



# ABDULLATIF ABDUL AL JAFFAR FOR A/C & REFRIGERATIONS

**Complete HVAC&R Contracting**

**Annual Maintenance Contract**

**Technical Support Consultancy**

**Energy Saving Solutions**

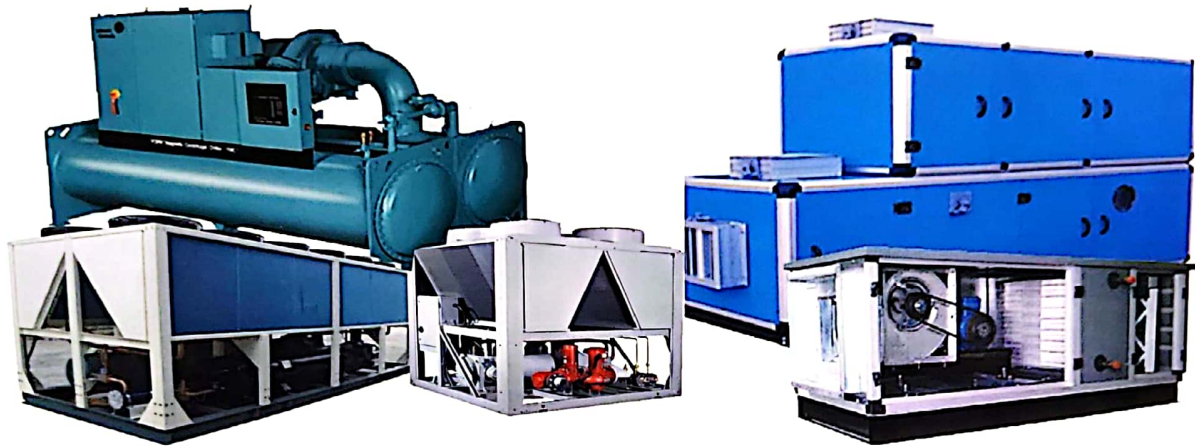


**Keeping You Cool**



## AIRCONDITIONING & REFRIGERATION SERVICES

A.A.J Air Conditioning & Refrigeration Services specializes in Complete HVAC&R Contracting, Service, Repair, Retrofit, Modernization and Annual Maintenance of Central Air Conditioning Equipment such as Centrifugal, Screw, Reciprocating Liquid Chillers and Ancillary units. We are happy to bring these specialist expertise and resources in the region to fill the service void and poised to offer the most highly advanced services and solutions best available in the HVAC/R Industry, at fair prices.



All our services are performed by our professionally experienced technical staff that enable them to offer the highest quality services that saves equipment down time and operating cost. Our main commitment is to provide the best Technical Support & Solutions that benefits the equipment end user for the most beneficial use of their HVAC&R equipment without any major breakdown. Our HVAC&R Annual Preventive and Predictive Maintenance Technical Support agreements are provided with **FULL COMPREHENSIVE** including spare parts & **TECHNICAL LABOUR INTENSIVE** spare parts.

### OUR FULL RANGE OF TECHNICAL ACTIVITIES ARE FOLLOWS:

- New HVAC&R Supply & Installation
- Annual Maintenance Contracts
- Duct Fabrication, Supply & Installation
- HVAC&R Major and Minor Repair
- Compressor Overhauls and Repair
- Chiller Microprocessor Controls Upgrading
- Chiller Retrofit & Modernization
- Cooling Tower Repair & Service
- Upgrading & Replacement of Cooling Plants
- Complete HVAC&R Testing & Commissioning
- Process Cooling Chiller Repair & Servicing
- ODP CFC/HCFC Refrigerant Conversion
- ODP CFC Refrigerant Containment
- HVAC&R Energy Savings & Optimization
- Chiller Plant Automation Services
- Building Management System (BMS)
- NDT Specialist Inspection Services
- Water Treatment Solutions & Services
- Heat Exchanger Re-tubing Service
- Condenser Coils Replacement
- Condenser Corrosion Protective Coatings
- Complete Unit Refurbishment Warranty

Air Conditioning & Refrigeration Services can be your trusted and most preferred service provider for ALL YOUR HVAC needs and we assure you of our best attention round the clock. Our professional and time bound commitment separates us from any competition in the industry.



## OUR EXPERTISE

A.A.J Air Conditioning & Refrigeration Services provide various specialist services in the field of commercial & industrial air conditioning & refrigeration. Our service standards are far in excess of the standards available in the local industry. Our Specialist Services include an assortment of value added services such as Energy Savings Services and Non-Destructive Services (NDD) performed by our Associate Team of European / Western Ventures.

We provide the following Specialist Services on demand;

- **Refrigerant Analysis**  
(Analysis performed by an Independent Lab to ensure all refrigerant samples meet ARI standards)
- **Eddy Current Tube Analysis**
- **Vibration Analysis**
- **Thermographic Infrared Testing and Analysis**
- **Spectrochemical Oil Analysis**  
(Analysis performed by Independent Lab that specializes in the analysis of refrigeration oil analysis)
- **Ultrasonic Water Flow Analysis and Measurement**
- **Motor Insulation Testing**
- **Testing, Adjusting & Balancing (TAB)**

## VALUE ADDITION SERVICES

### ■ Vibration Analysis

Vibration analysis is an important tool that enables our Service Engineer to "look Inside" the compressor and determine the condition of bearings, gears and other rotating components. Worn bearings and components will emit a distinct signal corresponding to the severity of the damage and the rotational speed. A sensitive vibration equipment can detect the signal and record it for diagnosis by our vibration engineer.

The vibration data will be uploaded to a hand held data gathering computer and Digitally Transferred to our office in the region for analysis and full detailed report.

### ■ Spectrochemical Oil Analysis

The compressor is an integral part of an air conditioning unit. With only the analysis of its oil, the lab report can get a "look inside" without tearing it completely down. When unacceptable wear conditions develop inside the compressor, a corresponding detectable change in the characteristics of the oil will become evident. This oil analysis report, plus the related knowledge of our qualified and experienced service engineer, will provide valuable information about the internal condition of a compressor and thus the performance of the unit itself.

**Lubricant Condition:** The assessment of the lubricant condition whether the system fluid is healthy and fit for further service or is ready for a change.

**Contamination:** Contaminants in the form of rust, dirt, water, acid are the leading cause of machine degradation and failure. Increased contamination alerts you to take action in order to save the oil and avoid unnecessary machine wear.

**Machine Wear:** An unhealthy machine generates wear particles at an exponential rate. The detection and analysis of these particles assist in making critical maintenance decisions. Machine failure due to worn out components can be avoided.





## ■ Refrigerant Analysis

A contaminated refrigerant can damage the integral components of a cooling unit, affect its efficiency, and decrease its working life. Therefore, it is necessary to find contaminated refrigerants before they are used and evaluate their quality. We offer services for refrigerant analysis conducted by a third party independent laboratory and can provide full analysis report and recommendation regarding the operating Refrigerant cleanliness and associated contamination in the circuit/s for the following:

Complete ARI Standard 700-93 - The purpose of the test is to evaluate and accept/reject refrigerants, regardless of source, for use in new and existing air-conditioning products refrigerant suitability - From analyzing refrigerant from a specific unit, The lab can evaluate the refrigerant's contamination levels. Corrective actions are recommended when contaminant levels fall outside acceptable ranges. A refrigerant suitability or compatibility report, in addition to the knowledge of our qualified and experienced service engineers, will provide valuable information about the refrigerant before it is used, sold, or disposed.



## ■ Refrigerant Containment and Management

We will use recovery, recycling and reclamation of your refrigeration system as appropriate to comply with current world wide refrigerant legislation. Our technicians are certified to perform recovery, reclamation and recycling of all operating Refrigerants. We always keep you informed regarding refrigerant issues and opportunities. We will make recommendations based on equipment age and the business objectives of your facility to comply with the same legislation.

We provide CFC & HCFC Refrigerant Engineered & Drop In Conversions for all types of cooling equipment with OZONE friendly ZERO ODP refrigerants and provide technical support services for refrigerant containment.

## ■ Eddy Current Testing

Eddy current analysis is an electromagnetic technique and is completely non-destructive. It works on the principle of Electromagnetic Induction. There is no dangerous radiation or hazardous chemicals involved with this technique. Our associate specializes in the inspection of installed heat exchanger tubing Eddy Current Testing used in the Commercial Air Conditioning, industrial refrigeration Marine and Chemical Industries. Eddy Current is limited to testing metallic materials and works best on nonmagnetic alloys. It can be applied to magnetic materials such as Monel, Nickel, Ferralium or other Ferritic Stainless steels using magnetic saturation techniques.



## ■ Thermographic Infrared Analysis

With heat-sensing scanners and imaging equipment, our UK associate can detect any abnormal temperatures or heat build up in your mechanical system. If present, there are signs that a system has problems. For example, many building systems have electric motors which are costly to repair or replace. Our thermographic analysis will quickly spot the overly high operating temperatures that are the principal cause of costly motor repair.

Thermographic testing also pinpoints such problems as loose or corroded electrical connections, deteriorating wire insulation and inadequately lubricated bearing. This testing is a powerful tool for early problem identification and avoidance of potential breakdowns. Our written report will include specific recommendations for correcting any detected problems.





## REPLACEMENT PARTS & COMPONENTS

A.A.J Air Conditioning & Refrigeration Services provide all kinds of HVAC&R complete range of replacement parts and components procured from original equipment manufacturers / genuine replacement parts. These give us terms of cost efficiency by eliminating expensive downtime and providing fast procurement of required components.

We also provide micro processor controllers for equipment upgrading and energy saving control devices from our associates in Europe & America.



## GI & PRE-INSULATED DUCT

We have a fully fledged well mechanized duct factory equipped with state of art CNC machines and can make any size and form of rectangular ducts. Besides we also fabricate Pre Insulated Ducts on site for any sizeable project. We have produced huge number of lengths of ducts both GI & Pre Insulated for our own projects as well as supplied to our Sub Contractors



A.A.J Air Conditioning & Refrigeration Services are available 24X7 to provide services throughout the SULTANATE OF OMAN, KINGDOM OF BAHRAIN, KINGDOM OF SAUDI ARABIA. Having our Field Service Engineers based in the region enables us to promptly answer your emergency or repair request

Our motto is...

**"Eco-Friendly Principles & Green Building Concept"**

