# Round the World branches of activities:-

- **HVAC** 
  - o HEATING
    - Boilers
      - Hot water boilers.
      - Steam boilers.
    - Heaters
      - Duct in-line heaters.
      - Electrical heaters.
    - Heat pump.
    - 4- Pipe system.
  - **VENTELATION** 
    - Air washers.
    - Air Handling Units.
    - Fans
      - Fresh air fans.
      - Exhaust fans.
      - Axial fans.
      - Centrifugal fans.
      - Roof top fans.
      - Ex-proof fans.
  - o A/C (AIR CONDITIONING)
    - Chillers of Absorption, (Centrifugal, Screw, Scroll and Reciprocating) Compressors\*
      - \* New version chillers of variable speed compressors and fans can save energy {high ESEER (European Seasonal Energy Efficiency Ratio)}.
      - ACWC (Air Cooled Water Chillers)
        - Standard chillers.
        - o Tropical Environment (52°C) chillers.
          - Packaged ACWC
          - Remote Condenser ACWC; These chillers of split condensers which can be places in any location in the building and the remaining items of the system can be placed in any other location (i.e. inside the building) to be clean and safe. We recommend our customers to order these units.
      - WCWC (Water Cooled Water Chillers)
    - **COOLING TOWER** 
      - Centrifugal fans cooling towers.
      - Axial fans cooling towers.
    - AHU (AIR HANDLING UNITS)
      - Vertical type air handling units (up to 30 Tons).
      - Horizontal type air handling units (any size).
      - Ceiling type air handling units (up to 30 Tons), starting from (29) cm height.
      - Single skin air handling units.
      - Double skin air handling units.
      - Single zone air handling units.
      - Multi zones air handling units.
      - 2-Pipe system air handling units.
      - 4-Pipe system air handling units.
      - Backwards fans air handling units.
      - Forward fans air handling units.
      - Air handling units with humidifiers.
      - Air handling units with de-humidifiers.
      - Air handling units with electrical heaters.

- Air handling units with heat recovery.
- Air handling units with Silencers.
- Air handling units with all type of filters and most Efficiencies (Washable, Synthetic, Bag, Re-generable acrylic class G4, Hype) and others which can absorb gaseous & organic vapors...etc.
- FCU (FAN COIL UNITS)
  - DX fan coil units.
  - Chilled water fan coil units.
    - Concealed fan coil units.
    - o Decorative fan coil units (all color).
    - o Floor stand fan coil units (all color).
    - o Wall mounting fan coil units (all color).
    - o Ceiling type fan coil units (all color).

### DUCTED A/C UNITS

- Roof top packaged units.
- Fully fresh air packaged units.
- Split ducted units of indoor and outdoor units
- Concealed ducted units
- Remote Condenser Ducted units; These units of split condensers which can be places in any location in the building and the remaining items of the unit can be placed in any other location (i.e. inside the building) to be clean and safe. We recommend our customers to order these units.
- VRF (Variable Refrigerant Flow) A/C SYSTEM
  - Air cooled VRF outdoor units (Heat Pump) serving Multiple indoor units
  - VRF Indoor Units (evaporator units)
    - o Hi-Wall type
    - Concealed ducting type
    - Ceiling mounting type
- CLEAN ROOMS A/C SYSTEM
- COOLERADO SYSTEM

It is the newest & most economical air-conditioning system in this century. These units can cool the buildings *without compressor*. This system can reduce the ambient temperature from (70°C) to (13°C) by consuming (1) hp power only for a room of (5) Tons capacity / Fully Fresh Air requirement.

- PUMPS
  - SECONDARY PUMPS OF INTELLIGENT VARIABLE SPEED CONTROLLER (FREQUENCY INVERTER)
  - PRIMARY PUMPS
    - o End suction centrifugal pumps.
    - Vertical in-line pumps.
    - o Horizontal split case centrifugal pumps.
    - o Fire fighting pumps.
    - o Submersible pumps.
- METAL WORK
  - DUCTING
    - o Galvanized sheet metal duct work.
    - Hood sheet metal work.
    - o Pre-insulating duct work.
    - o Silencers (Sound Attenuators).
- AIR OUTLETS
  - Grills
  - Registers
  - Diffusers
  - Louvers

- Volume dampers
- Motorized Volume dampers
- Fire dampers
- Jet diffusers

#### PIPING

- Copper piping
- Galvanized piping
- PVC & UPVC piping
- Drainage piping
- POLY PROBELEN piping
- Ductile cast iron piping
- Carbon steel piping (mainly Schedule 40)

## FITTINGS

- All needed fittings:
  - o 90° Elbow
  - o 45° Elbow
  - o T-section fittings
  - o Y-section fittings
  - Reducers
  - o Flexible connections
    - Steel
    - Rubber
  - o Flanges
    - Neck
    - Flat
    - End
  - o End plugs

### INSULATION

- Fiber glass insulation of different thickness, densities & cladding.
- Rock wall insulation of different thickness, densities & cladding.
- Styroboard insulation
- Double glassing windows heat saving insulation.
- Thermo stone wall insulation.
- Foam insulation.
- Sandwich panels insulation.
- Pipes high density thermal insulation + Aluminum or galvanized cladding.
- Arm flex (Closed Cell Elastomeric) insulation.

# VALVES & ACCESSORIES

- Balancing valves
- Globe valves
- Gate valves
- Butterfly valves
- Safety valves
- Strainers
- 2-Way valves
- 3-way valves
- 4-way valves

#### CONTROL

- 2-Way valve actuators
- 3-way valves actuators
- 4-way valves actuators
- Air vent
- Chilled water bubbles remover

- Thermometers
- Thermostat
- Temperature sensors
- Temperature gauges
- Pressure gauges
- Hi pressure switch
- Low pressure switch
- Hi-Low pressure switch
- Differential pressure switch
- Anti-freeze switch
- Flow switch
- Selector switch
- Air flow meters
- Water flow meters
- Electrical controls

#### REFRIGERANTS

- R123, R124, R134a, R404A, 407A, R407C, R408A, R409A, R410A, R507
- R11, R12, R22, R500, R502
- Ammonia (R717)
- CO<sub>2</sub> (R744)
- Nitrogen (R728)

#### - REFRIGERATION

- $\circ$  Cooled rooms & stores of (+5°C) to (-5°C).
- o Freezing rooms & stores (-18°C) to (-30°C).
- o Shock freezing rooms (-40°C) to (-80°C).
- Slaughters
- T&B (Test and Balance): There are few companies in the world doing this activity.

We are proud to be one of these companies doing this activity since 2003-2004.

## - ESCALATORS & LIFTS

#### - FIRE ALARM & FIGHTING SYSTEMS

- Smoke detectors
- o Ionized smoke detectors
- Heat detectors
- o Audio alarm
- Visible alarm
- o Bells
- o Broken glass
- o Sprinklers
- o Zone control valve
- o Tamper switch
- o Contact module
- Hose and nozzles
- o Extinguisher
- o Pumps & Jockey pumps

## - ELECTRICAL & ELECTRONIC DIVISION

- Transformers
  - Power transformers
  - Distribution transformers
- o Switch gear
- o Ring main unit
- o Power distribution Boards
- Control Boards

- o Cabling and wiring
- o Earthing System
- o Lighting (Lumens design).
- Sockets and Socket outlets
- GENERATOR SETS: Synchronizing these sets with the main power.
- UPS (Uninterruptible Power Supply): Covering power during the time between the main power OFF and operation of Gen Sets.
- TELECOMMUNICATION SYSTEM
- DATA NETWORK
- INTEGRATED TELEVISION AND SATELLITE SYSTEM
- SOUND AND PUBLIC ADDRESS SYSTEM
- CLOSED CIRCUIT TELEVISION (CCTV) MONITORING SYSTEM
- BMS (Building Management System):- All above activities can be controlled through this system and can be monitored through Internet or Ethernet. SMS option to receive messages on your mobile phone that there is a defect somewhere in the system. Some defects can be solved from home or any place in the world. You can set the system where ever you are and any time you wish. The system controls the operating of all units in a sequence you program it before automatically. You don't need to do anything while this system is working well.

We are proud to be one of the leaders doing such system in Baghdad/IRAQ since 2006 and it is working perfectly till today.

- PLUMBING
- STEEL WORK
  - o Hangars
  - Stores
  - o Tanks
    - Storage tanks
    - Pressed steel tanks
    - Expansion tanks
- DESIGN AND RE-DESIGN DIVISION: We design the project refer to the customer requirements.

We can re-design any project having their own design according to the latest upgrade specifications available in the world matching the requirements of the customer to:-

- 1- Save the investing money during installation of the project.
- 2- Reducing the running cost of the project during operation.
- 3- Durable and Reliable project to reducing maintaining cost.
- 4- Latest technology.
- 5- Saving space.
- 6- Reducing energy consumption.
- 7- Compatibility between the design and the manufacturer products.
- 8- Matching Iraqi tropical environment.
- 9- Matching environment requirements.