



BROAD A/C & ENERGY
远大巴基斯坦



MEHRAN PLASTIC INDUSTRIES

Go Green with **BROAD.**





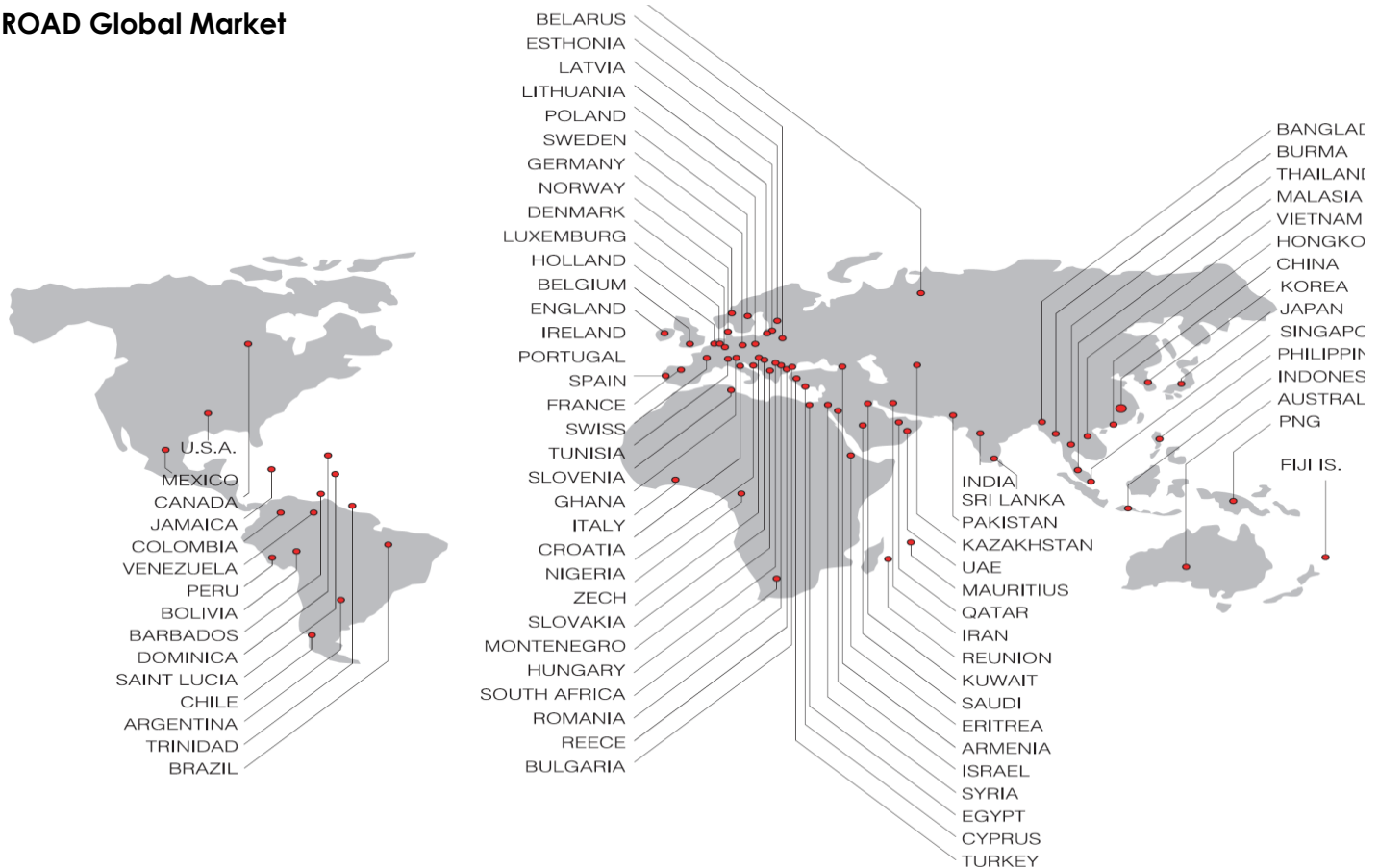
LEADER IN MODERN ABSORPTION & ELECTRIC CHILLERS

BROAD Group was established in 1988, headquartered in Changsha, China and has products in more than 82 countries. The company has been serving the global market for more than 30 years and is highly experienced in HVAC technology.

BROAD A/C & ENERGY (Pvt.) Limited is a Broad Air Conditioning Corporation company, serving Pakistan since 2002. It is a Sales and After-Sales-Service provider for all Broad customers in Pakistan.

Broad Absorption Chillers are currently operating over 33,000 + system. Some of the World's leading Industrialists put their trust in Broad system to help them achieve their production objectives.

BROAD Global Market



GLOBAL EXPERTISE, LOCAL SOLUTIONS

Since its inception Broad Installed based in Pakistan has been grown up to 58,280 US RT till date. BROAD A/C & ENERGY Mission is to Make Pakistan Green with a cost-effective cooling and heating solution that can better utilize Thermal Waste energy, reduce Carbon footprint of the country and eliminate the risk of Global Warming.

Broad A/C & ENERGY has project & service support teams in South and North region with component After Sales inventory for rapid service to our customers. Under Service Agreements, Broad A/C & ENERGY Maintain Chiller plants of more than 24,000 US RT in aggregate.

Broad Services always focuses customer ease, with the unique and non-traditional way. Our service moto is "Prevent is better than Cure". Consequently since 1996, Broad offering Free Online Monitoring and Troubleshooting 24/7 to our customer.

Mehran Plastic Industries (Pvt) Ltd

Mehran Plastic Industries (Pvt.) Ltd. established in 1988, the company started with a vision to manufacture and market the best products to customers. Mehran Plastic Industries (Pvt.) Ltd. is FSSC 22000 Version 4.1 Certified and SMETA Version 6.0 qualified / certified and one of the leading manufacturers of rigid plastic packaging products in Pakistan by developing its capability in injection molding, blow molding, compression molding and printing with more than 100 employees.

Co-generation Energy Plant:

Mehran plastic Lahore generates electricity through the use of cogeneration, combined heat and power (Co-) production, a system that provides chilled water from waste heat of MTU 12VL64 natural gas generator. Broad CHP system will significantly reduce its greenhouse gas emissions and the site's environmental footprint compared to conventional systems.

BROAD HVAC Solution:

For Smooth operation of the production plant, Broad Proposed a Hybrid solution that can operate on two different energy sources.

The Chiller system is comprised of

- Exhaust Fired absorption chiller 200 RT.
- Broad Magnetic Bearing Centrifugal chiller 200 RT

Mehran Plastic has switched to Green Energy with Broad and move the step forward to make Pakistan green by reducing CO₂ emission of 3,7 Tones/Anum.

Power Plant Efficiency:

Plant efficiency of the Mehran plastic was 44.37%. Broad Waste Heat Recovery Chiller improves the system efficiency up to 67.54%.

Project Details

DATE

March,2021.

LOCATION:

Lahore, Pakistan.

COOLING CAPACITY:

200 + 200 = 400 RT

INDUSTRY TYPE

Packages Industries.

PROJECT TYPE

Combination of Waste Heat Recovery + Electric Chiller.

ENERGY SOURCE:

1.5 Mw 12VL64 MTU Genset.

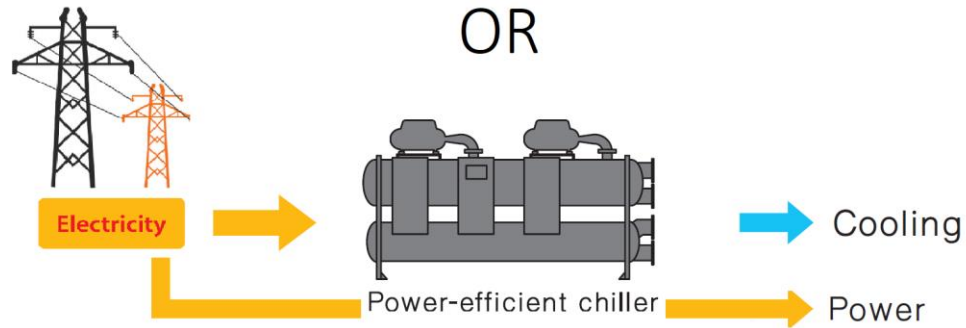
1 MW National Grid.

580 KW Solar Power.





Operational Scheme:



The Chiller water system is comprised of Exhaust Fired Absorption & magnetic bearing chiller. The factory installed Gas engine running on natural gas and one of engine's exhaust loop connected to a 200 RT absorption chiller. During the availability of Natural Gas Customer operate the factory on Genset because of stable and low tariff power generation, Exhaust heat is used to power the absorption chiller, providing machine cooling to injection molding machines. In the absence of Natural Gas customer self-power generation is shutoff, customer use Grid Power for factory operation and Broad Oil Free Magnetic Centrifugal Power Efficient Electric chiller for chilling.

Project Gallery:





IMPROVING PLANT EFFICIENCIES WITH BROAD

Using waste heat from power generation or industrial process as the energy source to realize free cooling, Industrial waste heat, exhaust and hot water from power generation are 100% green energies and can be treasure instead of waste.

Broad A/C & ENERGY is committed to the inherent value and flexible solutions that thermally driven absorption plays in our modern world. Absorption design is Broad core competency and primary focus. Unlike many current players in the absorption market, Broad designed and Manufactured World first Exhaust and Multi Energy Operated Absorption Chiller back in 2003. BROAD Chillers and packaged water distribution system are ISO, CE, UL, ETL, ASME, AHRI certified. engineering teams offer installation, commissioning and maintenance support to ensure improved production efficiencies continue to return on the initial investment for many years.



Power Efficient Oil Free Magnetic Centrifugal Chiller



Waste Heat Recovery Chiller (Exhaust/ Flue from Genset or Turbine)



Non-Electric Absorption Chiller (N.G, Steam, Hot Water)



Packaged Water Distribution System

ASK US FOR A FREE
ON-SITE CONSULTATION