



# ALKARAM TEXTILE. (NOORIABAD)

Improving Profits with **BROAD**.



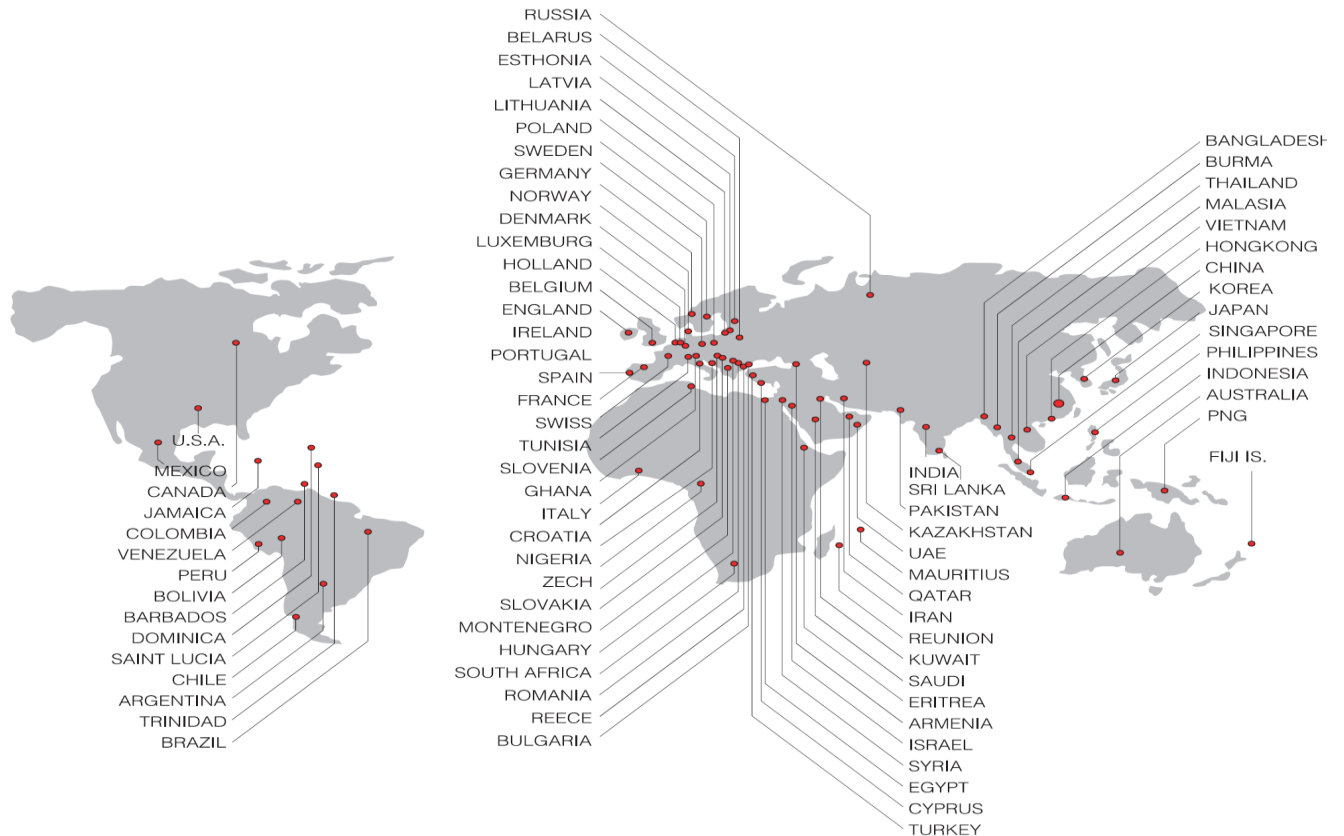
BROAD AIR CONDITIONING  
远大空调有限公司

# TRUSTED TECHNOLOGY

Broad Chiller are used in different processing facilities around the world to maintain process temperature, improve quality, reduce static and provide air cooling. Some of the World's leading manufacturers put their trust in Broad Air Conditioning systems to help them achieve their production objectives.

## GLOBAL EXPERTISE, LOCAL SOLUTIONS

### BROAD Global Market



The company has been serving the global textile industry for more than 30 years and is highly experienced in many different HVAC related technologies, Chillers Water distribution system, Air Quality products etc. Chiller systems are designed for each individual application, textile experts to create the optimal production environment. If required, Broad regional R&D departments can work with a production team to deliver innovative solutions for unique textile processes. Broad A/C engineering teams offer installation, commissioning and maintenance support to ensure improved production efficiencies continue to return on the initial investment for many years.

# ALKARAM TEXTILE IMPROVING PROFITS WITH BROAD

ALKARAM TEXTILE Mills was setup to provide innovative textile solutions across the globe for more than 35 years. It is the largest vertically integrated textile setup in Pakistan. It is one of Pakistan's largest consumers of Organic Cotton & Better Cotton Initiative (BCI) cotton.



### Project Description

Maintaining the correct temperature & relative humidity will prevent moisture loss during a textile's processing and storage. Typically, losses can be reduced from 4% to just 0.5%, which results in an immediate 3.5% increase in product yield and profitability.

Broad offers 2 x Chillers, On waste Heat of 1.5 MW x 2 Engines of MTU 12V L64. Duplex Exhaust & Jacket Water Chiller of Capacity 450 & 310 = **760 RT** in Total. Save carbon footprint of 13 million Kg/Annum i.e., equivalent to 0.71 million Trees/Annum.

### Achievement

ALKARAM textile was a user of Numerous Brands of Chillers but They Choose Broad for their new factory in Nooriabad Over other Brands because of our product Reliability, Efficiency and Strong backup Support.

### Weaving efficiency

Optimal condition reduces yarn breakages in weaving, reducing machine downtime as well as loom stop marks and weavers' knots in the finished product. Broad has helped manufacturers increase their production efficiencies from as low as 49% up to 96% through effective Environment condition control.

### Employee comfort

Broad Chillers can deliver around 5°C of evaporative cooling to a textile production facility. The increased humidity will also suppress dust, fly and lint creating a healthier and more productive atmosphere for employees.



## POWER PLANT EFFICIENCY & SAVINGS

Input Energy in 2 x MTU 12V L64 KWth	6856	
Electrical Output of 2 x MTU 12V L64 KWel	3042	
Electrical Efficiency %	44.4%	
BROAD Exhaust Chiller Recovery KWth	1590	452 RT
BROAD Jacket Water Chiller Recovery kWth	1100	310 RT
<b>EFFICIENCY OF POWER PLANT 2 x MTU 12V L64 WITH BROAD CHILLER RECOVERY.</b>	<b>83.61%</b>	
<b>YEARLY COST SAVING USING BROAD CHILLERS.</b>	<b>22.5 MILLION PKR</b>	

# 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 has a comprehensive range of products to suit any processing facility. Utilizing waste Heat sources, helps to achieve the Optimal temperature and humidity that is feasible for the plant operation.

Broad product such as Absorption (Non-Electric) Chillers, Waste Heat recovery Chiller, Power Efficient Oil Free Chillers, Packaged Water Distribution System, Air purification & Quality devices.

ASK US FOR A FREE  
ON-SITE CONSULTATION



Non-Electric Steam Operated Chiller (Waste Plant or Boiler)



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



Jacket Water Recovery Absorption Chiller



Packaged Water Distribution System