## **COMPANY PROFILE**

**Coil Tech Electromechanical** is an Independent **Large Tonnage Chiller Service Organization** that specializes in the Service, Repair, Retrofit, and Modernization of all Manufacturers Liquid Chillers. Coil Tech Electromechanical was established in 1975 by a group of Industry experts from Carrier, Trane, York, McQuay, Honeywell, Siemens and the Bechtel Construction Company. These industry professionals formed a nationwide service organization with technical capabilities and SYNERGIES that were far superior to any of the manufacturer service offerings.

In 2001 U.S. Chillers made a strategic decision and agreed to bring its expertise and resources to the Middle East and Gulf Region to fill the service void.

Now for the first time in the Middle East, Professional Large Tonnage Chiller Specialist Services are available, and all the services are performed and supervised by American Service Engineers who are Industry and Factory Certified by all the Major Chiller Manufacturers.

U.S. Chillers whole organization including our Energy Engineering Dept. is completely committed and is focused on providing and supporting the Middle East and Gulf Region with the most highly advanced services and solutions available in the HVAC/R Industry, at fair and honest prices.

Coil Tech Electromechanical can perform services on Centrifugal, Screw, Reciprocating, and Absorption Chillers as well as all ancillary equipment.

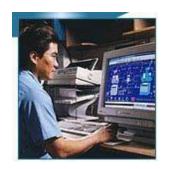
Coil Tech Electromechanical customer focused approach to chiller field service engineering, and consultative services, performed by **American service engineers** enables them to offer the highest quality chiller services in World. Our commitment to our customers is that we will provide solutions and recommendations that benefit the equipment user and not the equipment manufacturer

We at the U.S. Chillers look past the flanges of the chillers and walk the entire facility to identify and provide to our partners potential energy, environmental and operational savings and improvements.

Our service engineers and energy engineers inspect and survey your facility and forward the necessary data and information gathered to our energy engineering department in the United States.

After reviewing the data if potential solutions can be engineered, an energy and feasibility study is performed and is forwarded to our partners with our recommendation, solutions and guaranteed savings for our client partner company to consider.





Given the current trend and needs related to informational advice on Large Tonnage Chiller Services, market analysis has been conducted by US Chiller Services in order to present options to equipment owners and end users.

USCS focus entirely on the needs and benefits of the equipment owners in order to deliver a first class service designed to support a fast growing industry.

Specialist services and techniques are delivered to our clients, studies are conducted based on general observations and analysis of today's technologies; as an independent service provider, USCS are perfectly placed to offer impartial and unbiased advice leading to the best and most practical and cost effective opportunities available in the industry.

# Type of work undertaken (Specialized Service Contracts)

- a. Large Tonnage (Reciprocating/Screw/Centrifugal) Liquid Chiller Services and Maintenance. (50TR to 10,000TR Capacity)
- b.Reciprocating/Screw/Centrifugal Compressor Overhauling For Any Chiller or Air-conditioning Unit. (Carrier/Trane/York/McQuay/Any Brand)
- c. Breakdown Repairs of Liquid Chillers & Commercial/Industrial Air-conditioning Units.
- d. Retrofits/Reconditioning of Any Liquid Chiller or Air-conditioning Unit.
- e. Fabrication and Installation of Condenser/Evaporator Coils.

We would also like to bring to your kind attention that Coil Tech Coil Tech Electromechanical Co. has won the <u>H.E. Prime Minister's Award</u> for excellence in industry and that we are the only Organization in the Middle East that has American/ Western Engineers certified to service/repair Carrier/Trane/York and McQuay liquid Chillers.

Coil Tech is a "BAHRAINI NATIONAL COMPANY" established in 1995 specializing in fabricating, producing and installing (Fin & tube) condenser/evaporator coils for industrial, commercial and domestic air conditioning units including liquid chillers of any make, capacity or size. Our material specification, workmanship and in-process inspection meet and exceed any other Original Equipment Manufacturer.

We **Coil Tech Electromechanical**, specializes in the maintenance/services of reciprocating, centrifugal, screw and absorption chillers from 50 TR to 10,000 TR capacities.

### <u>Availability Of Major Electro-mechanical/Microprocessor Spare Parts:</u>

Coil Tech Coil Tech Electromechanical Co. has national purchasing agreements with all the major Chiller manufacturers (Carrier/Trane/York/McQuay) in the U.S. This agreement power allows us to procure and secure any needed parts or components faster, more reliably and cost effectively than the local agents in the Gulf Market.

# Centrifugal Chiller Services

- Preventive and Predictive maintenance contracts
- Annual and or preseason service
- Major and minor repairs
- Motor replacement and repairs
- Overhauls and stop majors
- Microprocessor control service and upgrades
- CFC containment/ purge upgrades
- Pre Vac pressurization and Rupture Seal upgrades
- External oil filter installations
- Energy Modernization upgrades

All our service engineers are western engineers and having a minimum of 15 years hands on field engineering experience They are active members of and receive ongoing training from The American Society of Heating, Refrigeration and Air conditioning Engineers (ASHRAE)

# **Reciprocating Chiller Services**

- Preventive and Predictive maintenance contracts
- Annual and or preseason service
- Major and minor repairs
- Compressor repairs and replacement
- Compressor overhaul
- Energy / modernization upgrades

All our service engineers are required to have completed a 5 year training program (United Association of Air conditioning Engineers, USA, City and Guilds, UK). This training is mandatory requirement in order to be able to service Heavy applied Liquid Chillers.





# Refrigerant Management

- Refrigerant conversions
- Refrigerant containment
- Refrigerant monitoring ASHRAE 15 UPGRADES

They are also active members and receive ongoing training from Refrigeration Service engineers Society (RSES)



# **Absorption Chiller Services**

- Preventive and Predictive maintenance contracts
- Annual and or preseason service
- Major and minor repairs
- Solution analysis
- Pump repair and replacement
- Controls upgrade
- Burner operation / DF units

All our service engineers are industry and or factory certified of Carrier, Trane, York, McQuay, Dunham-Bush Liquid Chillers They travel every two years to the US for industry and factory training and re certification



#### Screw Chiller Services

- Preventive and Predictive maintenance contracts
- Annual and or preseason service
- Major and minor repairs
- Compressor repairs and replacement
- Compressor overhaul
- Energy / modernization upgrades

Our service engineers receive ongoing training at our regional training centre in Bahrain



# **Non Destructive Testing**

- Eddy current testing
- Oil / water analysis
- Vibration analysis
- Thermo graphic infrared analysis

We have engineers who are EPA certified in recovery, recycling, reclamation and handling of all refrigerants including low pressure and high pressure refrigerants



#### **Other Services**

- HVAC consulting services, testing and inspection contracts
- HVAC management and vendor compliance contracts
- Centrifugal compressor teardown and maintenance training
- Energy services / Chiller plant performance optimization
- Chiller plant automation services
- Variable frequency drive repair and service
- Replacement parts all OEM chillers
- 24 hours remote chiller monitoring
- Water treatment / technologies
- Heat exchanger re-tubing services



US Chillers is also EPA approved to train and proctor the EPA refrigerant certification exam all levels 1,2,3 and universal

#### Markets Served

#### Educational

Schools, Universities, Colleges, Research Facilities

#### **Health Care**

Hospitals, Clinics, Extended Care Facilities

#### Industrial

Petrochemical, Process, Food Processing, Pharmaceutical

#### Lodging

Hotels, Motels

#### Office/Public Facilities

Owner Occupied or Managed Office Buildings Auditoriums, Museums, Theatres, Airports

#### Retail

Shopping Malls, Galleries, Banks

#### Manufacturing

Plants, Laboratories, Warehouses, Clean Rooms

#### **Spare Parts**

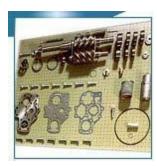
U.S. Chillers through its national purchasing agreements in the United States with all the major OEM's has the ability to obtain every necessary part and component direct from the OEM factory and parts distribution centers throughout the USA, faster and more cost efficiently than the local agents and distributors can procure required parts.

This insures the customer that they are receiving only genuine OEM replacement parts and components at fair and competitive prices.









#### Non Destructive Services

Coil Tech Electromechanical brings you the most Advanced Technology available in the Industry.

If equipment fails unexpectedly, you face downtime and, potentially, inconvenienced occupants. With predictive maintenance, you'll know about potential problems before breakdowns occur.

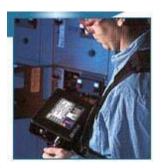
That brings you the ability to schedule repairs before they become more costlyand at times when they won't inconvenience you or your building occupants. Using today's best testing tools and technologies, we can discover or rule out virtually any kind of hidden building's system problem. As a result, we can help you:

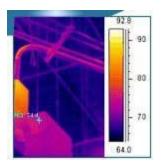
- Find, identify, and correct minor problems inexpensively, before they lead to more complex and expensive repairs.
- Avoid needless downtime and inconvenience or discomfort to occupants.
- Ensure continued production when equipment is used in process applications
- Control energy cost
- Prolong equipment life, deferring replacement cost
- Prevent overtime cost for unscheduled repairs

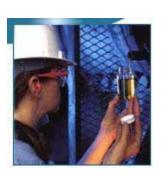
Coil Tech Electromechanical predictive maintenance is key to optimal building systems management. With it, you can make the most informed decisions and achieve the lowest overall operating cost. Some of the predictive services we offer are:

- Vibration analysis
- Thermo graphic testing
- Eddy current tube testing
- Water / Oil / Refrigerant analysis performed by an independent United States laboratory
- Motor insulation testing
- Ultrasonic water flow analysis & measurement
- Water chemical analysis









# **Training**

All U.S. Chiller field service engineers are certified to service Carrier, Trane, York, and McQuay chillers. They are more trained and certified to service large tonnage chillers than the factory representative themselves.

They have not only a minimum of 15 years hands on filed chiller service experience, but are also certified by the United Association of Refrigeration Service Technicians and hold active membership in the Refrigeration Service Engineers Society and **ASHRAE**.

In addition, each and every U.S. Chiller service engineer has worked directly for one or more of the major chiller manufacturers as a senior chiller specialist or higher and has been directly responsible for the hands on training of the factory's mechanics under their supervision.

If U.S. Chiller field service engineers were actually training factory service representatives on how to service and repair large tonnage chillers, then why not let them service your chiller?

This is the heart and soul of the philosophy of Coil Tech Electromechanical: providing the most highly skilled field service engineers in the industry to facilities throughout the Emirates and Bahrain.



# Air Conditioning Finned Tube Coils (Condenser & Evaporator Coil)

For last decade, *Coil-Tech Coil Tech Electromechanical Co.* has been providing heat transfer coils for a variety of replacement and Original Equipment Manufacturer's thermal applications. This has allowed us to build an extensive knowledge base and acquire practical application experience to help customers with their unique and challenging heat transfer projects.

At first glance, a coil does not look complicated so enhancing its performance may seem impossible. Herein lies our "hidden engineering." Since a coil has no moving parts and nothing to adjust, the performance enhancement of a coil must be built into each design from the very beginning. Once a coil is built, no adjustments can be made to improve its performance.



We take this process very seriously because it dramatically affects our customers' investment. In addition to delivering the most efficient product, our teams add value through exceptional performance. We guarantee our total commitment to shipping your order on time and becoming your single-source partner--from single, custom designed units to large volume orders of standardized coils. We look forward to providing a **Custom to the Core** coil that fits your application!

**Coil-Tech** works with customers needing one or hundreds of coils. We have the facility, equipment, and expertise to help design a solution for your particular application, and build a coil that meets your needs. Look through our web pages <a href="https://www.coil-tech.com">www.coil-tech.com</a> for any further information or contact us through our mentioned details below.

We operate three strategically located facilities in Bahrain with well mechanized ISO std. coil manufacturing facility & UAE. Throughout our history, our facilities have undergone numerous state-of-the-art improvements and workforce expansions. We employ a team of over 20 degree holding engineers from various technical disciplines.

Our engineers' diverse backgrounds provide unique perspectives and creative solutions to our customers' challenging coil designs and applications. Our customers talk directly with our engineers enabling our team to better understand the scope of the project and the customers' specific requirements. The same engineer is integral throughout the manufacturing process and is available to answer any of our customers' questions. This system provides our customers with the best possible service and the highest quality product.

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Our main objective is to provide our customers with a product that performs according to their exact requirements. Our goal is to provide value and the assurance that we can become your total integrated heat transfer resource. We are **Custom to the Core** and have been for over 10 years in the region.

Being an ISO 9001:2000 certified organization by Lloyds Register Quality Assurance since 1999. Coil Tech has set new standards and achieved a 'World Class Recognition' by meeting all the stringent requirements of the BS EN ISO 9001: 2000 for Manufacturing, Installation, Servicing and Repairs. We have also set new standards by becoming the first company to be certified in Bahrain in this field of specialization. We have also set new standards by becoming the first company to be certified in Bahrain in this field of specialization. This lead to us being awarded "H.E. Prime Minister's Award for Excellence". ISO requirements include the need for active involvement by the management and staff in the quality process, a documented process for the control of product manufacturing and services, a close working relationship with customers and vendors with strict adherence to written quality procedures.



Its emphasis on quality, continuous improvements, diversification and employee training has given Coil Tech the edge in this competitive market in being recognized and distinguished by their clients in meeting their need.

By adopting and implementing the Quality Management System Coil Tech has taken their first step in the journey to "TOTAL CUSTOMER DELIGHT"

Raw materials and parts are tested & then selected to meet and exceed manufacturers original material design specifications.

#### **Assembly**

Each unit passes through rigorous examination during the assembly and production stages, any defects are immediately reported and rectified before reaching the next stage.

#### **Brazing**

Coils brazed using silver-baring brazing alloy (brazing rods) for maximum bonding.

#### **Expansion**

Coils are mechanically expanded to fins, for uniform tube to fins bonding for maximum heat transfer.

#### **Testing and Inspection**

Our standard leak testing is done with a minimum of 300 PSI for a controlled period. After leak testing, each unit is labeled with a unique serial number for traceability.





#### **Middle East Offices**

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