

Partnering with the Best : NEX choose BAUER for their Biogas plant in Pune

7th Jan 2016 saw the successful beginning of a first of its kind public private partnership (PPP) in India in the area of waste management.

Waste management is a serious issue for all the growing cities in India, so, for the Pune city, the renowned Poonawalla Group along with their technology partner Noble Exchange Environment Solutions (NEX) and the Pune Municipal Corporation have found an ideal solution.

These three organisations came together and now operate a very efficient 300 MT/day organic waste collection & processing system. By using thousands of litter bins, the organic waste is segregated at source. At specially designated collection centres, this organic waste is further sorted, crushed and converted into slurry and with the help of specially designed closed trucks, this slurry is carried away from the city to their state-of-the-art biogas plant on the outskirts in Talegaon. Here, this slurry is mixed with micronutrients / enzymes and pumped via a sealed system into temperature controlled large digesters where the micro-organisms / bacteria break the waste down and biogas is generated in this process. The gas is directed into the purification system for further processing and what is left behind is organic manure (fertiliser) which is rich in nutrients & is therefore in high demand for agricultural use.

The biogas is purified in various stages to remove carbon-dioxide, hydrogen sulphide and moisture thereby improving the methane content in the gas making it the most suitable & economic replacement fuel for LPG in large commercial kitchens, furnace oil in furnaces and petrol in vehicles. NEX,



Philipp Bayat, the Chairman of BAUER GROUP, at the NEX Biogas plant during his visit to India in May 2016

this project's technology partner, chose only the best of the equipment right from the crushers, agitators to the high pressure compressors and storage cascades. They opted for 3 nos. CTA28.0-90 from BAUER KOMPRESSOREN India to compress the purified gas upto 200 bar and store in mobile cylinders.

This compressed gas filled into the mobile cylinders is then despatched to a variety of users to be used as fuel. These 3 BAUER compressors handling a gas flow of approx. 1000 Sm³/h use the acclaimed PLC based B-Control II for automatic, integrated & user friendly operations. NEX has integrated this compressor control into their overall plant's central control system making human intervention almost superfluous. Besides the technology being used, the other points that make this plant stand out from others are : (a) modern design, (b) cleanliness and (c) absence of any odour. NEX & their partners have amply demonstrated not only the economic feasibility of this project but also the success of the PPP route in tackling the modern menace of waste, scientifically.

The Poonawalla Group owned Serum Institute of India (<http://www.seruminstitute.com/>), is the largest supplier of vaccines to the World Health Organisation, is amongst the top three most valuable pharmaceutical companies in India, have manufacturing sites in 5 countries and their products are marketed in 90 countries



Noble Exchange's state-of-the-art biogas manufacturing plant at Pune

BAUER India marks presence at the International Cryogenic Engineering Conference

India has emerged as a growing economy and huge investments are being made in infrastructure, social sector and in science & technology. Many developmental projects in the field of cryogenics, superconductivity and low temperature physics have been funded and many more are in the pipeline. There is a tremendous growth in man power and facilities provided to R & D centres engaged in the field of superconductivity, cryogenics and low temperature physics.

The International Conference on Cryogenic Engineering-International Conference on Cryogenic Materials 2016 (ICEC26/ICMC 2016) is a biennial international conference on cryogenic engineering and cryogenic materials started by the International Cryogenic Engineering Committee and the International Cryogenic Material Committee. The prestigious conference returned to India after a gap of 16 years, last held in the year 2000 at the Indian Institute of Technology, Bombay (now Mumbai). The conference was hosted jointly by the Indian Cryogenics Council (ICC) and the Inter-University Accelerator Centre (IUAC), in the capital city of New Delhi. The main objective of the ICEC 26 - ICMC 2016 conference was to bring together researchers from R&D institutions, universities and industries, to stimulate fruitful exchange and dissemination of information and ideas in the field of cryogenic engineering and materials. Futuristic trends in the ongoing large superconducting and cryogenic projects were the focus of this conference.

BAUER KOMPRESSOREN INDIA Pvt Ltd (BKI) participated in this conference as an exhibitor. Through this participation, BKI got an opportunity to once again connect with its most regular patrons- "The cryogenic community". BKI displayed the contemporary product offerings with the latest controls. The booth was visited by scientists, researchers from prestigious laboratories, academicians from educational institutes and by Industry representatives and shared their interest in new developments in BAUER HP Helium compressors and accessories.



26th International Conference on Cryogenic Engineering - International Conference on Cryogenic Materials 2016 (ICEC26/ICMC 2016)

BAUER - 27 years young at TIFR

Tata Institute of Fundamental Research (TIFR), Mumbai, India is a National Centre of the Government of India, under the umbrella of the Department of Atomic Energy carrying out basic research in physics, chemistry, biology, mathematics, computer science and science education. Scientists from around the world visit TIFR to make use of its facilities for fundamental research purposes.

TIFR's Low Temperature Facility (LTF) meets the requirement of two cryogenic fluids - liquid Helium and liquid nitrogen along with other cryogenic support services at various facilities and laboratories of the institute. LTF is one of the oldest (established in the year 1962), yet a very modern cryogenic facility and this owing to the very reliable equipment they chose. Other Indian Research Institutes and Labs also look upon them for their expertise in facility management especially in the cryogenic field. The facility consists of Helium liquefiers and other auxiliary equipment such as: Helium feed gas compressors, Helium recovery gas compressors, Cryogenic dewars and high pressure cylinders etc. The Helium recovery system handles a large quantity of boil-off Helium gas sent by various laboratories through the long recovery piping network with a very high percentage of Helium gas recovery.

Mr.K V Srinivasan is Incharge of this Low Temperature Facility and makes available the cryogens for research on a "on demand" basis. Here is what Mr.Srinivasan has to say about his facility and the kind of equipment he chose for such a demanding service.

"The high pressure Helium compressors and the purification system from BAUER KOMPRESSOREN are an important and integral part of the Helium recovery system in the LTF. Our association with BAUER products date back to late 1980's and since then TIFR has bought and installed many BAUER HP Helium compressors of various capacities with purification systems.

Presently we are operating BAUER HP helium compressors of model: G15.1-11(Installed in year 1999, clocked ~13000 hours); Model:G22.0-18.5 (Installed in year 2006, clocked ~14500 hours); Model:G22.0-18.5 (Installed in year 2010, clocked ~700 hours) along with the Seccant IV regenerative helium gas purification system (Installed in the year 2013, clocked ~ 1400 hours).

The configuration of their machines is best suited for Helium gas recovery, the safety features and the state of the art PLC based control provides ease of operation and

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Mr. K. V. Srinivasan, Incharge LTF, TIFR Mumbai

maintenance. We appreciate the quality, reliability and performance of BAUER HP Helium compressors and accessories.”

- Because our protectors deserves the BEST

Staying ahead of its time, SRG Techno Pvt Ltd has always endeavored to bring the latest technological / systems and innovative product of International Standards especially in the given domain. We work with the Indian Armed Forces, Special Forces (including the elite NSG/ SPG), Para-Military Organizations (CRPF, BSF, CISF, ITBP etc.) and State Police/Law Enforcement Forces (all India) in order to equip them with innovative & latest technological product of international standard in field of Security, Survivability and Surveillance. We provide them a comprehensive solution and highly specialized equipment as part of their Modernization plan.

We represent some of the known International Companies for Non-Lethal & Anti-Riot Equipments in India. Some of the equipments which we use requires high pressure air. BAUER KOMPRESSOREN is world leader when it comes to high pressures. Hence there was no second thought when we wanted to associate our self with high pressure compressor manufacturing companies. It had to be BAUER!

Working with BAUER India is fun. They are the most professional people that I have come across. They know their field, applications and products.

When we participated at Defexpo India 2016, we ensured that their new product "IE100" was on display at our stall. Having their personnel on our stall was a great boost. Defexpo India 2016, the ninth in the series of biennial Land, Naval and Internal Homeland Security Systems Exhibition, was held at Naqueri Quitol in Quepem Taluka of South Goa, India from 28th to 31st March 2016.

We were lucky to host few dignitaries at our stall during this expo: Honorable Defence Minister Mr. Manohar Parrikar, General Dalbir Singh Suhag - Chief of The Army Staff - Indian Army, Lt. General Subarta Saha - Vice Chief of Army Staff - Indian Army, Union Home Secretary Defence, Mr. Duggal - DIG NSG, Cmde. R Nair - CO INS Hansa (HQNA), etc.



Mr. Ajay Gupta, Director - SRG Techno Pvt. Ltd.

"BAUER" is the most preferred brand for Defence, Para-Military and Law Enforcement Forces for their high pressure requirements."

BAUER KOMPRESSOREN India Pvt. Ltd.

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