

# 30<sup>th</sup> Anniversary of the Montreal Protocol and World Ozone Day - 2017 Industry Exhibition



Ministry of Environment, Forest  
& Climate Change



**30<sup>th</sup> Anniversary of the Montreal Protocol**  
**(1987-2017)**



## BIRLA AIRCON



Birla Aircon a Division of Pratyaksh Birla Group is professionally managed 3-decades old company in the field of Air-conditioning and Commercial Refrigeration. The company has State Of The Art Plant in the Northern India and a leading name for the custom made Refrigeration solutions. The customized refrigeration solutions cover a wide range of applications and the ISO9001:2015 quality managed system has earned accolades for the company.

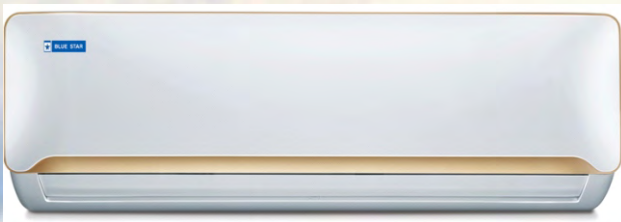
They've successfully supplied Water Coolers, Water Chillers, Deep Freezers, Mortuary cabinets, Ice cream Freezer on Wheels, Mobile Lassi Coolers etc



## BLUE STAR LTD.



Blue Star is India's leading air conditioning and commercial refrigeration company, with an annual revenue of over ₹4400 crores (over US\$ 681 million), a network of 35 offices, 5 modern manufacturing facilities, 2700 employees, 2200 dealers and 600 retailers.



The Company fulfills the cooling requirements of a large number of corporate, commercial as well as residential customers. Blue Star's R-32 is a promising refrigerant in the air-conditioning industry, which has a potential of economically satisfying the requirements for environmental protection. It aids in faster cooling, has nil Ozone Depletion Potential and lowest Global Warming Potential, making it a highly eco-friendly refrigerant.





Daikin Air-conditioning India Pvt. Ltd. (DAIPL) is a 100% subsidiary of Daikin Industries Ltd., Japan, a global leader in the manufacturing of commercial-use and residential air conditioning systems.



Backed by the superior technology, the organization offers a wide range of energy efficient air conditioning solutions to the Indian customers. It has been successfully offering premium air conditioning solutions in the Indian market for large-scale projects.

In a developing country, Daikin India is the first manufacturer to produce low GWP HFC 32 based Room ACs at its state-of-the-art manufacturing facility at Neemrana, Rajasthan. Since 2013, Daikin India has sold more than 1.5 Million low GWP HFC-32 based ACs in the market.



## ENERGY EFFICIENCY SERVICES LIMITED



**ENERGY EFFICIENCY SERVICES LIMITED**  
A JV of PSUs under the Ministry of Power

EESL is a joint venture company of four power sectors enterprises i.e. NTPC Ltd, Power Grid Corporation of India (PGCIL), Power Finance Corporation Ltd. (PFC) and Rural Electrification Corporation (REC) with an aim to function as an Energy Service Company (ESCO). EESL has been carrying out market transformation through affordable energy efficient appliances and schemes.



The organization facilitates the implementation of energy efficiency projects for Demand Side Management (DSM) to reduce energy consumption. EESL has been the first such exclusive company for implementation of energy efficiency projects in South Asia. EESL's Energy Efficient Air Conditioning Programme (ESEAP) aims to launch 1.5 ton super-efficient air conditioners of ISEER 5.2 at affordable process. EESL has also been taking its schemes abroad and attempting to replicate the India-model to other countries.





Expanded Polymer Systems is an organization of dedicated professionals who strive to design and invent. With their expertise in polyurethane technologies since 1983, Expanded team specializes in design and development of customer specific products.



## FRIGTOOLS REFRIGERATION & ENGINEERING COMPANY



FRIGTOOLS manufactures a wide range of Refrigeration & Air conditioning Service tools & equipment since 1961. Range of equipment include Refrigerant Charging Equipment for domestic, commercial & industrial units, Refrigerant Recovery Units for cooling appliances, VRV/package units, central air conditioning plants, tonners/ISO tanks etc, Vacuum Pumps, Car AC Recovery, Recycling, Evacuating & Charging Units ,Refrigeration tools, Valves & Compressor Protective Devices, RAC educational Trainers/RAC compressors & air conditioners test benches & large nos of RAC Components & accessories as per customer's requirements.



FRIGTOOLS has RECEIVED INNOVATION & NEW PRODUCTS DEVELOPMENT AWARD from NIRATA for the year 2002 for Frigtools achievements in designing and development of Evacuating, Charging & Recovery Units. Also received Award of excellence energy saving from ACREX India 2011.



Godrej & Boyce Mfg. Co. Ltd.; a Godrej group company, started its humble journey in year 1987. Today they have 15 diverse divisions manufacturing locks to rocket launchers, and providing service to every corner of India and across the globe, touching the life of 750 million Indians who use one of their products every single day.



One innovative approach that is rising to the challenge is using a commonly available hydrocarbon - propane (Hydrocarbon 290, HC-290 or R-290) as the refrigerant. The standard-bearer for this approach in India is their appliances division (GODREJ Appliances) who developed R-290 AC in India. This R-290 AC makes a case that ACs in the Indian market can be built using climate friendly refrigerant that has zero Ozone Depletion Potential and lowest Global Warming Potential.



Honeywell ([www.honeywell.com](http://www.honeywell.com)) is a Fortune 100 software-industrial company that delivers industry specific solutions, which include aerospace and automotive products and services; control technologies for buildings, homes, and industry; and performance materials globally.

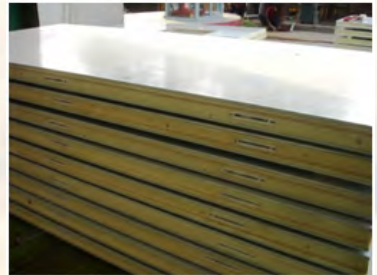


Their technologies help everything from aircraft, cars, homes and buildings, manufacturing plants, supply chains, and workers become more connected to make our world smarter, safer and more sustainable.

## INDUSTRIAL FOAMS PVT. LTD.



"Industrial Foams Pvt Ltd" is more than 2 decades old recognized Rigid PU System House having blending facilities at Kasna, Greater Noida. We produce Systems for SMEs for their requirement in Rigid Foam Systems - Insulation Panels, Refrigeration, Spray Foam, Rotomolding and Thermo ware.



All of our systems are HCFC free and produced using blowing agent Ecomate®, Cyclopentane, HFOs & Water, which is environmentally benign and having zero Ozone Depletion substance and low Global Warming Potential (Zero ODS and low GWP) with good mechanical and thermal properties as per latest environmental requirements.



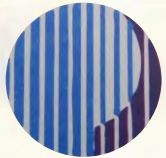


**TRANE**, a business of Ingersoll Rand the world leader in creating and sustaining safe, comfortable and energy efficient environments improves the performance of homes and buildings around the world. Trane solutions optimize indoor environments with a broad portfolio of energy-efficient heating, ventilating and air conditioning systems, building and contracting services, parts support and advanced controls for homes and commercial buildings.

**WHAT WE DELIVER:** Reliable, state-of-the-art energy-efficient systems that deliver comfort for commercial buildings and homes.



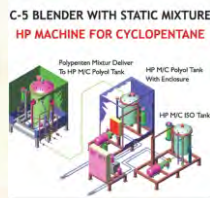
## POLYCRAFTPUF MACHINE PVT. LTD.



Founded in 1996, Polycraftpuf Machine Pvt. Ltd. has emerged as a world-class manufacturer of custom-engineered and standard polyurethane processing machinery.

Polycraftpuf delivers all types of Metering Machines for the processing of urethane foam, RIM (Reaction Injection Molding) and RRIM Equipment including complete Bulk and Blending Systems as well as innovative process controls and 24-hour service facility

Polycraftpuf offers an unparalleled level of service including a multimillion rupees inventory of spare parts and inventory of Rexroth. Our service technicians and repair department are available to provide any level of service that you require from a simple answer to on-line or on-site assistance.



**Products Manufactured/Services Offered :** Low Pressure PU machine, High Pressure PU machine, Hydraulic press, Conveyors, Shoe sole PU machine, Shoe Sole conveyors, Storage tanks, Blending tanks, Cyclopentane system

## REFRIGERATION & AIR-CONDITIONING SERVICING SECTOR SOCIETY



Refrigeration & Air-conditioning Servicing Sector Society" (RASSS) has been formed by a group of like minded people for the development and promotion of the Refrigeration and Air-conditioning (RAC) servicing sector for adopting good servicing practices in the RAC field. RASSS understand that the RAC servicing sector has been playing a crucial role in the Ozone Depleting Substances (ODSs) phase out programme since India became a Party to the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer including in the current Hydrochlorofluorocarbons (HCFCs) phase out programme being implemented by India.



Recognizing the importance and the need to have an association for the RAC servicing sector for appropriately addressing the concerns (Knowledge, skills, behavioral aspects) of this sector, RASSS has been formed as a registered society.

## SRF LTD.



SRF is committed to improving quality of life through range of products & services. They adopted 'continuous improvement' as a motto to shape plans and actions. Anchored by strong workforce of around 6,300 of different nationalities, working in 11 plants in India, 2 in Thailand and 2 in South Africa, SRF continues to cater customers in over 75 countries.

With a turnover of around Rs. 4,600 crore, SRF are market leaders in India and enjoy significant global presence. SRF is known for technical textiles, fluorochemicals, specialty chemicals, engineering plastics and packaging films.



Plant Site



R134a



R410a

SRF continues to leverage on its technical capabilities to develop and produce a range of environmental friendly fluorocarbon refrigerants such as HFC 134a, HFC 32 and other very low GWP HFOs.



## SUBROS LIMITED: MAC REFRIGERANTS & IMPACT ON ENVIRONMENT



Subros Limited, founded in 1985, is a technology driven company and the leading manufacturer of thermal products for Mobile air conditioning applications in India. Subros technical centre, which is located at Noida, India is having vast experience, rich knowledge, integrated facilities and technical experts to develop latest technology based product for Mobile air conditioning.



Subros technical centre is continuously working to enhance the thermal comfort of the mobility community in India by creating environment friendly solutions suitable for our climate and economy.

## VOLTAS



Voltas is India's largest air conditioning company, and on the world's premier engineering solutions providers and project specialists. Founded in India in the year 1954, Voltas offers Room Air Conditioners, Commercial Refrigeration products, Air Coolers, Water Dispensers, Water Coolers; and also serves a wide spectrum of industries such as heating, ventilation, refrigeration, electro mechanical solutions, textile machinery, mining and construction equipment, water management & treatment, and cold chain solutions. Voltas has built up a substantial reputation over the years, and is a resurgent brand in the AC industry; being the market leader in Room AC segment. It is also the proud recipient of National Energy Conservation Award from Bureau of Energy Efficiency, Ministry of Power, Government of India. It is one of the Top 10 companies with the Tata Group.

Green Refrigerant Products:

Inverter Air Conditioner:

Developed with Green Refrigerant: Solstice R-444B

Which is zero ODP & GWP : 295

Cooling performance improvement by 10% in tropical



Inverter Chest Freezer:

Developed with Green Refrigerant: R600a (isobutene)

Which is zero ODP & GWP : 3

Faster pull down & 30% higher energy efficiency than R134a



**In association with**



**Refrigeration and Airconditioning  
Manufacturers Association**



**IPUA**

**Indian polyurethane association**

**REGMA**

**Refrigerant Gas Manufacturers Association**



WE ARE ALL  
**#OZONEHEROES**

**For further information**

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