



Corporate Profile - 2019

TOTALTECH

OUR PRODUCTS

RESIDENTIAL & COMMERCIAL



WINDOW



CASSETTE



FLEXI



WALL MOUNTED



FREE STANDING



CONDENSING UNIT



DUCTED



CHILLED WATER



INVERTER



WATER TANK COOLER



HEAT PUMP CHILLER



CENTRAL DUCTED UNIT



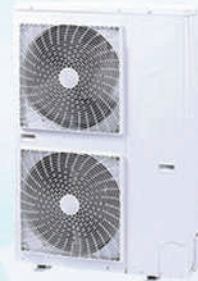
ROOF TOP PACKAGE



AIR HANDLING UNIT



AIR COOLED CHILLER



VRS



CHEST FREEZER



DISPLAY CABINET

EXCEPTIONAL
PERFORMANCE



WINDOW

FEATURES

- High efficiency rotary / reciprocating compressor
- Available in cool, heat pump & electric heater models
- Guaranteed operation up to 57°C
- Whisper quiet operation
- Special hi-tech acoustic insulation
- 3 speed fan control
- 3 air filters (anti-bacterial, electro static and charcoal)
- Auto air sweep
- Available in 50 & 60 Hz

WALL MOUNTED

FEATURES

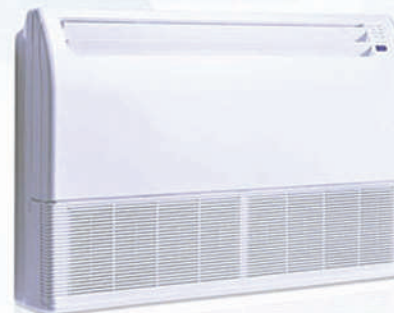
- Modern & attractive designs
- LCD (Liquid Crystal Display)
- High performance fan
- 24 hour independent timer
- Quick cooling & heating
- Air sweep with wide angle of distribution
- Low noise operation
- Auto restart & memory function
- Low power consumption

CONTROLS

- Wireless remote control
- Cool/Heat/Auto/Fan operation modes
- Sleep mode & ON/OFF timers
- Auto restart function
- 3mins compressor delay protection
- Room temperature setting



FLOOR



FLEXI SPLITS

FEATURES

- FLEXI-ble Installation. Floor/Ceiling
- Quiet turbo fan
- Immediate cooling or heating
- Low noise & silent operation
- Easily detachable grill for cleaning
- Low power consumption
- Wide angle of air distribution

CONTROLS

- Wireless remote control
- 3 operation modes - Cool/Heat/Fan
- Fan speed and air swing control
- Sleep mode & ON/OFF timers
- Auto restart function
- 3mins compressor delay protection

CASSETTE

FEATURES

- Modern & attractive designs
- Quiet turbo fan
- Immediate cooling or heating
- Easily detachable grill for cleaning

CONTROLS

- Wireless remote control
- 3 operation modes - Cool/Heat/Fan
- Fan speed and air swing control
- Sleep mode & ON/OFF timers
- Auto restart function
- 3mins compressor delay protection
- Room temperature setting





DUCTED

FEATURES

- Designed & tested in ARI standards
- Leak tested with electronic machines, piped and internally steel
- Fully charged with refrigerant R-22/R407C
- Whisper quiet operation
- Made from high quality galvanized, weather resistant steel & powder coated
- Fully hermetic scroll or reciprocating type designed
- Compressor provided with crankcase heaters
- Coils made of seamless inner grooved copper tube and aluminum fins
- Easy accessible control box, compressor and high pressure switch

FREE STANDING

FEATURES

- Modern & attractive designs
- LCD (Liquid Crystal Display)
- 24 hour independent timer
- High performance fan
- Immediate cooling or heating
- Air sweep with wide angle of distribution

CONTROLS

- Wireless remote control
- 3 operation modes - cool/heat/fan
- Fan speed and air swing control
- Sleep mode & on/off timers
- Auto restart function
- 3mins compressor delay protection
- Room temperature setting



LO - STAT



HI - STAT



WALL MOUNTED



CASSETTE



FLEXI FLOOR/CEILING



FREE STANDING



DUCTED - LO STAT



DUCTED - HIGH STAT

CHILLED WATER FCU

FEATURES

- Manufactured from high grade engineering plastic and corrosion resistant sheet metal
- Insulated to reduce condensation and noise levels
- Low noise, with high efficiency cross flow blowers
- High efficiency, long life, high power factor, capacitor driven motor
- Cooling coils are manufactured from seamless copper tubes mechanically bonded to high efficiency waffled fins for maximum heat transfer
- The units are provided with standard high efficiency filters (Washable type)
- Galvanized steel casing
- Efficient heat exchange made of copper tube and enhanced aluminum fins
- Motor can withstand winding temperature in excess of 130°C (256°F)
- Fans are statically and dynamically balanced for quieter and vibration free operation
- Optional coils are available for district cooling applications with low GPM



AIR HANDLING



WALL MOUNTED



CASSETTE



FREE STANDING



DUCTED SPLIT

INVERTER

FEATURES

- A DC inverter A/C uses magnetic force to operate, reducing power consumption
- DC inverter technology enables the A/C to be activated with a high operating frequency and 20% increase of cooling and heating capability. Room temperature can reach the set level in the quickest time
- From Hitachi / Mitsubishi, famous inverter compressor manufacturer
- R410A eco friendly refrigerant
- Small torque fluctuation, low vibration and quiet operation
- High efficiency due to its patent internal structure design
- Neodymium permanent magnetic rotor, has powerful magnetic force, large torque and high efficiency
- Internal oil circulation structure
- Concentrated winding, improving low frequency efficiency
- Equipped with IECO energy-saving technology
- Rapid Cooling and heating applies compressor high frequency start up technology, offering instant ambient temperature changes



CONDENSERS

FEATURES

- It can be matched with all the indoor models to deliver the Rated Capacity
- All are made of heavy gauge powder coated galvanized steel suitable for outdoor installation
- Condenser fan motors are inherently protected and permanently lubricated type
- Units are completely factory wired with single point power input
- High efficiency hermetic compressors
- Available in R-22 / R407C / R410A refrigerant to work till 54°C



TOP DISCHARGE



SIDE DISCHARGE

WATER TANK COOLER

FEATURES

- Available for 200 to 1000 gallons
- Compact & energy saving design
- Automatic motor & compressor shut-off at preset water levels
- Cables & tubes - protected & insulated against heat, dust & humidity
- Micro processor based control:
 - temperature adjustment
 - cool mode selection
 - water level sensing
- Totally sealed motor
- Safety devices controlling voltage at 12V prevents electric shock





INDOOR



OUTDOOR

CENTRAL DUCTED SPLIT

FEATURES

- Solid & rugged construction of powder coated metal cabinet ensures years of rugged service, equipped with most advanced components for outstanding performance.
- Coils are made of seamless inner grooved copper tube/corrugated aluminum fins
- Outdoor units are suitable for mounting on the roof or on the ground. All units are factory assembled, piped, internally wired and fully charged with R-22 / R407c. These units are tested in accordance with ARI standards.

ROOF TOP PACKAGE

FEATURES

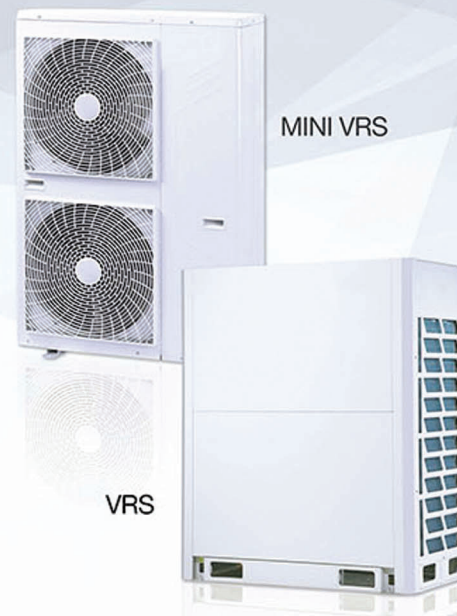
- Units are horizontal airflow type and are suitable for mounting on the roof or on the ground. All units are factory assembled, piped, internally wired and fully charged with R-22. These units are tested in accordance with ARI standards
- Units available voltages: 380-415V/3PH/50Hz & 380V/3PH/60Hz 208-230V/3PH/60Hz & 460V/3PH/60Hz
- All the units are provided with compressor lockout either by locking relays or by high pressure control trip with manual reset switch
- 100% fresh air roof top units as an option



3-25 TONS



30-90 TONS



MINI VRS

VRS

VRS

FEATURES

- HIEER and COP alues
- All DC fan motors
- High efficiency heat exchangers
- Multi-Solenoid valves control
- Double EXVs control
- Wide capacity range

CONTROLS

- Wide operation range
- Long piping capability
- Wide range of indoor units
- Duty cycling
- Precise oil control technology
- Intelligent defrosting technology
- Rapid cooling or heating

HEAT PUMP CHILLER

FEATURES

- Completely integrated with water storage tank, pump and accessories
- Cabinet is powder coated to withstand the corrosive atmosphere
- Superior liquid handling capacity
- Works at high efficiency due to its near 100% volumetric efficiency
- High operation temperature and high working pressure
- AISI 316 stainless steel for effective corrosion resistance
- Condenser coil used in the system of fin and tube type
- External rotor fans are used for better performance
- Water entering and leaving temperature sensors





25-206 TONS

AIR COOLED CHILLER

FEATURES

- Corrosion-free profile construction
- Multiple compressor design
- Fitted with Scroll compressor with anti-vibration mounts
- Refrigeration circuit complete with TEX valve, replaceable drier, sight glass etc
- Compressor and fan motor provided with overload relays for protection

AIR COOLED CONDENSER

- Condensers are manufactured from seamless inner groove copper tubes mechanically expanded into aluminum fins. Type-L heavy wall seamless copper tubes are provided for coil headers. The condenser coils are hydrostatic pressure tested in accordance with the UL 1995 standard

AIR HANDLING

FEATURES

- The 4AH series air handling units are based on Awal's ADS series. The feature of this series is the flexible-modular type construction with 11 basic sizes covering a wide range of air flow from 2890 cu.m/hr to 45,680 cu.m/hr
- Units are manufactured at ISO 9001 certified facility centre using quality standards for the components used in construction of the units
- The blue skin pre coated outer panels are feature of ADS series which is known for its aesthetics



40,000 CFM

CHEST FREEZER

FEATURES

- 100% environment friendly
- CFC - free insulation foam
- Scratch resistant, powder coated
- Plastic coated metal baskets
- Rust & dent proof
- External control board
- Yellow pilot lamp / quick freezing
- Red pilot lamp / alarm
- Green light / input
- Low energy consumption with extra thick insulation
- Discharge of defrosting water



DISPLAY CABINET

FEATURES

- Environmentally friendly, tropicalised cooler
- Pre-painted interior with single vertical tube light
- PVC coated wire shelf designed to hold containers of different upright sizes
- Easy roll out sliding condensing unit
- 0 to 10°C adjustable thermostat
- Energy efficient compressor



450 LTR

350 LTR

TESTING FACILITIES

QUALITY CONTROL

TESTING LABORATORY

There are five (5) Psychrometric chambers equipped with internationally reputed brands of measuring equipment for conditioning tests including Maximum Temperature Operating Test and Abnormal Test

RAIN TEST EQUIPMENT

The Rain Test Equipment simulates rain using a drive for spray apparatus moisture resistance. This is to check the enclosure of the appliance and provide a degree of protection against moisture in accordance with the classification of the appliance.

INTEGRATED ELECTRICAL SAFETY TEST

Auto and manual facilities for High Voltage, Insulation Resistance, Earth Contact, Leakage Current, Low Voltage Start ability and Electrical Performance tests on air conditioners.

BALL PRESSURE TEST APPARATUS

Test of plastic part to ensure the plastic properties at high temperature under stress/load condition.

AIR SAMPLER

The Air Sampler carries the air to the sampling chamber, where, with the help of RTD it measures the Dry Bulb Temperature and Wet Bulb Temperature (DBT and WBT) of the air.

GLOW WIRE TEST

This test is the fire test of plastic parts. It is conducted to ensure the good fire retardant properties.

MARD SIMULATOR TRANSPORTATION SHAKER

Transportation Touch Screen Control intended to qualify the package and the enclosed product to ensure that they together can withstand the rigors of transportation.

MILLI-OHM METER

An insulation resistance testing for very fine low value in milli-ohm is conducted for the electrical safety test of products.

CODE TESTER

The Code Testers create an external static pressure and measure the air volume of the Indoor units.

DESIGN PROTOTYPING WORKSHOP

The design prototyping workshop is where the prototypes for new product designs are built and evaluated. It is fully equipped and has the technical facilities to conduct the proper evaluation and research.

AIR CONDITIONER TESTING LAB

There are two psychrometric test labs, named AGTL 1 & AGTL 3. Both laboratories are accredited to ISO 17025:2005 by Dubai Accreditation Center.

NEEDLE FLAME TEST

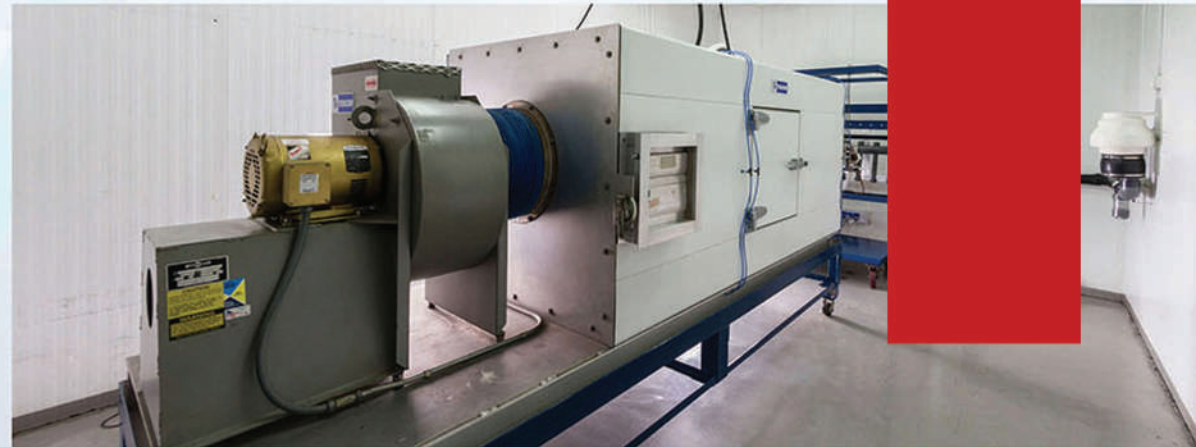
Plastic part for no flame and ignition of the test specimen and no ignition of the tissue paper placed below the test specimen while the test is carried to ensure the fire retardant properties.

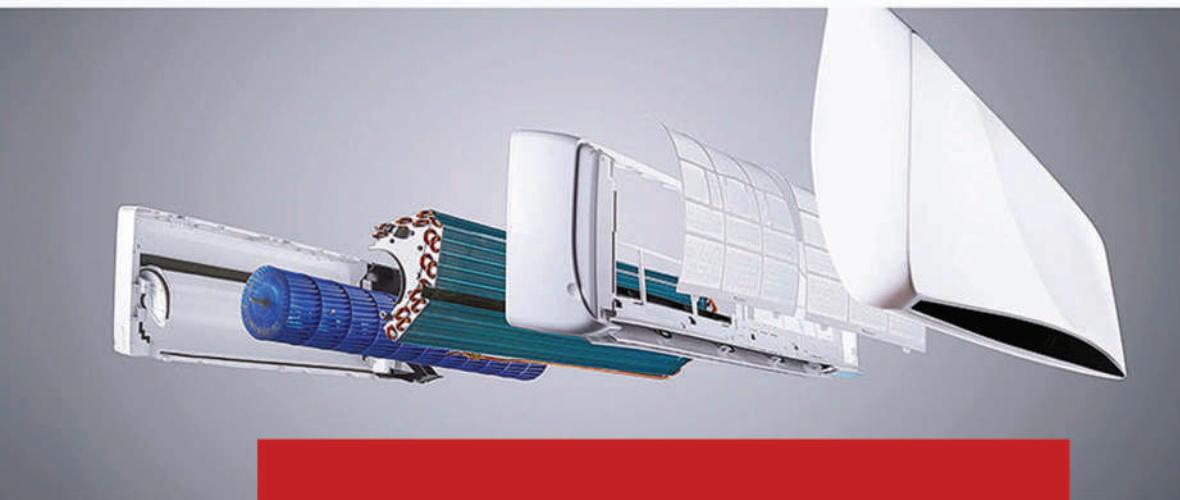
SOUND LEVEL METER

Sound level meters can be used for simultaneous measurement of all unit (WAC and IDU) noise parameters. The instrument uses an intuitive, color coded display to ensure ease of use.

ROTATING VANE ANEMOMETER

Rotating vane anemometer is used for collecting air velocity, CFM, and temperature measurements at supply and return grills.





PRODUCT DESIGN CAPABILITIES

- Window Air Conditioners
- Split Air Conditioners
- Central Air Conditioners
- Residential Roof Top Packaged from 3 to 6TR
- Commercial Roof Top Packaged from 8 to 25TR
- Large Capacity Roof Top Packaged from 30 to 90TR
- Ducted Splits from 4 to 120TR
 - Heat Pumps
 - Chilled Water Decorative splits, FCU and AHU
 - Chest Freezers
 - Multi Splits/VMS
 - AHU's up to 60000 CFM
 - Chillers with Scroll Compressors up to 200TR
 - Non-Standard Products
 - Visi Coolers and Chest Freezer

CUSTOMIZED PRODUCT DESIGN

CUSTOMIZED PRODUCT DESIGN

TOTALTECH Design and Development department specializes in creating customized product designs according to customer needs. We provide efficient and reliable solutions for application in any commercial or industrial buildings. Awal Gulf's Design and Development department has the flexibility and engineering expertise to meet even the most challenging project requirements.

PRODUCT DEVELOPMENT TOOLS

Pro/ENGINEER is a 3D product modeling software that our designers use. It enables them to design products in the virtual world and visualize a concept before finalizing it. This tool allows the concept to be conveyed through drawings to enable our manufacturing team to produce them, thus resulting in a lot of saved time.

COIL SELECTION SOFTWARE

Coil Selection software is a thermal engineering tool which allows HVAC engineers to design the very nervous system of an air conditioner; the outdoor and indoor coils. It is customized to take on any type of ambient conditions and the type of refrigerant and geometry of the coil to come out with the best possible options as per the user's inputs, in the least possible time.

OPTIONAL FEATURES

- Anti Corrosive Fins for Condenser Coils
- Antifreeze Thermostats
- Hour Meter
- Phase Loss Protection
- Hydrophilic Coated Fins for Evaporator Coils
- Voltage Monitor
- Thermostat: Provides Cooling, Staged Heating and Fan Control Fan Cycling Switch
- Fan Speed Controller
- Temperature Humidity Sensors
- Micro Processor Control
- Compressor Alternating Switch
- Overload Thermal Protection for Compressor
- Volt Free Contacts for BMS
- Dual and Adjustable Pressure Switches
- Double Skin Construction
- Compressor Interlock with Blower
- SS Tray/Hardware
- Overload Thermal Protection for Motors
- Fine/Bag Filter
- Backward Curved Blower

APPLICATION FIELDS



RESIDENTIAL



SCHOOLS



HOSPITALS



SUPER MARKETS



BANKS



AIRPORTS



HOTELS



PUBLIC TRANSPORT



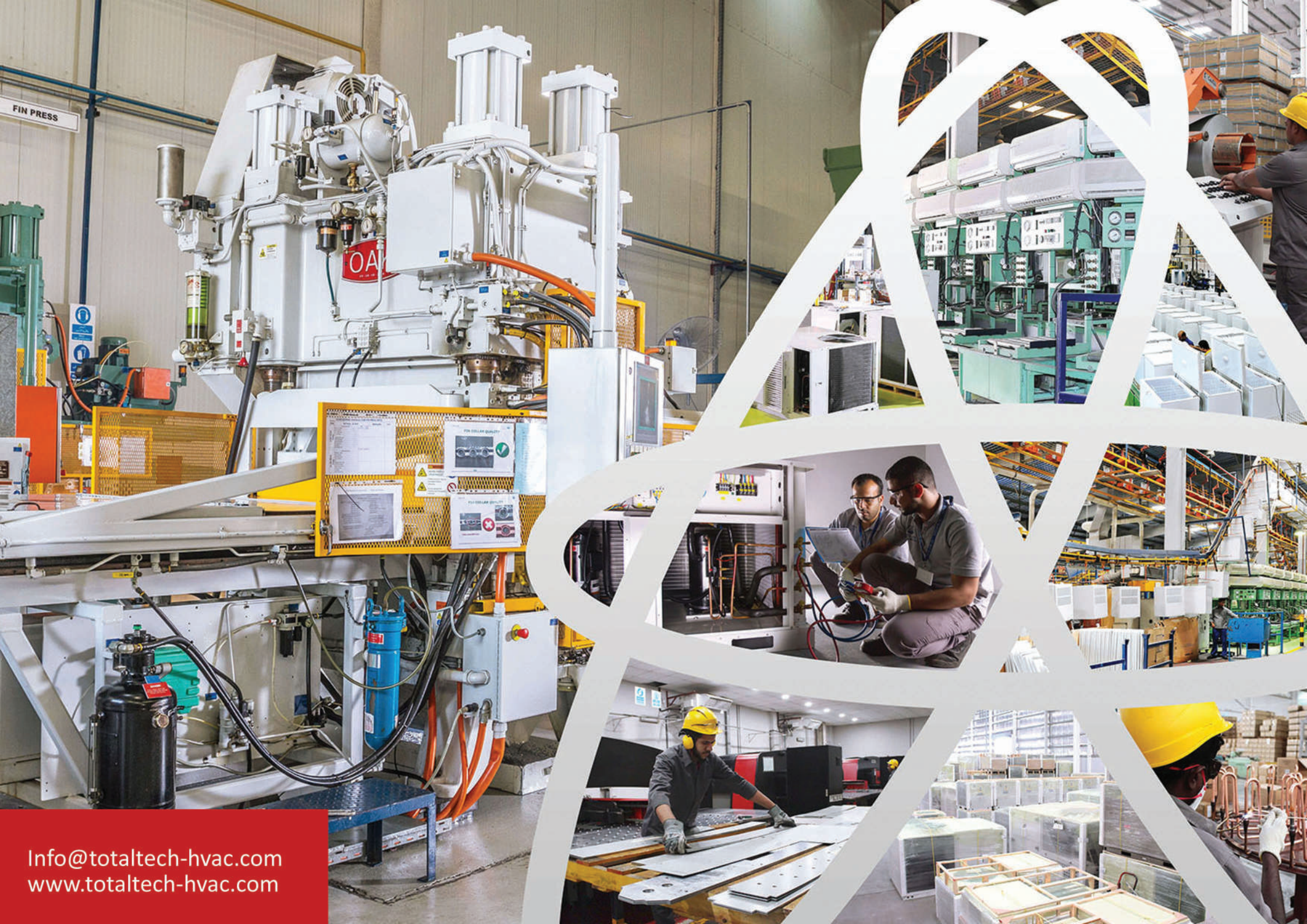
MALLS



BUILDINGS



INDUSTRIAL



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