

GREEN
IS THE FUTURE



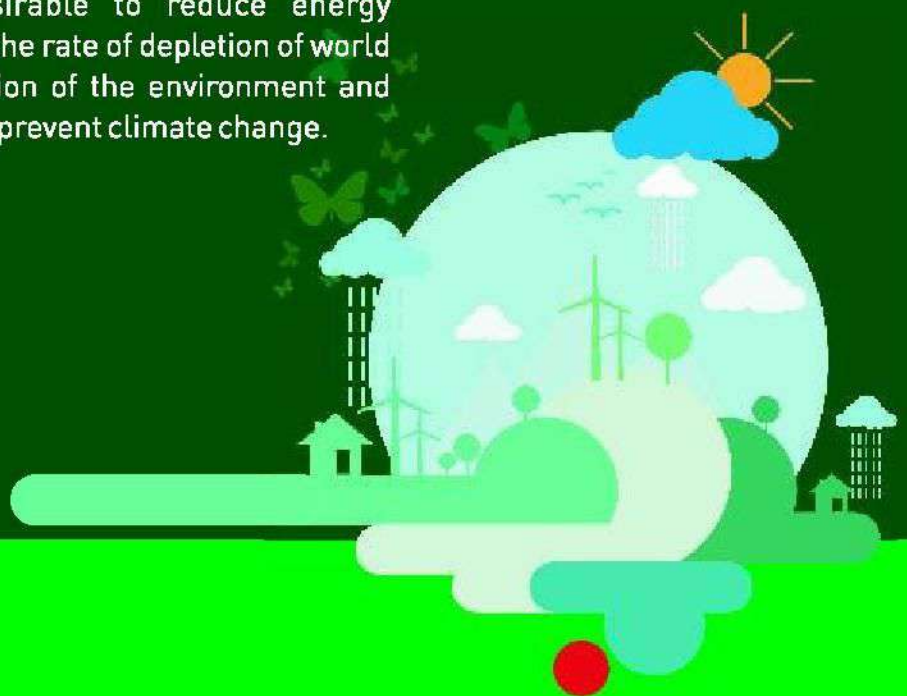


GALAXY ENERGY SOLUTIONS
Simply Green

THE FUTURE

GREEN, a much needed requirement today, is not just a color, it is the reason behind our existence. It is the color of Balance in the World, Harmony in Ecological System and Sustainable Growth. It is the symbol of LIFE today and of the future. The future of our environment, the future of energy requirements & consumption, the future of our continued development and most importantly the future of our children.

Globally, buildings are responsible for approximately 40% of the total world annual energy consumption. Most of this energy is for the provision of lighting, heating, cooling, and air-conditioning. Increasing awareness of the environmental impact of CO₂ & NO_x emissions and CFCs triggered a renewed interest in environment friendly cooling, and heating technologies. It was therefore considered desirable to reduce energy consumption and decrease the rate of depletion of world energy reserves and pollution of the environment and take necessary measures to prevent climate change.



GALAXY ENERGY SOLUTIONS

GALAXY GROUP has always been committed and worked towards bringing the best of the world to serve the people with responsible and sustainable solutions. Galaxy Group started its operations during the golden era of India. The journey so far has only strengthened our belief in the Indian growth story and we are determined to add and facilitate its further growth.

We understand that for any true growth in this day needs to be based on the fundamentals of sustainability. Green is the Future! And we have already taken the initiative to ensure a better and greener future for our children. We envisage bringing many more advanced and futuristic environment friendly solutions in the following years.



HYDROMX[®]

Energy Saving Solution

**Patented Energy Saving Heat Transfer Nanofluid
Is Now Here To Serve The World**

HYDROMX is the ONLY energy saving product in the global market that can reduce Heating/Cooling Bills up to 20%-35%.

The revolutionary HYDROMX is an organic solution which works in 50:50 ratio with water in heating/cooling system. Not only does it reduce carbon emissions and energy bills, it also prolongs the life of the boiler and protects 100% against frozen pipes.

HYDROMX has already been introduced into the USA, Europe, UK and is now available in India because of Galaxy Energy Solutions. It is the only energy saving fluid that is backed by the European Bank for Reconstruction and Development (EBRD). Developed in Turkey, the HYDROMX and NANO-TECHNOLOGY has the potential to reduce India's carbon footprint and help achieve sustainable industrial development. With large sum of money spent annually in India on HVAC alone. HYDROMX is the answer to many economic and environmental issues.



INVENTED IN EUROPE



Programme Co-funded By The European Union

HYDROMX is in active use in countries like



**Now It Is Brought To India By
GALAXY ENERGY SOLUTIONS**

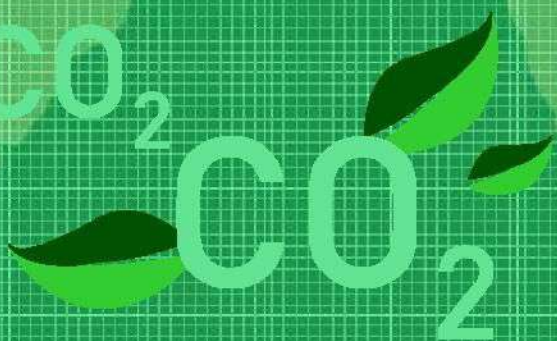


NO_x

WHAT IS HYDROMX ?

HYDROMX is a revolutionary heat transfer fluid that contains stably suspended NANO-PARTICLES to increase the speed of heat transfer.

IT IS THE ONLY PATENTED ENERGY SAVING HEAT TRANSFER NANOFLUID.



LESSER ENERGY CONSUMPTION

REDUCED CARBON EMISSION

ENVIRONMENT FRIENDLY

RECYCLABLE





KEY HIGHLIGHTS

PATENT

Patented across 171 countries

INDIA

Galaxy Energy Solutions is the exclusive distributor across India

SAVINGS

up to 35% v/s Water or Glycol

WARRANTY

Manufacturer's warranty: 8 years

Life expectancy: 15-20 years

ROI

Payback period 2-3 years

BENEFITS

Reduced Carbon Emission

100% Freeze Protection

100% Tax Deductibility

100% Insured

SPECIFICATIONS

pH Value: 8.2 - 8.6

Freezing Point: -61°C

Boiling Point: 118°C

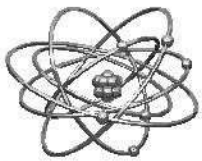
DENSITY:
Less denser than Ethylene Glycol.
Between 20°C and 80°C,
6% denser than water

VISCOSITY:
Less viscous than Ethylene Glycol.

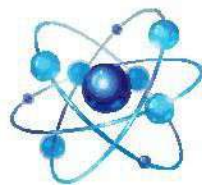
How It Works ?

How Does HYDROMX Work?

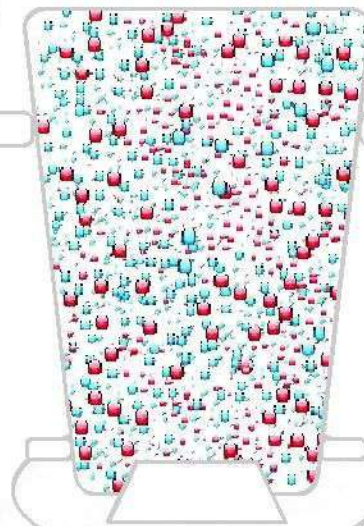
HYDROMX uses NANO-PARTICLES to increase the speed of energy transfer, by cooling/heating up the fluid and transferring energy in a shorter amount of time, thereby requiring significantly less energy.



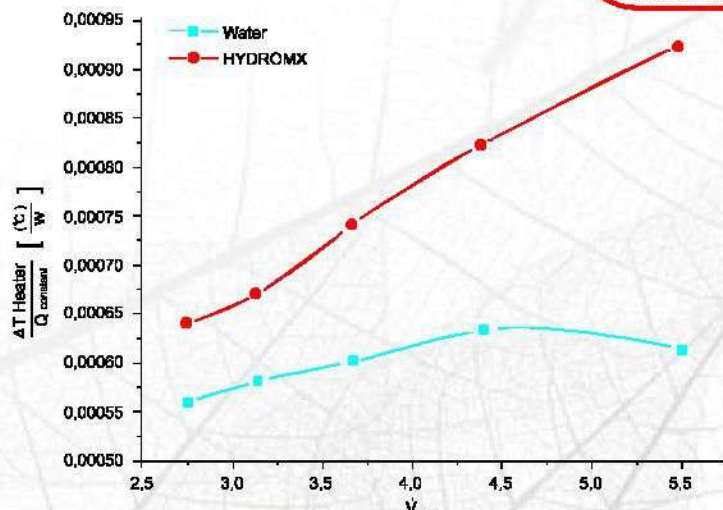
Atomic Structure of Metal
is closely knitted
Good Conductor of Heat



Atomic Structure of water
is Less Viscous
Not as good as metal in
Heat Conduction



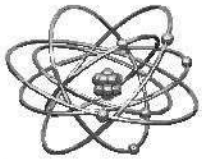
HYDROMX is the best of both (Metal & Water),
as the HYDROMX particles help water gain
metallic properties and results in more efficient
heat transfer.



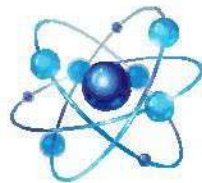
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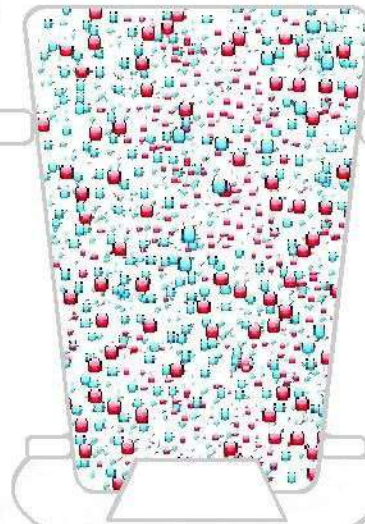
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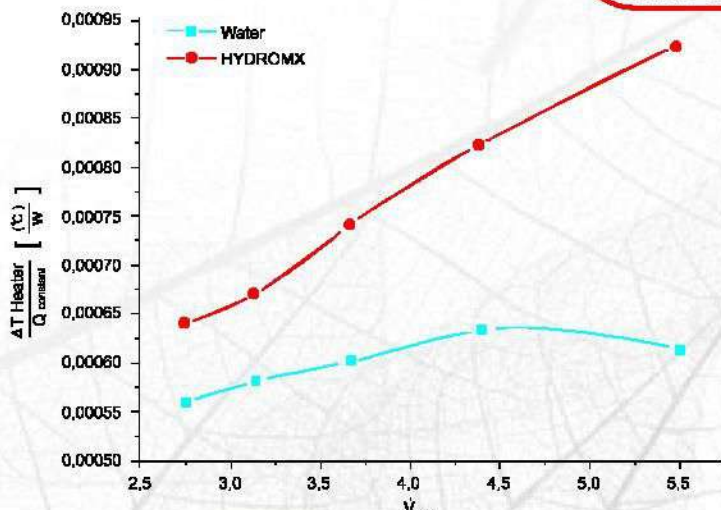
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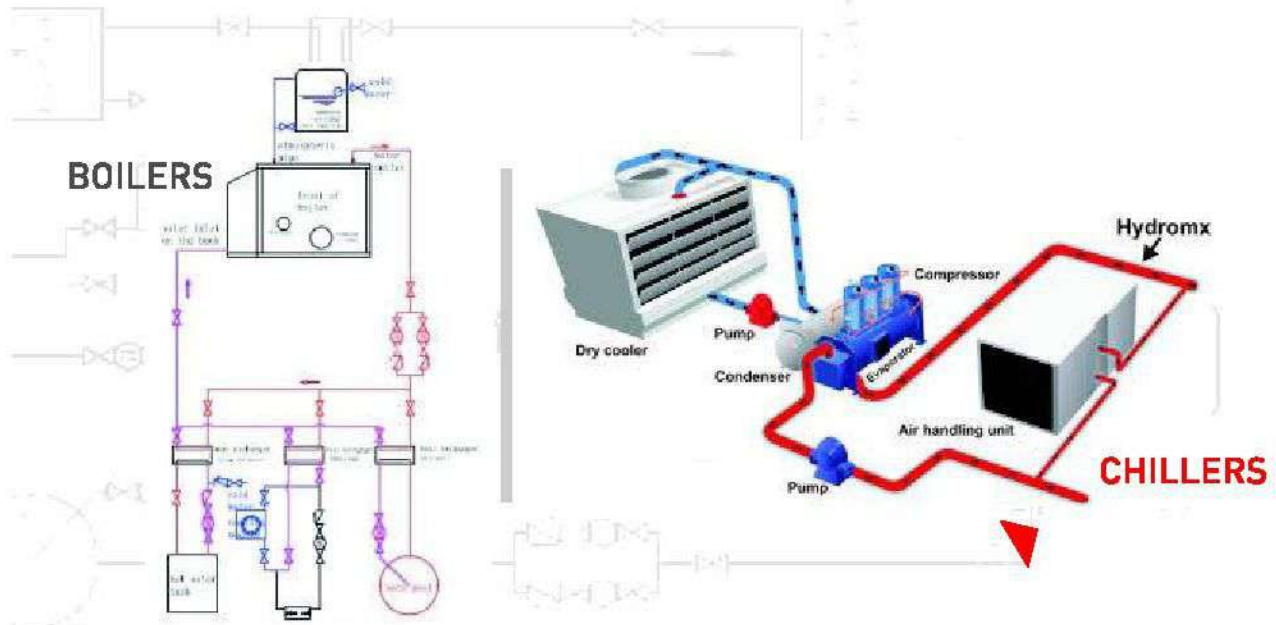
One **Solution** - Many Solutions

Features	Water	Chemical Inhibitor	Antifreeze	
Energy Saving Up To 35%	X	X	X	✓
System Protection	X	✓	X	✓
Freezing Protection	X	X	✓	✓
Bacteria, Corrosion, Calcification	X	✓	X	✓



APPLICATIONS

SCHEMATIC DIAGRAMS FOR BOILERS & CHILLERS



HYDROMX is best suited for closed-loop hydronic heating and cooling systems where efficiency increases due to diminishing run-time of associated equipment. Hence drastic increase in equipment life is achieved along with lesser maintenance cost.

HYDORMX when used with water in the ratio of 50:50, enhances the capacity of water to transfer heat. Thus making it more efficient in terms of energy consumption.



insured.™



HYDROMX IS SECURED BY
second largest insurance company in the world.

USD 10 MILLION COVERAGE

NO CLAIMS UNTIL NOW SINCE THE 1ST CLIENT

ADDITIONAL COVERAGE IF NEEDED



Hydromx® Contributes to LEED

LEED BD+C: New Construction v4 - LEED v4

Optimize Energy Performance

Possible 18 points

Part: Optimize Energy Performance

Hydromx® contributes to option 1 of the LEED program. Contribution points could be calculated by the ratio of energy consumption for acclimation to the energy consumption of the whole building.

Option 1. Whole-building energy simulation

See the part : <http://goo.gl/VU9u2u>

LEED BD+C: New Construction v4 - LEED v4

Building Life-Cycle Impact Reduction

Possible 5 points

Hydromx® contributes 3 points out of available 5 points in this topic through option 4..

Option 4. Whole-building life-cycle assessment (3 points)

Hydromx® reduces more than 20% to not only the topics mentioned, but all the relevant topics with respect to conventional heat transfer fluid.

See the part : <http://goo.gl/6CRADS>

LEED BD+C: New Construction v4 - LEED v4

Building product disclosure and optimization Environmental product declaration

Possible 2 points

Hydromx® also has environmental product declaration. Hence, Hydromx contributes to each part with 2 points.

Option 1. Environmental product declaration (EPD) (1 point)

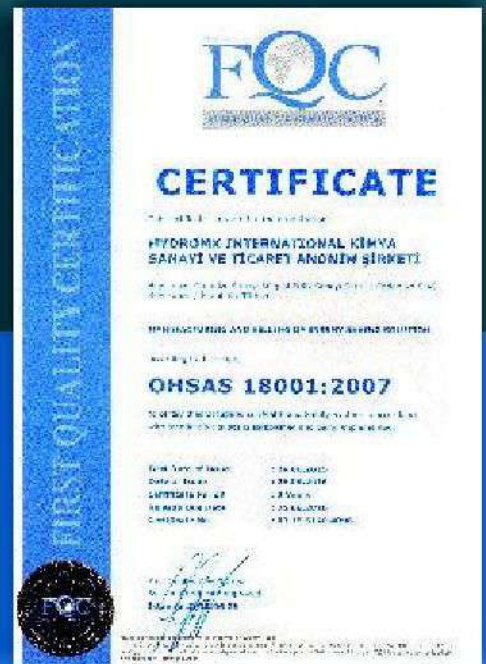
Option 2. Multi-attribute optimization (1 point)

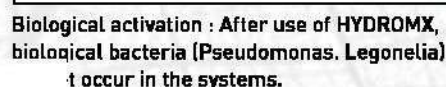
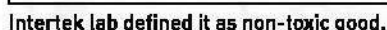
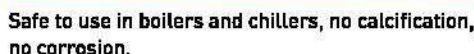
See the part : <http://goo.gl/KgUO2e>

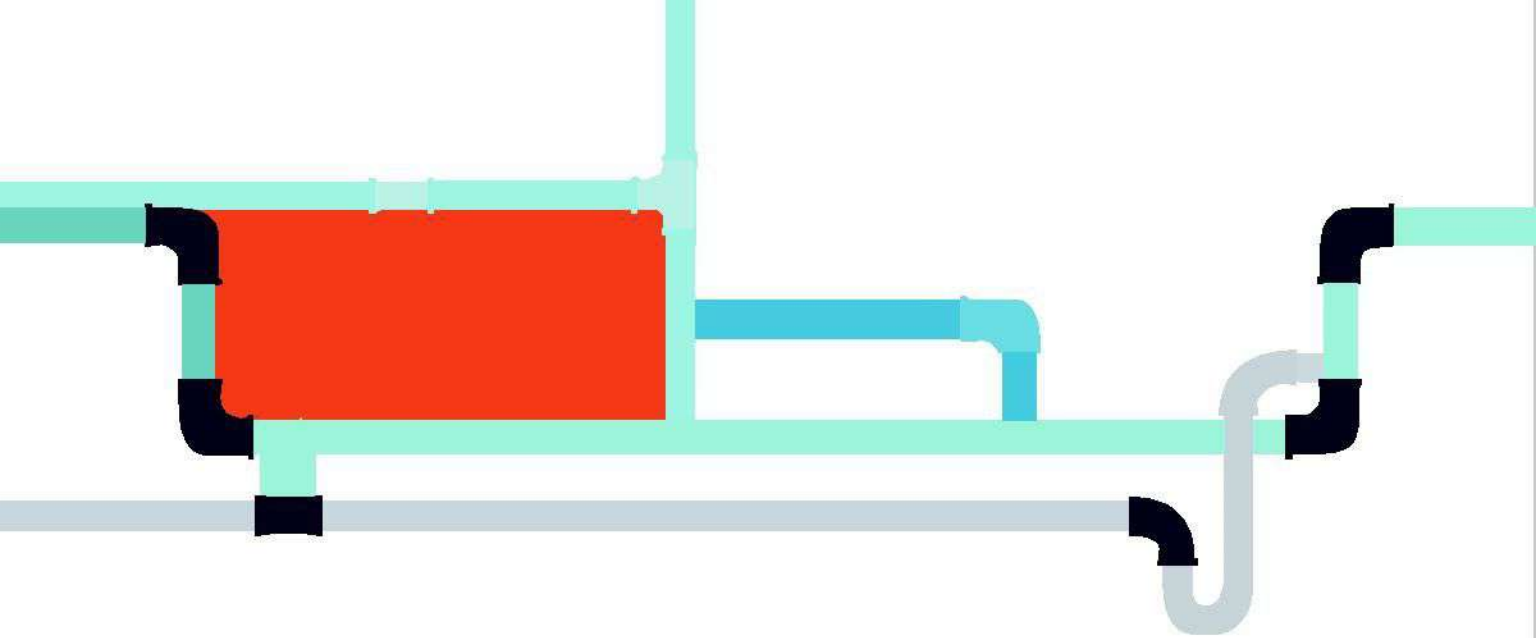
Environmental Effect	Hydromx reduces the parameters with respect to Water	Hydromx reduces the parameters with respect to Ethylene glycol - Water (30/70)
Global warming potential (greenhouse gases), in CO2e	%25	%37
Depletion of the stratospheric ozone layer, in kg CFC-11	%25	%35
Acidification of land and water sources, in moles in kg SO2	%25	%35
Eutrophication, in kg phosphate	%23	%40
Formation of tropospheric ozone, in or kg ethene	%23	%40
Depletion of nonrenewable energy resources, in MJ	%26	%35

Phd. Vladimir Koci
Verifies at the
Comparative LCA of
Hydromx®

CERTIFIED







SCIENTIFIC REFERENCES



Dr. Issa Chaer

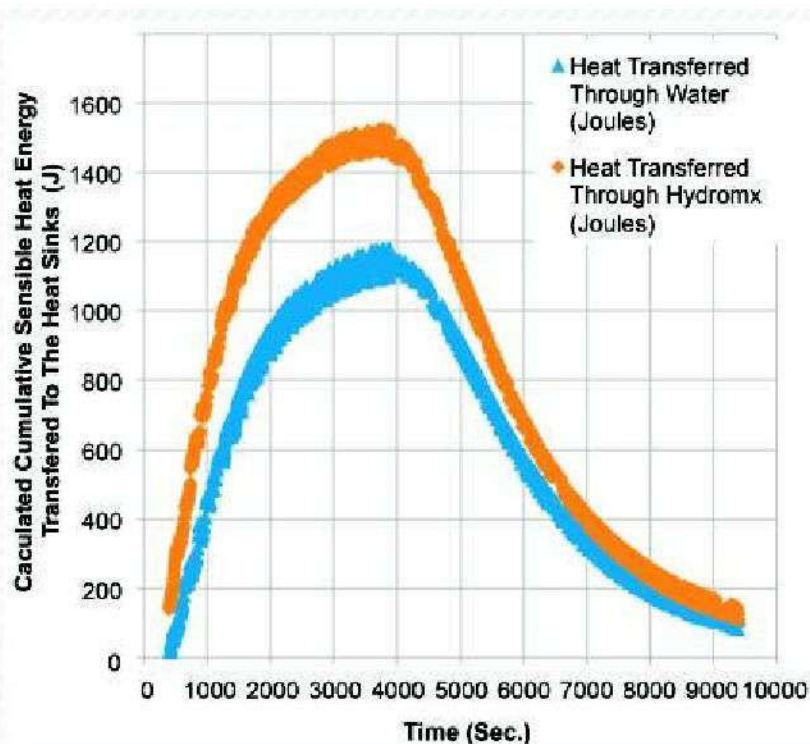
LSBU established in 1892

One of the top university in engineering

Laboratory findings showed that

HYDROMX is 37% better heat transfer fluid than water.

LSBU PUBLISHED AN ACADEMIC REPORT.





Enertek
International



Prof. Marc Assael

One of the top thermo-physical property professor in the world.

139 International Scientific Papers,
121 Conference papers and 9 books.

He is also reviewing scientific papers
as reviewer.

One of his main focus is NANOFUIDS.

He Published 4 reports on HYDROMX
including: Thermo-physical
Properties, Heating Applications.
Nano-Particles reactions and
Efficiency Evaluation

NO SEDIMENTATION

Enertek is an independent R & D company
offering confidential and competitive
solutions to boiler industry.

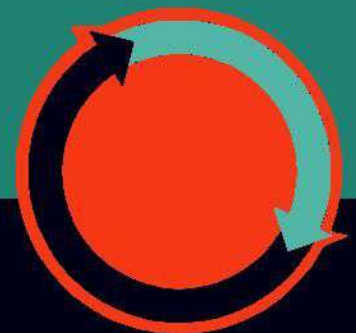
They are working closely to test major
boiler manufacturers' boilers for
efficiency. HYDROMX had been tested in
their facilities and results were
outstanding.

BDR - Thermia provided a boiler for tests.

**HYDROMX is 24% MORE EFFICIENT THAN
WATER.**

**Fluid Temperature decreased by 3°C with
HYDROMX.**

**After this test BDR Thermia decided to
make HYDROMX as their R&D product.**



CLIENTS



MICRO LABS LIMITED



Club**Mahindra**
MAHABALESHWAR



HONDA MOTORCYCLE & SCOOTER INDIA PVT. LTD.



THE
ROSEATE

NEW DELHI

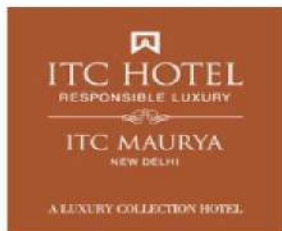


Holiday Inn

JAIPUR CITY CENTRE



CLIENTS



CASE STUDIES



The Turkish Air Forces
Erzurum Military Air Base





CHILLERS

35% ENERGY SAVING

The world's most successful pay-tv service, Home Box Office Inc (HBO) is a Time Warner company.

Hauppauge Data Centre

Overall 35% energy saving.

Return on Investment (ROI) 1 year

More than 1000 hours of Free Cooling.

Compressor run-time hours slashed by an **average of 46%**, increasing equipment life.

Annual saving in EACH CRAC unit of 65,000 kWh energy forecast, which equates to the emission of 29 tonnes of CO₂.

22% ENERGY SAVING

Case Study August 2013 - January 2014

Carrefour Icerenkoy Shopping Center has 45,145m² land area and leasable area. It has 3x Chillers, 1560kW in total.

This hyper-market is under management of CEFIC, (French FM Company) which is the largest French FM Company and case study is approved by France HQ.

25 tonnes of water replaced with HYDROMX / Water (50/50) in chillier system.

Independent University Monitoring & Verification (Kocaeli University)

22% average energy saving year over year.

Now rolling out to five more locations.



BOILERS



30% ENERGY SAVING

Forest Green Rovers is the most sustainable football club in the UK. Total floor space is 2,900 sq m heated by two 70kW Potterton boilers and a Glow Worm 15hxi boiler. In total 1,200 litres of water circulate through 73 rads.

After 12 months :

30% energy saving achieved.

A saving of 90,596 kWh energy attained.

The emission of 18.3 tonnes CO2 was prevented.

FGR benefitted from an annual saving of £ 3,570.

30.9% ENERGY SAVING



Hamworthy Heating is a leading British manufacturer and supplier of commercial heating and hot water solutions.

It is a part of Group Atlantic which is the second largest boiler manufacturer group in Europe.

30.9% heat energy saving achieved.

A saving of 5,000 kWh energy attained in 45 days.

The emission of 3.3 tonnes CO2 was prevented in 45 days.

Hamworthy accepted to refer product to their customers (Barclays is one among them).



The Turkish Air Forces
Erzurum Military Air Base

35% ENERGY SAVING

The Erzurum Air Force Base is situated 1757 meters (5766 feet) above sea level. Erzurum is known as "The Rock" by NATO. The area has a harsh climate, with long cold winters, an average of 114 days of snow per year and short summers.

10 tonnes of HYDROMX installed in 2009.

Over 35% Energy Saving.

ROI < 1.5 years.

In use for 5 years without any problem.



36.77% ENERGY SAVING

Limitless hospitality

The Lalit is a chain of 5 star hotels that has 13 properties across India.

The Lalit Jaipur, being the early adopters of new technology adopted HYDROMX and used it for their boiler systems.

They achieved 36.77 % savings.



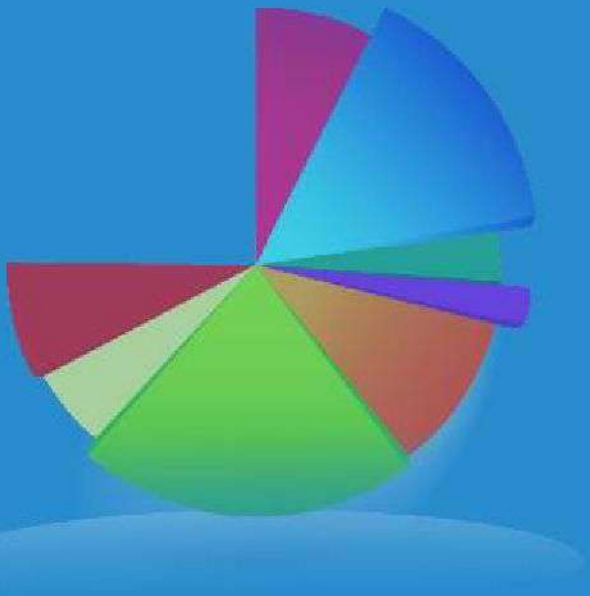
HYDROMX FOR A GREENER FUTURE

IF, ONLY 5% OF THE WORLD USES
HYDROMX IT WILL BE EQUIVALENT TO

USD 50 Billion Saving Per Year

86,505,000 Tonnes/Year
Less Carbon Emission

Planting 247,160,000 Trees



FUTURE IS
GREEN



GALAXY ENERGY SOLUTIONS

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GALAXY ENERGY SOLUTIONS IS THE EXCLUSIVE DISTRIBUTOR OF HYDROMX IN INDIA