



KEHEMS TECHNOLOGIES

News Letter
May 2024



www.kehems.com



MANAGING DIRECTOR

MESSAGE

Dear Kehems Family,

As we embark on a new financial year, I am filled with pride and excitement for the journey ahead. At Kehems Technologies, we are not just a company; we are a family built on a foundation of cultural values, discipline, and processes.

Our path to growth is guided by our commitment to conserving energy for our customers and delivering a return on investment that exceeds expectations. With the inauguration of the Deepak Kemkar Expo Centre and Center of Excellence, we now have a platform to showcase the state-of-the-art components that power our world-class range of products. This facility demonstrates how Kehems stands out in terms of product quality and performance compared to our competitors.

I want to express my sincere appreciation for the efforts of every department within our organization. We recognize and reward their hard work, while also providing support and guidance to those who may need it. Our sales and service departments are the driving force behind our growth, supported by the dedicated teams in sourcing, finance, projects, administration, IT, HR, and production.

As we set our targets and goals for the coming year, I have full confidence in our team's ability to excel and achieve success. I wish luck and success to each and every member of the Kehems family. Together, let's make this year our best yet.

Warm regards,

Kshama Jain
Managing Director
Kehems Technologies

MESSAGE FROM THE MANAGING DIRECTOR'S DESK FOR EXPO CENTRE:

Dear Team,

It is with great pleasure and pride that I announce the inauguration of our new Expo Centre and Centre of Excellence, dedicated to the memory of our esteemed founder chairman.

Today marks a significant milestone in the journey of our company. These state-of-the-art facilities not only honour the legacy of our founder but also symbolises our commitment to excellence and innovation.

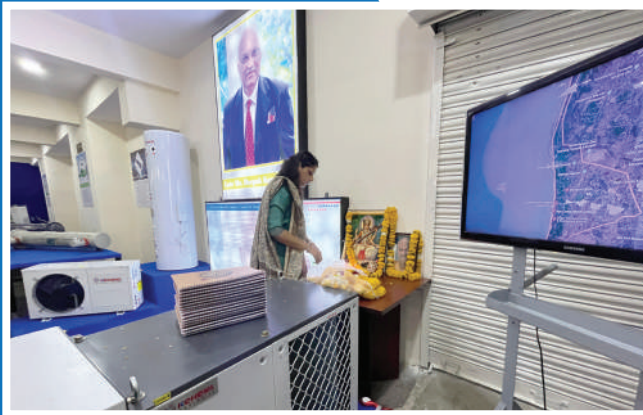
The Expo Centre will serve as a platform to showcase our cutting-edge products and technologies to our clients, partners, and stakeholders. It will be a hub of inspiration and collaboration, where ideas are exchanged, and possibilities are explored. Meanwhile, the Centre of Excellence will be a beacon of knowledge and expertise, fostering continuous learning and development within our organisation. It will provide our team with access to the latest tools, resources, and training opportunities to enhance their skills and capabilities.

As we stand on the threshold of this new chapter in our company's history, let us reflect on the vision and values instilled by our founder and chairman. Let us strive to uphold his legacy of integrity, innovation, and dedication to excellence in everything we do.

I extend my heartfelt gratitude to everyone who has contributed to the realisation of this milestone. Together, let us continue to push the boundaries of what is possible and write the next chapter of success for our company.

Warm regards,

Kshama Jain
Managing Director





Ahri Test Banch For Water Cooled And Air Cooled Chillers And Only Company In India Which Gives Ltr Chiller Testing On Brine



KRISCOOL
SCREW, SCROLL AND
LOW TEMPERATURE CHILLERS

KRISTHERM
HEAT PUMP SYSTEM
Up to 120 Deg C

KRISSERVE
PARTNER IN
SERVICE EXCELLENCE

KRISTESS
THERMAL STORAGE SYSTEM

EFB
ENERGY
FINANCE BUSINESS

WHITE LABELING

IN-HOUSE SPECIAL PROJECT TEAM

38 Years of Existence	300+ Employees	7000+ References	Low Power Consumption	Low Noise Level	Eco-Friendly
140+ After Sales Staff	16 Locations	High Reliability	Decarbonisation	Heating/Cooling Efficiency	Ease of Installation





SCREW HEAT PUMP

Capacity from 100kW to 2000kW
Hot Water outlet temperature
from 45°C to 75°C
Environment Friendly, Maintenance
Free & Emission Free.



AIR TO WATER SCROLL HEAT PUMP

Capacity 3.5kW to 292.7kW
Hot Water outlet temperature
from 55°C to 65°C
Environment Friendly,
Maintenance Free & Emission Free



WATER TO WATER SCROLL HEAT PUMP

Capacity 32kW to 160kW
Hot Water outlet temperature
upto 60°C
Environment Friendly, Maintenance
Free & Emission Free



DOMESTIC HEAT PUMP

Capacity 3.5kW to 10.8kW
Hot Water outlet temperature upto 60°C
Environment Friendly, Maintenance
Free & Emission Free



LOW TEMPERATURE SCREW CHILLER

Capacity 12Tr to 300Tr Temperature Range From -5°C to -40°C

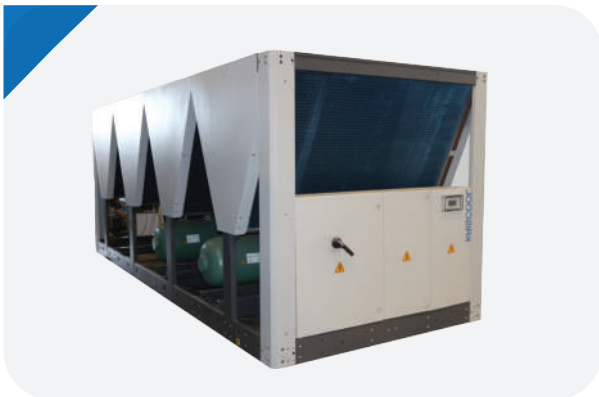
The Energy Efficient Machines of Industry
AHRI Certified
R134a R404a
Environment Friendly, Maintenance Free & Emission Free



WATER COOLED SCREW CHILLERS

Capacity 30Tr to 650Tr

The Energy Efficient Machines of Industry
AHRI Certified
R134a
Environment Friendly, Maintenance Free & Emission Free



AIR COOLED SCREW CHILLERS

Capacity 30Tr to 650Tr

The Sturdiest Machines of Industry
AHRI Certified
R134a
Environment Friendly, Maintenance Free & Emission Free



AIR COOLED SCROLL CHILLERS

Capacity 3.5Tr to 103Tr

Trend Setting & The Most Sophisticated Scroll Chillers
Environment Friendly, Maintenance Free & Emission Free

KRISTESS

THERMAL ENERGY STORAGE

**The Most Effective Decarbonisation Tool
Environment Friendly, Maintenance Free & Emission Free**

In Today's Uncertain Situation Of Power Outrage, Kehems Has A Solution For Up Keeping Your Air Conditioning And Efficiency Of The Systems And Resources. Kehems Technologies Is Pioneer In Thermal Storage System Across The World Insist Of Having Sustainable And Un-interrupted Air Conditioning With Us.

- Flexibility:
 - In selecting chiller combinations.
 - In meeting short time unaccounted loads.
 - On plant room sizing
 - System back-up.
 - Reduced standby requirement.
 - Optimized low side installation as well
 - Reduced Capital Costs
 - Reduced Energy Costs
 - Reduce Size of Cooling Machinery
 - Reduce Standby cooling machinery.
 - Reduce electrical installation
 - Reduce auxiliary equipment
 - Reduce Back-up generators; thereby
 - Reduce Capital Cost
 - Reduce Energy Consumption and
 - Reduce Energy Cost
 - Small Chiller – Less CFC/ HSFC consumption
 - Smaller cooling tower – Less Water Consumption
 - Smaller Gen set – Less Pollution
 - More Electricity Production during off-peak periods.
 - Based on US Green Building Council's LEED Rating System 'Thermal Energy Storage System is considered 'Green'.
 - Reduced refrigerant charge.
 - Reduced CO₂ and NxO generation at power generating plants
 - Reduced CO₂ and Nx generation at local generators by back up generators.
 - Free Standby
 - Critical areas serviced without chillers on UPS
 - Reduced fluctuations of chilled water temperature
 - Short time excess peak meeting capacity



KEHEMS SERVICES

Keeping customers at the center of our vision, mission and every activity is the core value of Kehems

After sales service plays an important role in customer satisfaction and customer retention. It generates loyal customers. Customers start believing in the brand and get associated with the organization for a longer duration. They speak good about the organization and its products. A satisfied and happy customer brings more individuals and eventually more revenues for the organization. The needs and demands of the customers must be fulfilled for them to spread a positive word of mouth. In the current scenario, positive word of mouth plays an important role in promoting brands and products. After sales service plays a pivotal role in strengthening the bond between the organization and customers.

KEHEMS believes that the Customers are the assets for company and do all efforts to maintain it the best ways. Kehems service makes sure products and services meet or surpass the expectations of the customers.

KEHEMS Technologies Pvt Ltd. has a full-fledged service team to cater to all the after-sales service needs of our clients. The Company has wide network service stations all over India to meet customer requirements. We understand the geography and have complete knowledge of the application and customer profiles. Service personnel is stationed all the country – Delhi, Jaipur, Udaipur, Ahmedabad, Vadodara, Mumbai, Pune, Goa, Bangalore, Chennai, Hyderabad, Kolkata and Indore. These service personnel, trained at Indore factory as well as at sites, are responsible for taking care of all activities starting from pre-commissioning to all after sales service needs of the customers in the respective regions.

With the widespread deployment of service team across the strategic location, KEHEMS is able to respond to service needs with the minim time possible.

With the stocking and availability of spares at head office as well as all branch offices, KEHEMS is in the position to attend any of the service requirement with a short span of time.

After sales service includes various activities like:

- Pre-Installation and Commissioning Services
- Installation and Commissioning
- Operation and Maintenance Training
- Operation and Maintenance of AC plants
- Services during Warranty Period
- Retrofitting Services
- Annual Maintenance Contracts
- Providing Break-Down Technical Assistance
- Spares Supply and Replacement
- Screw Compressor Service Centre



KEHEMS
S E R V I C E S

Partner in Service Excellence

Pre-Installation and Commissioning Services:

The technical assistance for preparation of site for installation of equipment is provided for smooth installation and commissioning. This covers Civil, Foundation, Electrical, Cabling, Piping, Valves, Controls, Pressure Test, Safety Devices etc.

Operation and Maintenance Training:

Training to Customer at site and at KEHEMS factory covers aspects of Refrigeration system, electrical components, Standard Operating Procedures, Dos and Don'ts, maintenance schedules, record maintenance, Fault diagnosis and Optimized operation of the Plant.

Annual Maintenance Contract:

KEHEMS undertakes tailor made Annual Maintenance Contracts as per client requirement. This includes all services, assistance and spares required by customer. The AMC covers services mentioned under monthly / quarterly / yearly schedules. KEHEMS offers both comprehensive and non-comprehensive type of AMCs.

Operation Contracts:

Under this contract, KEHEMS provides competent resources based on the scope & SLA signed with clients. The contract covers only the manpower operations. The manpower are trained for technical & soft skills. The training program is further customized based on clients' inputs & feedback. KEHEMS & its resources are fully compliant on all aspects of regulations & statutory

Compressor Servicing Centre:

KEHEMS has a state-of the art screw compressor service centre at Indore. Kehems is the only chiller manufacturer having its own compressor service centre to provide efficient and prompt services to its customers.

CASE STUDIES PROJECTS

Bombay Hospital Jaipur

Product Supply – Water to Water Screw Heat Pump.

Capacity – 120 KW

Consultant & Consultant Brief – Direct PO from Bombay Hospital.

Year supply – 2022

Key Achievement :-

1. We have done retrofit project at Bombay Hospital-Indore
2. Where we have supply , install , testing and commissioning of New Heat pump.
3. We have done modification work in the existing piping.
4. We have replaced our old heat Pump with new heat pump.

Typical observations of conventional system

- Energy Consumption
- Efficiency
- Heating with fossil fuel
- Challenges for Climate
- Sustainability
- Connected Load (electrical heating system)
- Challenges for Fuel Handling (Petrol/ Diesel)
- Safety Norms
- Compliances
- High Operation Cost

Heat pump system design – deciding factors

- Application
- Total hot water consumption / Heating capacity calculation
- Usage pattern
- Tank Sizing
- Selection – Type of Heat Pump
- Ambient condition
- Space availability
- Water quality
- Pressure balancing
- Proper Engineering



Crown Vault

Product Supply –

1. Chiller (KRISCOOL 261 ASLVH X 03-23.74 TR)
2. AHU (7000 CFM x 02)
3. TFA (1300 CFM x 03)
4. Liquid Dehumidifier (03)
5. Radiant Cooling (01)
6. Electrical Panel
7. BMS System..

Consultant & Consultant Brief – Air Treatment Engineering Pvt Ltd Chennai. Basically Air Treatment is expert in HVAC, Electrical, Plumbing, Firefighting and IBMS.

Year Apply – This Project was awarded by us in May-2023 and we executed the same Radiant cooling system in Sept-23

Key Achievement – Specially this project was designed for Radiant cooling system, through Radiant we can reduce the ducting and Indoor units directly it goes to reduces overall project cost, we are controlling all plant through BMS.

Radiant cooling – Advantages

- Air system is about 1/5th of a conventional air conditioned building – lesser ducting and lower fan power
- Water is the main medium of heat transfer – pumping energy much smaller compared to fan energy.
- Chilled water temperature in the radiant pipes is 15 to 18 OC – chillers run at high efficiency
- Perception of thermal comfort is higher compared to a conventional air conditioned building

Redefining the Standards

- Building envelope heat load not to exceed 1.0 W/sqft
- More than 75% of the office area to be naturally lit as per LEED standards Breaking the barrier.
- > 550 sqft per TR of AC area
- < 0.4 W/sqft for lighting design
- < 3.5 W/sqft for electrical design
- < 0.5 kW/TR for chiller plant design



CASE STUDIES SERVICES

RRCAT Indore

Kehems Services is providing AMC for VOLTAS make Air Cooled Screw Chillers installed at the most critical lab area of RAJA RAMANNA Centre for Advance Technologies (RRCAT), Indore. The HVAC System plays a vital role in the Lab and they cannot afford any prolonged breakdowns of chillers. Looking at Kehems track record of satisfactory services, the CAMC of VOLTAS screw chillers are given to Kehems.

The customer was facing tripping with "low suction pressure" alarm in one of the chillers. The tripping was happening at irregular intervals and resolution was pending even before the AMC started by Kehems.

Our service team under Shahid Qureshi was deputed to study and resolve the problem. After studying the all the parameters and days of observation at site, it was found that the filter dryer strainer mesh was choked partially and it was causing the tripping while the chiller was in full load operation.

Key Achievement:

This was one of the rarest cases and the team with its technical expertise able to identify and resolve it on permanent basis.

Installation Details:

Chiller make - Voltas Ltd

Year of manufacturing - 2016

Chiller Model No - ACEGADXR3152MZ40A

Type of chiller units - Air cooled chiller

Cooling capacity (each chiller unit) - 315 TR

Quantity - 2 Nos.



Unichem Labs Goa

Unichem is one of the most important customers for KEHEMS. Our chillers are installed in their 5 units across India. Unichem Goa has 4 Nos. of KEHEMS make water cooled screw chillers working since 2018. Recently the site had issues of repeated failures of electrical contractors and resulting in compressor failures. A detailed study was carried out to find out the Root Cause Analysis. The repeated abnormal failures were tarnishing Kehems brand image and affecting the production facilities of customers. Considering the criticality of the failures, Bitzer was also consulted. Though the damaged parts were replaced and the equipment was put back into operation, the exact cause of failure could not be reached. After detailed analysis and observation by our service technical team, the problem was finally identified with the power cables between the Switch Fuse Unit and to contactors. The cables had become weak and got heated up internally after a few hours of operation and all phases were not passing current to contactors. The phase missing was overheating the contactors and damaging them. This was a learning for the service team as cables were never considered to be faulty prior to this incident. The cables were replaced and the issues resolved on a permanent basis.

Key Achievement:

This was a learning for the service team as cables were never considered to be faulty prior to this incident. The cables were replaced and the issues resolved on permanent basis.

Chiller make - Kehems

Year of Installation - 2015

Type of chiller units - Water cooled Screw chiller

Quantity - 4 Nos.

Cooling capacity - 3 Nos. 280 TR Each, 1 Nos. 310 TR





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Regional Presence

CENTRAL REGION

INDORE
UDAIPUR
JAIPUR
AHMEDABAD
VADODARA

SOUTHERN REGION

BENGALURU
HYDERABAD
CHENNAI
COCHIN

WESTERN REGION

MUMBAI
PUNE
NAGPUR
GOA

EASTERN REGION

KOLKATA
BHUBANESWAR

NORTHERN REGION

DELHI NCR