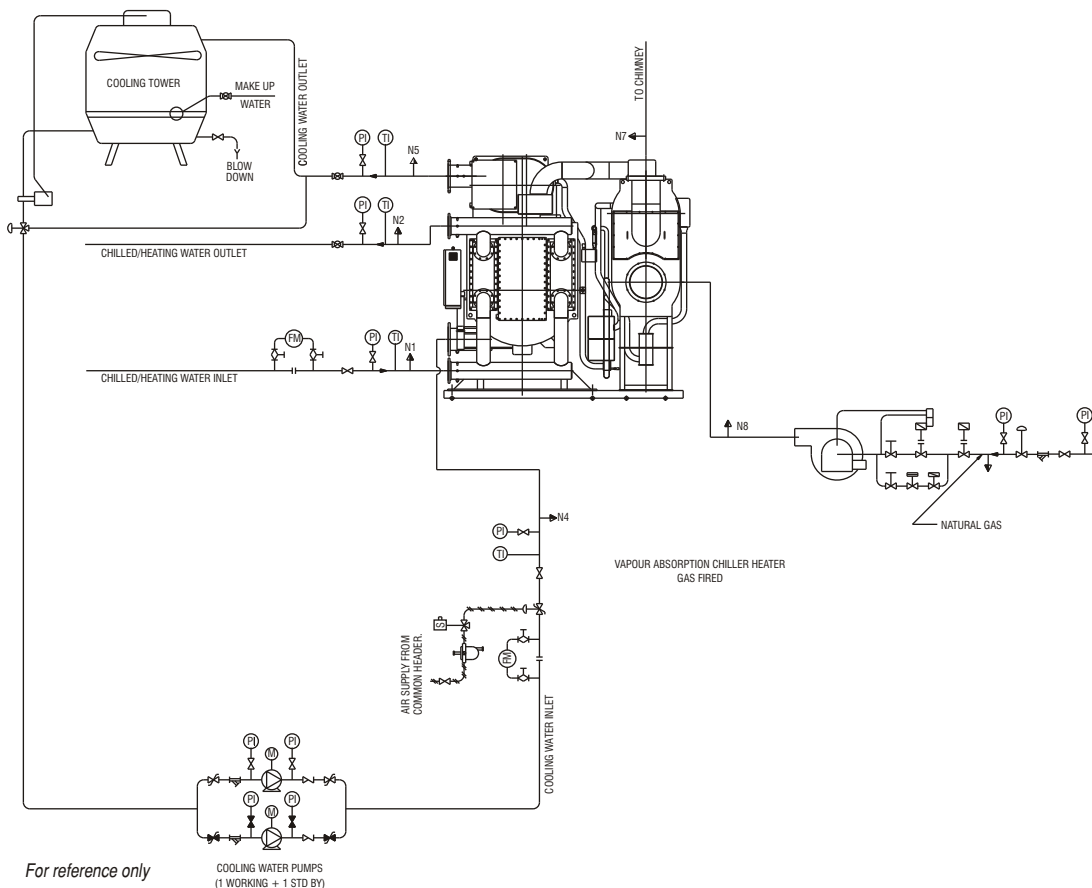
### LEGENDS

- GATE VALVE (OPEN)
- GATE VALVE (CLOSE)
- GLOBE VALVE (OPEN)
- GLOBE VALVE (CLOSE)
- NON RETURN VALVE
- COCK
- GAS REGULATOR
- THREE WAY CONTROL VALVE
- BUTTERFLY VALVE (OPEN)
- BUTTERFLY VALVE (CLOSE)
- 1/2" STRAINER
- MANUAL OIL VALVE
- GOVERNOR
- SOLENOID VALVE
- FAST ACTING VALVE
- MONO BLOCK BURNER
- FILTER 40 MECH
- ELECTRIC HEATER
- THERMOSTAT
- AIR FILTER REGULATOR
- CENTRIFUGAL PUMP
- MOTOR
- PNEUMATIC LINE

P - PRESSURE	A - ALARM
T - TEMPERATURE	L - LEVEL
F - FLOW	M - HIGH
I - INDICATOR	L - LOW
R - RECORDER	S - SWITCH
C - CONTROLLER	

CLIENT SCOPE    THERMAX SCOPE

## Gas Fired



For reference only

## TECHNICAL SPECIFICATION

Model Number	Units	GD20A CX	GD20B CX	GD20C CX	GD20D CX	GD30A CX	GD30B CX	GD30C CX	GD40A CX	GD40B CX	
		OD20A CX	OD20B CX	OD20C CX	OD20D CX	OD30A CX	OD30B CX	OD30C CX	OD40A CX	OD40B CX	
Cooling Capacity	TR	111	130	162	192	241	272	321	360	408	
Chilled Water Circuit	Flow rate	m <sup>3</sup> /hr	61.0	71.5	89.1	105.6	132.5	149.6	176.5	197.9	224.3
	No. of passes (Evaporator)	#	3	3	2	2	2	2	2	2	2
	Friction loss	mWC	4.8	5.7	6.3	8.0	5.9	6.7	10.0	7.1	7.5
	Connection Diameter	mmNB	100	100	100	100	150	150	150	150	150
Cooling Water Circuit	Flow rate	m <sup>3</sup> /hr	111	130	162	192	241	272	321	360	408
	Outlet Temp	°C	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6
	No. of passes (Absorber)	#	3	3	2	2	2	2	2	2	2
	No. of passes (Condensor)	#	1	1	1	1	1	1	1	1	1
	Friction loss	mWC	3.9	3.8	4.6	4.7	4.5	4.6	7.1	6.6	6.7
Fuel Circuit	Gas Consumption	Nm <sup>3</sup> /hr	29.7	34.4	43.6	51.1	64	72	85	96	108
	Oil Consumption	kg/hr	26.2	30.3	38.4	45.0	56.4	63.4	74.8	84.5	95.1
Overall Dimension	Length	mm	3200	3200	4000	4000	4140	4140	4750	4870	4870
	Width	mm	2600	2600	2600	2600	2850	2850	2950	3200	3200
	Height	mm	2660	2660	2660	2660	2850	2850	2850	3050	3050
Max. Shipping Weight	x 1000 kg	5.9	6.2	7.2	7.41	9.8	10.1	11.35	13.5	14.0	
Operating Weight	x 1000 kg	6.5	6.7	7.8	8.2	10.8	11.2	12.5	15.0	15.6	
Clearance for Tube Removal	mm	2400	2400	3755	3755	3815	3815	4100	4100	4100	
Electric Supply	Absorbent Pump Motor Rating	kW(A)	1.1 (3.4)	1.1 (3.4)	2.2 (6)	2.2 (6)	2.2 (6)	2.2 (6)	2.2 (6)	3(8)	3(8)
	Refrigerant Pump Motor Rating	kW(A)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)
	Purge Pump Motor Rating	kW(A)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)
	Burner	kW(A)	0.75 (1.7)	0.75 (1.7)	0.75 (1.7)	0.75 (1.7)	1.1 (2.5)	1.1 (2.5)	3 (6.1)	3 (6.1)	3 (6.1)
	Burner Type	HI / LOW (MODULATING BURNER AVAILABLE ON REQUEST)									
	Total Electric Input	kVA	7.4	7.4	9.3	9.3	9.8	9.8	12.40	13.8	13.8
Power Supply	415 V(±10%), 50 Hz(±5%), 3 Phase+N										
Exhaust Gas Duct Size	mmNB	200	200	200	200	250	250	250	300	300	

Model Number	Units	GD 40C CX	GD 50A CX	GD 50B CX	GD 60A CX	GD 60B CX	GD 60C CX	GD 60D CX	GD 70A CX	GD 70B CX	
		OD 40C CX	OD 50A CX	OD 50B CX	OD 60A CX	OD 60B CX	OD 60C CX	OD 60D CX	OD 70A CX	OD 70B CX	
Cooling Capacity	TR	452	505	560	636	709	802	890	993	1107	
Chilled Water Circuit	Flow rate	m <sup>3</sup> /hr	248.5	277.7	307.9	349.7	389.8	441.0	489.3	546.0	608.6
	No. of passes (Evaporator)	#	2	2	2	3	3	2	2	2	2
	Friction loss	mWC	8.3	7.3	7.7	6.8	7.3	4.8	5.2	5.1	5.6
	Connection Diameter	mmNB	150	200	200	250	250	250	250	250	250
Cooling Water Circuit	Flow rate	m <sup>3</sup> /hr	452	505	560	636	709	802	890	993	1107
	Outlet Temp	°C	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6	34.6
	No. of passes (Absorber)	#	2	2	2	2	2	1	1	2	1
	No. of passes (Condensor)	#	1	1	1	1	1	1	1	1	1
	Friction loss	mWC	7.0	7.2	7.5	7.7	7.9	5.4	5.7	12.8	6.0
Fuel Circuit	Gas Consumption	Nm <sup>3</sup> /hr	120	134	149	168	187	213	236	262	292
	Oil Consumption	kg/hr	105.7	118.0	131.2	147.9	164.6	187.5	207.8	230.7	257.1
Overall Dimension	Length	mm	4870	5100	5100	6700	6700	7900	7900	7900	7900
	Width	mm	3200	3450	3450	3700	3700	3900	3900	4100	4100
	Height	mm	3050	3300	3300	3400	3400	3400	3400	4000	4000
Max. Shipping Weight	x 1000 kg	14.6	17.5	18.0	26.5	27.2	31.5	33.1	40.5	42.0	
Operating Weight	x 1000 kg	16.3	19.3	20.0	29.6	30.5	34.8	36.9	45.3	46.9	
Clearance for Tube Removal	mm	4100	4100	4100	5320	5320	6560	6560	6560	6560	
Electric Supply	Absorbent Pump Motor Rating	kW(A)	3(8)	3.7 (11)	3.7 (11)	5.5 (14)	5.5 (14)	5.5 (14)	5.5 (14)	6.6 (17)	6.6 (17)
	Refrigerant Pump Motor Rating	kW(A)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	0.3 (1.4)	1.5 (5)	1.5 (5)	1.5 (5)	1.5 (5)
	Purge Pump Motor Rating	kW(A)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)	0.75 (1.9)
	Burner	kW(A)	3 (6.1)	3.7 (7.4)	3.7 (7.4)	4 (8)	4 (8)	7.5 (14.4)	7.5 (14.4)	11 (21.6)	11 (21.6)
	Burner Type	HI / LOW (MODULATING BURNER AVAILABLE ON REQUEST)									
	Total Electric Input	kVA	13.8	16.9	16.9	19.4	19.4	26.5	26.5	33.8	33.8
Power Supply	415 V(±10%), 50 Hz(±5%), 3 Phase+N										
Exhaust Gas Duct Size	mmNB	300	400	400	400	400	450	450	500	500	

**NOMENCLATURE** - G/O=Gas / Oil • D=Double Effect • 20, 30...=Frame Size • A, B, C...=Model No. • C=Chiller-Heater • X=High CoP • S=Side Arm Heat Exchanger.

- Cooling water inlet temperature = 29.4°C • Rated current for Purge pump = 1.9 A and Control panel = 1.5 A • Minimum Cooling water inlet temperature is 10°C
- Maximum Allowable pressure in chilled / cooling water system = 8 kg/cm<sup>2</sup>(g) • G.C.V. for Gas = 9650 kcal/Nm<sup>3</sup> • G.C.V. for Oil = 10960 kcal/kg
- All Nozzle connections to suit ASME B16.5 Class 150 • Ambient condition shall be between 5 to 45°C • Technical specification is based on ARI 560

## Applications

- ▶ Chemicals
- ▶ Commercial Centers
- ▶ Educational Institutes
- ▶ Electronics
- ▶ Hospitals
- ▶ Aquariums
- ▶ Office Buildings
- ▶ Casinos
- ▶ Plastics
- ▶ Bottling Plants
- ▶ Wineries
- ▶ Hi-Tech Insulation manufacturing
- ▶ Furniture Manufacturing
- ▶ Hotels
- ▶ Medical Centers
- ▶ Paper & Pulp
- ▶ Petrochemicals
- ▶ Pharmaceuticals
- ▶ Textiles
- ▶ Super Markets

## Worldwide Network



Distributor / Agent

In view of our constant endeavour to improve the quality of products, we reserve the right to amend any product details & contents of this literature without prior notice.



### THERMAX

Sustainable Solutions in  
Energy & Environment

#### Cooling & Heating Division

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## Thermax Business Portfolio

Absorption Cooling

Air Pollution Control

Boilers & Heaters

Captive Power

Chemicals

Water & Waste Solutions