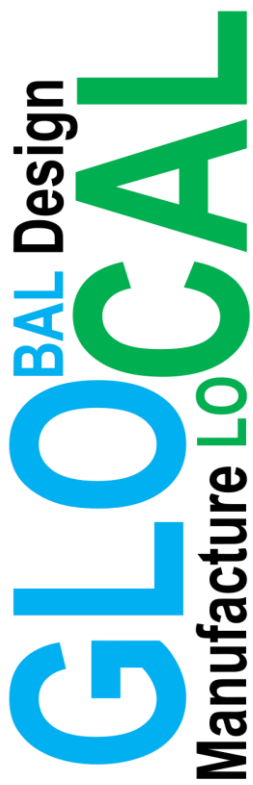


DESICCANT DEHUMIDIFIERS



AQUA AURA™

"Competence in Humidity Control"

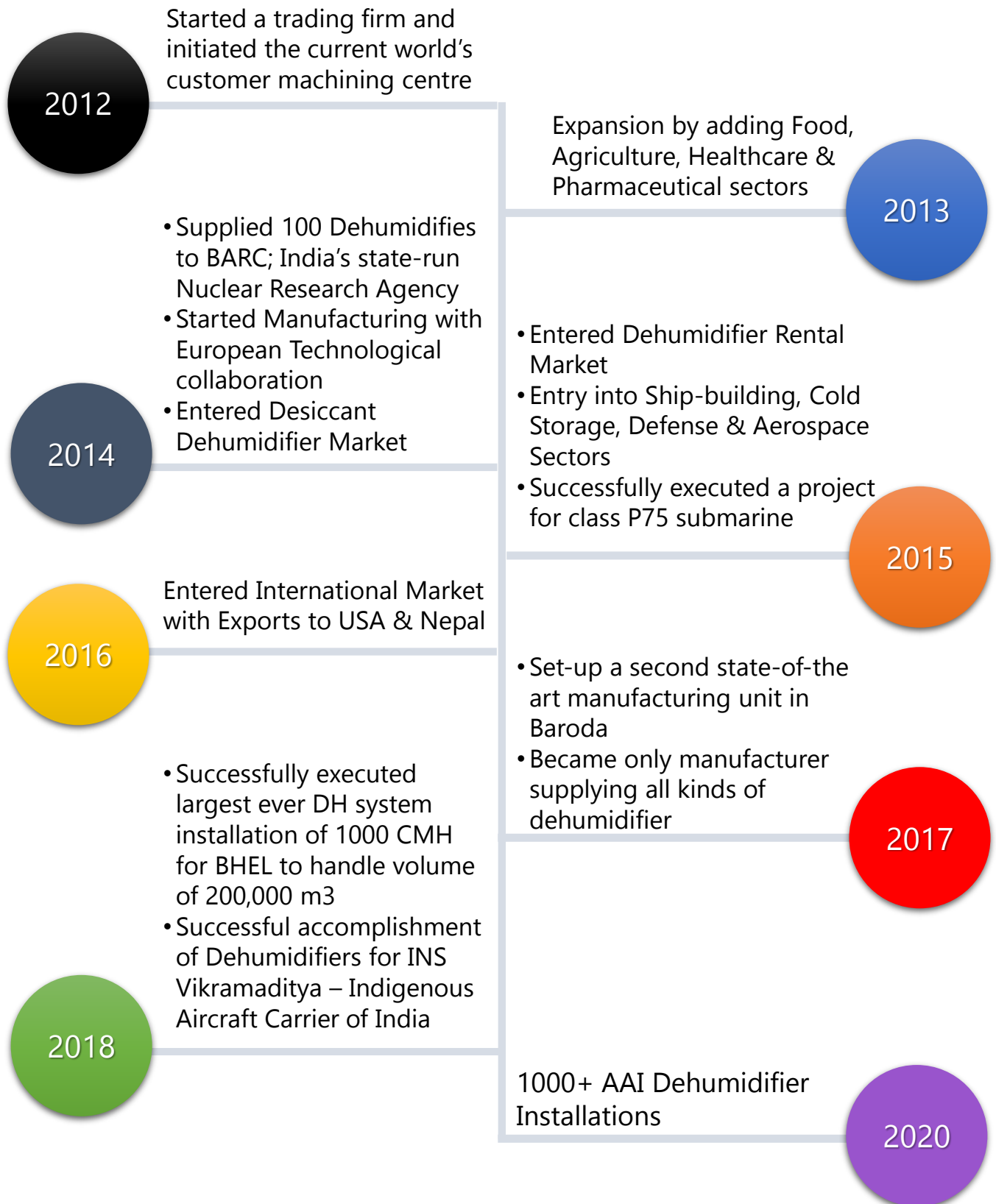


AQUA AURA INDIA (AAI) is an ISO 9001:2015 and ISO 14001:2015 certified company enabling condition controlled environment for industry-specific applications. Established on the philosophy of “Glocal”; AAI believes in Global designing with Local manufacturing. We synergize our offerings by leveraging the best of both worlds. AAI is devoted to technical research and heavily invested in technological development in the field of dehumidification systems coupled with temperature controlled applications. We strive for excellence and offer quality- engineered solutions for various industries and applications. AAI combines several industry best practices to engineer an innovative, efficient, cost-effective, sustainable and environment-friendly solution that is bespoke to meet the requirements of our customers in India as well as abroad. We offer stand-alone products for simple applications as well as a design-build solution for a relatively complex environment.

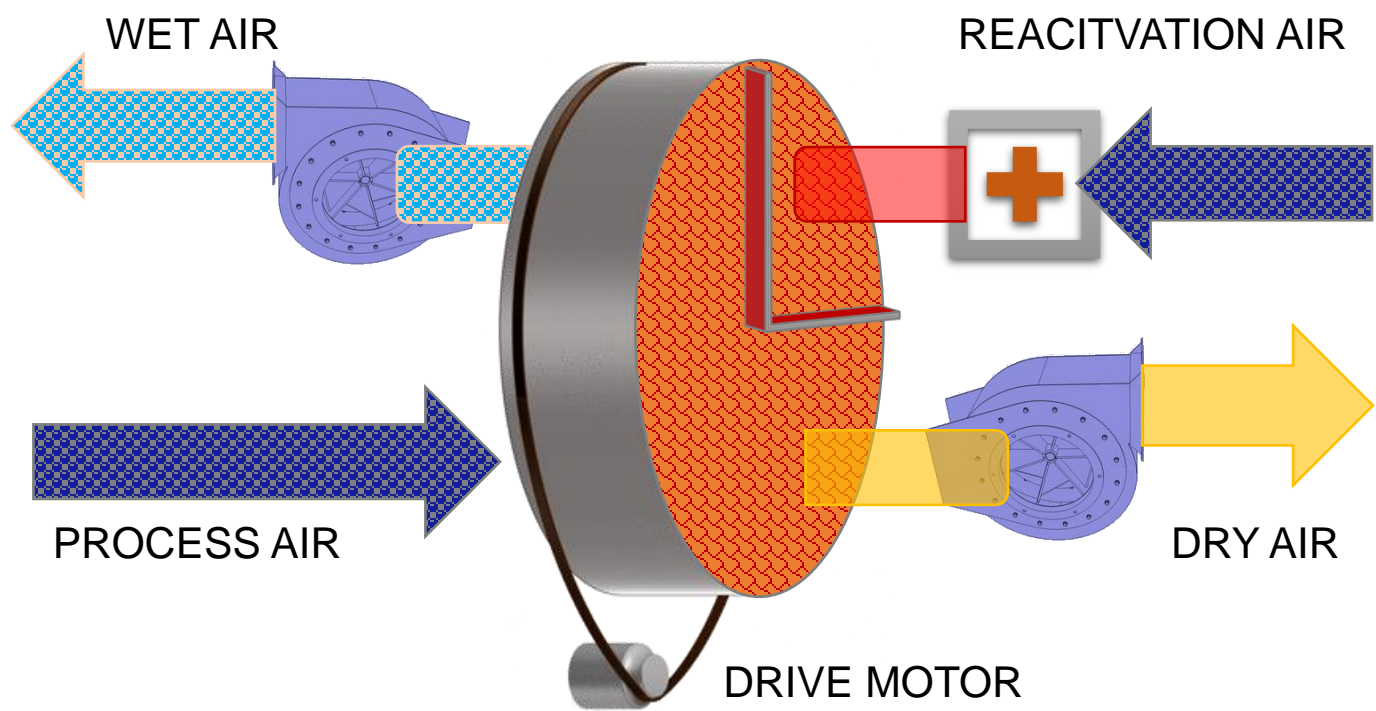
WHAT WE DO?

AAI is a pioneer in manufacturing desiccant based dehumidification systems often combined with refrigeration-based solutions. We manufacture stand-alone desiccant dehumidifiers. Subsequently, we are proficient in designing and executing engineered dehumidification systems coupled with temperature-controlled characteristics for applications with environment-sensitive requirements. We specialize in implementing a dehumidification system that can facilitate controlled atmospheric conditions for Pharma, Food Processing, Chemical Processing, Cold- Storages and Seed Storages. However, our offerings cover a wide range of applications starting from humidity control in supermarkets to specialized climatic controlled applications for Defense and Aerospace Engineering.

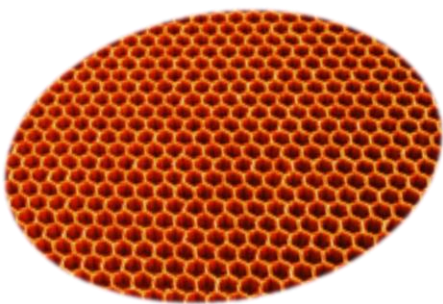




DESICCANT – BASED DEHUMIDIFICATION



Dedicated desiccant air-supply units provide low-humidity discharge conditions necessary to maintain a dry environment. It's a simple solution to an old problem. The solid desiccant rotor absorbs moisture from process air. The moisture is taken out of the rotor by a second and separate reactivating air-stream. This process enables the rotor to continually take moisture out of the airstream without interruption



Desiccant Rotor – Honeycomb Structure

- Larger Surface Area
- Faster Moisture Accumulation
- Moisture Holding Capacity – 10x its Weight

Advantages of Desiccant-based dehumidification:

- Ultra-dry air – Desired level of RH is achievable
- No Condensation – Better Thermodynamics
- Simple Operation – Blower fans, Heater & Desiccant Rotor arrangement
- Better Construction –Single-frame, Insulated and Weatherproof
- Ease of Maintenance –Rudimentary Inspection & Replaceable Components
- Modern Controls –AAI Smart Controls with PLC & HMI
- Durability –Effective Operational Life of 10 years or more
- Cost Effectiveness –Low Ownership & Life-Cycle Cost

COMPACT DESICCANT DEHUMIDIFIER

Product Highlights:

- Best-in-class Moisture Removal
- Plug-N-Play Installation
- Power Saving up to 30%
- Maintenance-free



Model Range: NSI 300D & NSI 600D

NSI - D Series units provide an excellent stand-alone solution when sensible heat gain is not a concern. To solve the existing moisture problems NSI - D Series units can be added to existing air-conditioning or conventional HVAC systems. The fully integrated dehumidifier is complete with process and reactivation filters, fans and the complete control system for safe operation.

Dehumidifier Model	NSI 300D	NSI 600D
Moisture Removal ¹ (Kg/Hr)	2..25	4.5
Process Air-flow (m ³ /Hr)	300	600
Reactivation Air-flow (m ³ /Hr)	100	200
Total Power Consumption(KW)	3.35	5.35
Power Supply (V/P/Hz)	240/1/50	240/1/50

¹ Tested at inlet conditions 20°C/60%RH.



COOLLINE DESICCANT DEHUMIDIFIER



Product Highlights:

- Best-in-class Moisture Removal
- Easy Installation & Maintenance
- Power Saving up to 30%
- Customization Available

Model Range: NSI 1000D – NSI 20000D

AAI's Coolline Desiccant Dehumidifier is ideal for large application area with existing HVAC system. This dehumidifier can be customized to meet the application-specific requirements. AAI offers multiple reactivation options; choose between electric heater or steam coils

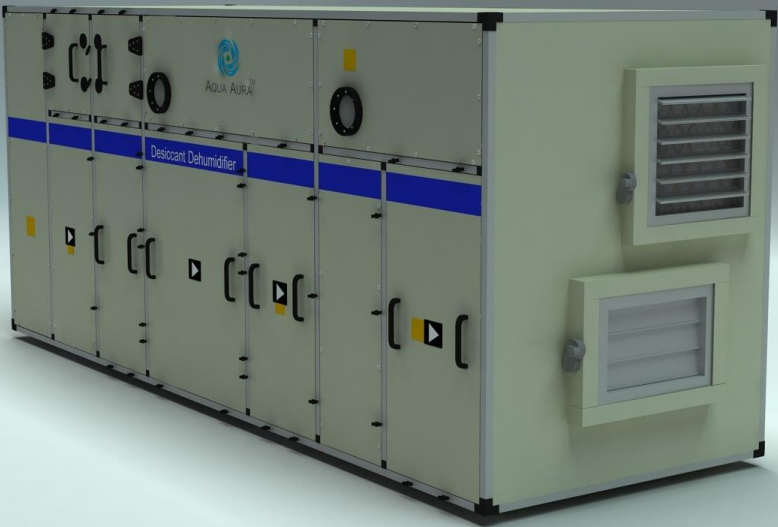
Dehumidifier Model	NSI 1000D	NSI 2000D	NSI 3000D	NSI 4000D	NSI 5000D
Moisture Removal ¹ (Kg/Hr)	8.45	16.9	25.35	33.8	42.25
Process Air-flow (m ³ /Hr)	1000	2000	3000	4000	5000
Reactivation Air-flow (m ³ /Hr)	350	650	1000	1350	1650
Total Power Consumption(KW)	10.5	20	30	40	50
Power Supply (V/P/Hz)	415/3/50	415/3/50	415/3/50	415/3/50	415/3/50

¹ Tested at inlet conditions 20°C/60%RH.

ENGINEERED DESICCANT DEHUMIDIFIER

Product Highlights:

- Bespoke Design
- Energy Efficient Solution
- Best-in-class Moisture Removal
- Multiple Flow Options
- Fully Factory-assembled
- Easy Installation & Maintenance



Model Range: NSI 5000ED – NSI 35000ED

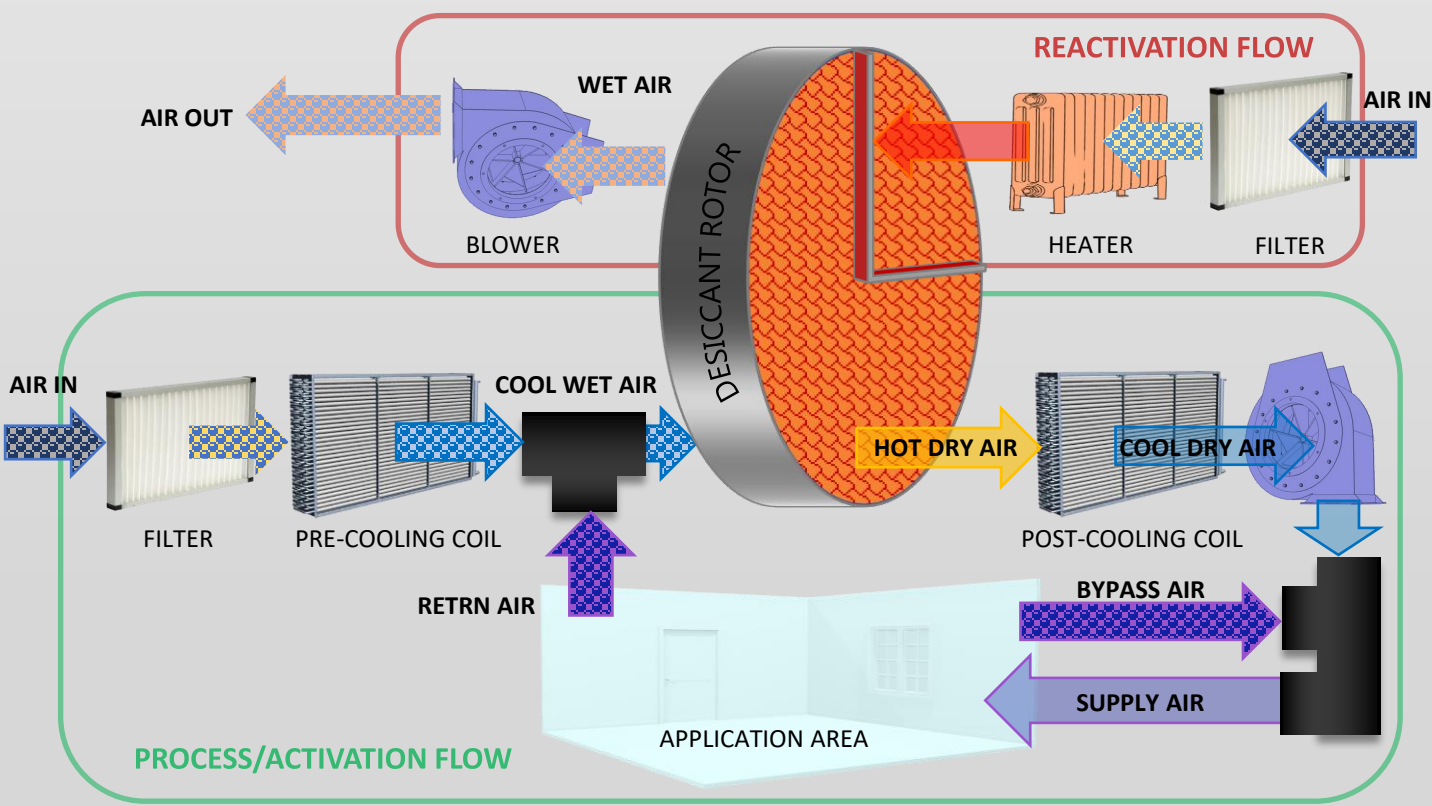
AAI’s Engineered Desiccant Dehumidifier is a design-built system, offering dual functionality i.e. dehumidification as well as temperature control.

Dehumidifier Model	NSI 5000ED	NSI 6000ED	NSI 7000ED	NSI 8500ED	NSI 10000ED
Moisture Removal ¹ (Kg/Hr)	42.25	50.7	59.15	71.83	84.5
Process Air-flow (m ³ /Hr)	5000	6000	7000	8500	10000
DH Air-flow (m ³ /Hr)	≤5000	≤6000	≤7000	≤8500	≤10000
Reactivation Air-flow (m ³ /Hr)	1650	2000	2350	2850	3300
Power Supply (V/P/Hz)	415/3/50	415/3/50	415/3/50	415/3/50	415/3/50

¹ Tested at inlet conditions 20°C/60%RH.

ED SERIES: SYSTEM FLOW

HYBRID - BYPASS SYSTEM



NSI – ED Series functions as a Dehumidifier as well as AHU. It enables a condition controlled environment for application of any size and requirement. It is a self-contained unit consisting of pre-cooling coil, post-cooling coil, desiccant rotor, heater and process & reactivation filters as well as blower fans.

NSI – ED series can be customized to provide multiple Air-flow options;

- Open Loop System**
(100% Fresh Air-flow)
- Closed Loop System**
(Full Return Air-flow)
- Hybrid System**
(Combination of Fresh & Return Air-flow)
- Hybrid Bypass System**
(Hybrid System with dedicated Chamber for Bypass Air-flow)

HOW IT WORKS?

Pre-cooling Coils:
Cools Air & Reduces Moisture

Desiccant Wheel:
Acts as Moisture-absorber and releases Warmer-dry Air

Bypass Chamber:
During Dry condition Air can bypass Desiccant Wheel

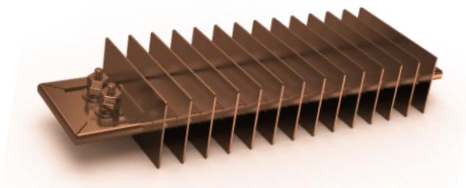
Post-cooling Coil:
Cools Air to desired Temperature

TECHNOLOGY HIGHLIGHT & FEATURES



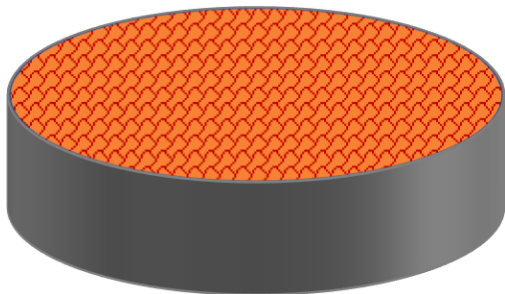
AAI Smart Controls with PLC + HMI

- AI Enabled – 10% Additional Power Saving
- Continuous Data Logging & Monitoring
- Auto-fault Detection and Monitoring



Power Efficient Finns Heater with SSR control

Desiccant Rotor is constructed of High Performance Silica Gel with Acrylic Coating and Peripheral Seal.



- High Content of Active Desiccant –NREL tested
- Acrylic Coating & Peripheral Seal prevents the desiccant from waring & ensures maximum sealing
- Incombustible rotor construction tested according to ASTM E84
- Higher Compression Strength

Features & Advantages:

- | | |
|--------------------------------------------------------------------------|-------------------------------------------------|
| • Robust & Leak-proof Design | • Simple Plug & Play Operation |
| • CNC Fabricated Unit with Powder Coated GI Material | • Multiple Installation Options |
| • Insulation: FM approved Nitrile Rubber with food-grade Aluminum Casing | • Intelligent restart following a power failure |
| • Control Panel Enclosure –IP55 | • Noiseless operation |
| • EU4 Filters for Process and Reactivation Inlets | • Easy Inspection & Maintenance |
| | • Washable Rotor & Filters |

Optional Features:

- | | |
|--------------------------------|---------------|
| • Stainless-steel construction | • EU7 Filters |
| • Steam Coil | • HEPA Filers |

OUR ESTEEMED CLIENTS

Automotive

- Bosch Ltd
- Guru Nanak Auto Enterprise
- Vishay Components India Pvt Ltd

Chemical & Processing

- Chemietron Clean Tech Pvt Ltd
- Deepak Fertilisers And Petrochemicals Corp Ltd.
- Grace Davison Chemicals India Pvt Ltd
- Gopi Synthetics Pvt Ltd
- Indorama Ltd
- India Gelatine & Chemical Ltd
- National Fertilizer Ltd

Cold Storage & Warehouses

- APMC
- Canara Refrigeration Sales & Service
- Gurukrupa Refrigeration
- Inguran Sorting Technologies LLP
- Kakkar Cold Storage
- Thermo Refrigeration
- Sai Refrigeration Ltd Syngenta AG
- Syngenta AG
- Utsav Care Refrigeration And Electrical
- Vakrathund Agri Tech Pvt Ltd

Commercial

- Dr. Sarvepali Radhakrishnan R Ayurved University
- Home Wood Works
- International Trading Company
- Manasalu Trading Concern
- Max India Ltd
- Nandadevi Outdoor Leadership School
- Rana Advertisers and Suppliers
- University of Kerala
- Saira Asia Interiors Pvt Ltd

Construction

- Pruthvi Builders Ltd
- Sairaj Infrastructure Ltd

Defense & Aerospace

- Bhabha Atomic Research Centre
- Hindustan Aeronautics Limited
- Indian Air Force
- Indian Navy
- Material Organization
- Naval Armament Depot

Electronics

- Adi Electronics Technologies Pvt Ltd
- Atlanta Electricals Pvt Ltd
- Sinhal Computers & Systems Ltd

Engineering And General Industries

- Aadhunik Industries Ltd
- Anchor Glass Industry
- Benson Polymers Ltd
- Carotino (India) Pvt Ltd
- Cu Built Engineers Pvt Ltd
- Daetwyler Swiss Tech India Pvt Ltd
- Image Gravures Ltd
- Gunebbo India Pvt Ltd
- Gentech Engineering Services
- Gowrie Research Pvt Ltd
- Harsh International Industries
- L&T Special Steels & Heavy Forgings
- Laser Spectra Services India Pvt Ltd.
- Log 9 Materials Scientifics Private Limited
- Mahadev Manufactures Ltd
- Mann And Hummel Filter Pvt Ltd
- Medical Engineering & Allied Service Pvt Ltd
- PMT Machines Ltd
- Polymer Technologies International
- Qmax Test Equipments Pvt Ltd
- Redemaco Engineering Pvt Ltd
- Suzlon Infrastructure Ltd
- Scorpio Engineering BMH Pvt Ltd
- Svan Analytical Instruments Pvt Ltd
- Shree Rajeshwaranand Paper Mills Ltd

Food & Beverage

- Avani Food Products Ltd
- Aquatica Frozwn Foods Global Pvt Ltd
- Alby Agro Pvt Ltd
- Devi Sea Foods Limited
- GK Tobacco Industries Pvt Ltd
- Gorasia Farms
- ITC Limited - Foods Division
- Neekanti Sea Foods Limited
- Om Shiva Products Ltd
- Sadhya Marines Limited
- Sun Products Ltd
- Sumiran Foods Pvt Ltd
- Siddu Packaging Pvt Ltd
- Suryamitra Exim Pvt Ltd
- Vishnu Export
- Yak & Dairy Pvt Ltd

Healthcare

- Apex Heart Institute
- Apex Heart Hospital
- Baroda Imaging Center
- Columbia Asia Hospital - Bangalore
- Columbia Asia Hospital - Pune
- CIMS Hospital Pvt Ltd
- Dhakan Hospitals
- Dattal Hospital
- Gujarat Ayurved Hospital
- HCG Medi-Surge Hospitals Pvt Ltd
- Kshipra Diagnostics
- Laboratory Trade Concern Pvt Ltd
- Magnum Mri & Nobel CT Scan
- Meditech Services
- M/S AES Meditech Solution
- Medistar Multy Speciality
- Netrazeus Healthcare
- The Christian Fellowship Hospital
- Shalby Hospital
- Shalina Laboratories Pvt Ltd
- Smt. R.B.Shah Mahavir Superspeciality Hospital
- Sarvoday Hospital
- World King Surgical

Oil & Gas

- Cairn India Ltd
- Indian Oil Co. Ltd
- Mangalore Refinery And Petrochimcals Limited
- Osnar Paints And Contracts Pvt Ltd

Pharmaceuticals

- 3B Black Biotech India Limited
- Algene Biotech
- Aeon Formulations Pvt Ltd
- Daetwyler Swisstec India Pvt Ltd
- Dwarkesh Pharmaceuticals Pvt Ltd
- Emcure Pharma Ltd
- Gem Pharma
- Hibrow Healthcare Pvt.Ltd
- Lupin Pharma Ltd
- Medisphere Marketing Ltd
- Natco Pharma Ltd
- Prince Care Pharma Pvt Ltd
- Swagat Herbal
- Techbio Solutions

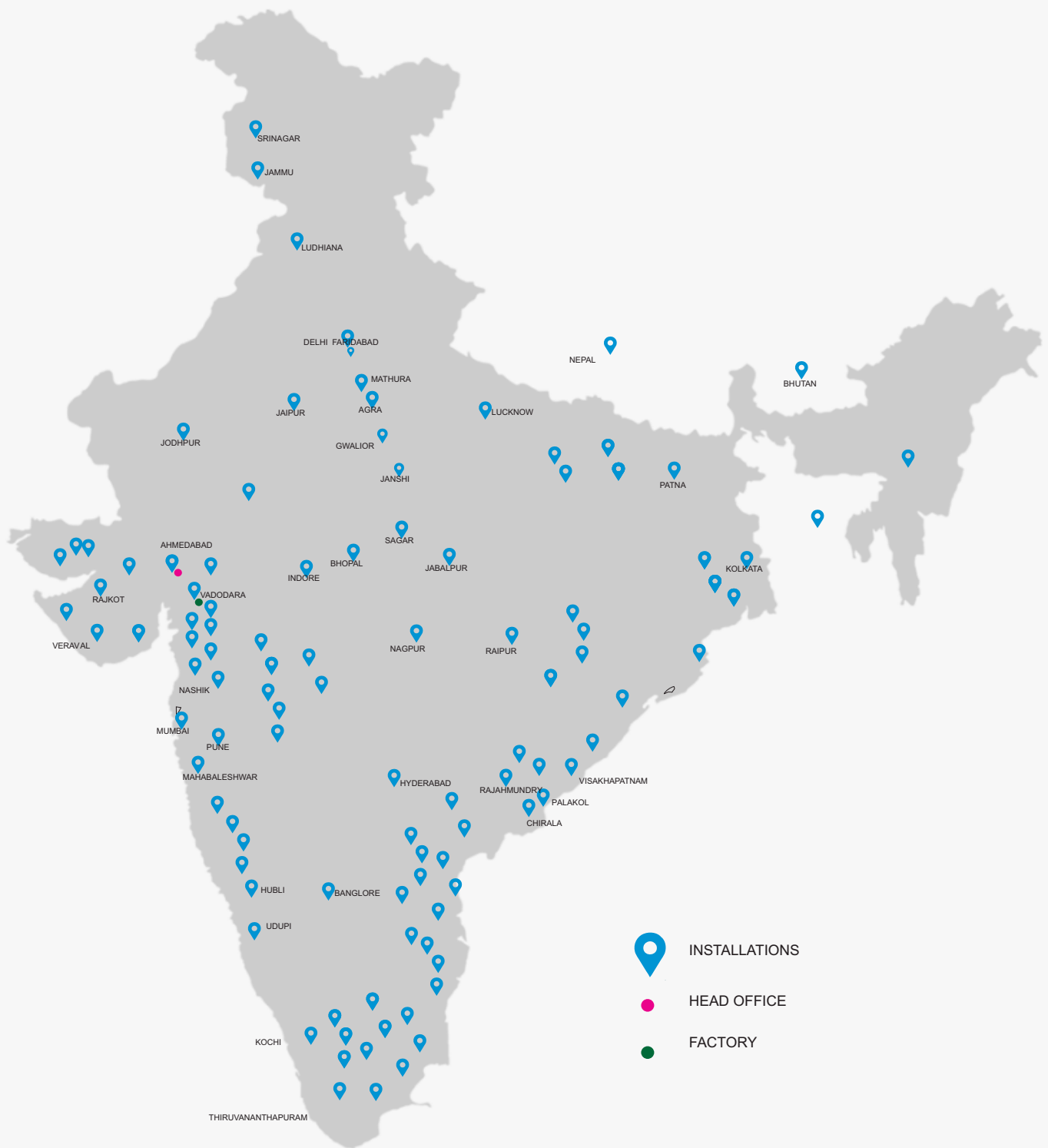
Power Generation

- Ather Energy Pvt Ltd
- Bharat Heavy Electricals Limited
- NTPC-Sail Power Company Pvt Ltd
- NTPC Ltd
- Voith Siemens Hydro Power Pvt Ltd
- VMC Power Solan
- TBEA Energy India Pvt Ltd

Ship Building & Marine

- Cochin Shipyard Ltd
- Garden Reach Shipbuilders & Engineers Ltd
- Mazgaon Dock Shipbuilders Ltd

And still counting...



- INSTALLATIONS
- HEAD OFFICE
- FACTORY

www.AquaAuraIndia.com



AQUA AURA™

"Competence in Humidity Control"

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