

Single Stage Air Washer



Eco-Cooling, High Efficiency & Low Energy.

Our Single Stage Air Washer is the ideal air handling solution for dry climates where cooling, humidity control, and energy savings are a priority. Designed with evaporative cooling technology, it delivers significant temperature reduction—up to 18–19°C—using 80% less electricity than conventional air conditioning. Constructed with corrosion-resistant materials and equipped with efficient filtration, this system ensures enhanced IAQ, low maintenance, and sustainable operation for commercial, industrial, and institutional spaces.

Features

- Evaporative cooling for temperature and humidity control in dry environments
- Up to 90% energy recovery efficiency, reduces cooling/heating load
- Made from corrosion-resistant materials like galvanized steel or SS
- Self-cleaning or easy access for periodic cleaning to ensure longevity
- Reduces temperature up to 18 to 19°C (Summer Condition)
- Uses up to 80% less electricity compared to conventional A/C
- Rust-free stainless steel tanks and high-quality evaporative cooling pads

Benefits

- Improved Indoor Air Quality (IAQ)
- Energy Savings
- Enhanced Humidity Control
- Low Maintenance
- Sustainability
- Cost-Effective
- Environmentally Safe

Product Technical Specifications – Product Range

1. Airflow Capacity:

- Ranges from 1,000 CFM to 100,000+ CFM

2. Filtration:

- Dual-stage filtration: Pre-filter (G4) and Fine filter (F7/F9)



3. Humidification Method:

- Evaporative cooling through water-saturated pads for humidification and cooling

4. Water Treatment:

- Optional UV or chemical treatment for water to prevent bacterial growth

5. Casing Material:

- Galvanized Steel or Stainless Steel (SS) for corrosion resistance



6. Water Tank:

- Built-in water tank with automatic water level control and overflow protection

Product Construction Details

1. Casing/Frame:

- Rigid, galvanized or powder-coated steel Stainless Steel, Aluminium
- Modular, double & single skin panel construction
- Extruded Aluminium Profile Frame Work (Thermal break & Non-Thermal break)

2. Insulation:

- 25 mm to 50 mm thick insulation (Density-40 kg/m³ (48 kg/m³, 64 kg/m³, 96 kg/m³ - Optional) (PUF, Glasswool, Rockwool, PIR)
- Provides thermal insulation and acoustic insulation

3. Base Frame:

- Heavy-duty steel or aluminum base
- Designed for floor mounting and vibration isolation

4. Panels:

- Removable or hinged access doors
- Inner skin: galvanized steel (pre-coated or powder coated), stainless steel, aluminium
- Outer skin: pre-coated, powder-coated steel, stainless steel, aluminium

5. Water Tank:

- Built-in water tank with an automatic water level control and overflow protection to maintain consistent operation.

6. Fan Section:

- EC or VFD-driven centrifugal fans
- Mounted on vibration-absorbing platforms
- Dynamically balanced for low-noise, high-efficiency airflow



7. Filter Section:

- Pre-filters in slide-in frames
- Fine filters, (HEPA filters, Carbon filters, Chemical Filters, Electronic Air Cleaner - optional)
- Easy access for replacement

8. Water Distribution System:

- Water spray nozzles & water distribution pads for uniform water distribution.

9. Media Pads:

- Cellulose pads for evaporative cooling, designed to maintain high surface area for maximum humidity absorption.

Product Certifications

1. Eurovent Certified : (Standard EN 13053 & EN 1886)

- Casing strength class : D1
- Casing air leakage class at -400 Pa : L1
- Casing air leakage at +700 Pa : L1
- Filter bypass leakage class : F9
- Thermal transmittance class : T2
- Thermal bridging factor class : TB2



3. CE Certified : (EN ISO 12100:2010, EN 60204-1:2018)

4. ISO Certified : (ISO 9001:2015)

2. AHRI Certified : Standard 1350

- Casing Deflection Rating Class (Positive) : CD4
- Casing Deflection Rating Class (Negative) : CD4
- Casing Air Leakage Class (Positive) : CL2
- Casing Air Leakage Class (Negative) : CL2
- Thermal Transmittance Class With Leakage : CT2
- Thermal Transmittance Class Without Leakage : CT2
- Thermal Bridging Class : CB2



5. AHRI Certified Chilled Water Coils : AHRI Standard 410

6. AHRI Certified Hot Water Coils : AHRI Standard 410

Applications



Healthcare Facilities



Retail & Malls



Entertainment Venues



Industrial & Manufacturing



Food & Beverage Industry



Hotels & Hospitality



Commercial Buildings



Laboratories



Educational Institutions

Our Presence



Sales & Support Offices

Ahmedabad | Bengaluru | Chennai | Delhi | Gurugram | Hyderabad | Jaipur | Kanpur | Kolkata | Mumbai | Pune

Corporate Office

Gurugram

DLF Corporate Greens,
Tower No. - 4, 12th Floor,
Southern Peripheral Road,
Sec - 74A, Gurugram -
122004, Haryana

Manufacturing Facilities

Haryana

O-1, O-5 and O-3/A,
Old Industrial Area,
Bahadurgarh-124507
Haryana, India

Maharashtra

343 & 343/1/A,
Village Lahe, Mumbai-
Nashik Highway,
Taluka Shahpur,
Thane - 421603

Karnataka

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3rd Phase, KIADB Industrial
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