

# ICEBERG INDUSTRIES

## Operation & Maintenance Services

**ICEBERG INDUSTRIES** holds a unique position in the industry, for not only that we supply & install Air Conditioning & Refrigeration Systems but also carry out Operation & Maintenance of HVAC Equipment all over Pakistan.

Maintaining HVAC systems is critical to demonstrate. We are following the industry's "standard of care". We execute Maintenance, Repairs and Modifies a wide variety of HVACR equipment, operate and perform corrective Operation & Maintenance on air conditioning and refrigeration systems and related equipment in accordance with operations, safety and regulatory requirements, takes proper action on complaint.

Considering the Operation & Maintenance as utmost important matter to our valuable customers, we maintain the full fledged inventory of all spares ex stock, keep updating inventory of tools with high-tech cutting-edge tools to expedite and automate troubleshooting & foreign trained teams of Engineers & Technicians who can reach on time and on site. The kinds of services we provide are

- \* 24 Hours On-Call Troubleshooting
- \* 24 Hrs Operation & Maintenance services
- \* Monthly Inspection & Maintenance Visit
- \* Quarterly Inspection & Maintenance Visit
- \* Complete Annual Maintenance Services

To render the best of best services, we have the following latest tools available with us.

### FLUE GAS ANALYZER

An electronic gas' components sensor

- \* Measure the components in flue gases e.g. CO<sub>2</sub>, CO & O<sub>2</sub> etc. for analysis of chiller behavior as well as keeping the chiller; environment friendly machine.
- \* Precise adjustment of chiller burner ensuring the cost effective gas consumption.



### ENDOSCOPY SET

A flexible type of video-scope that houses a very small embedded CCD (charge couple device) chip, video image is then relayed back to the display

- \* Examines internal conditions of chillers body without much cutting of chiller body and thus making the diagnostic step hassle free.
- \* Inspects heat transfer tubes of chiller up to any length for examination.



### FILTRATION PLANT

- \* Filter out high contents of Copper and Iron from the chiller's Lithium Bromide solution.
- \* Particles of even 0.1 5m sizes can be filtered out improving the LiBr quality up to 80%.
- \* Portable, easy to mount and above all can be used during operations.

### TUBE CLEANER

An electro-mechanical tube cleaner that brush out scales with adjustable length and diameter of shaft

- \* Efficient and time effective which can clean tubes smoothly.
- \* Can be used in two modes either dry or wet.



### TUBE EXPANDER

Latest microcontroller chip (89C52) based tube expander



- \* Use for fitting/fixing the tubes in machine slot;
- \* Can be utilized on tubes of SS & Copper & on variable tube sizes from 1/2" to 2" diameter.
- \* Along with tube expander, is available tube cutter and expeller that makes the tube replacement experience completely mechanized, simple and fast.

### CHEMICAL WATER TREATMENT

Iceberg has vast experience of 20 years in water treatment for Absorption chillers having refined chemicals that can

- \* Minimize microbiological contamination (algae)
- \* Control scaling in critical parts/tubes of absorption Chiller
- \* Prevent corrosion
- \* Protect against the risk of LEGIONELLA contamination

### FREON LEAK DETECTOR

- \* Hand held battery based leak detector
- \* Uses Freon gas for detection of most minor leakages that are impossible to diagnose with simple pressure testing

