



Kakati[®]

Vacuum Pumps & Systems for
Power Industry



www.kakatipumps.com



Established in 1965, today KAKATI is South-Asia's largest manufacturer of Liquid ring Vacuum pumps & Multistage Blowers. With over six decades of expertise, **KAKATI** is a trusted name across various industries in India and in many countries worldwide.

Backed by proven engineering excellence and innovation, KAKATI liquid ring vacuum pumps and Condenser Air evacuation Packages are designed to deliver **efficient, reliable, and cost-effective solutions** for the Power Industry.

Our strong presence and reputation in the power industry have been earned through consistent performance, robust quality, and long-term customer satisfaction.

KAKATI's World Class Quality, Unmatched Expertise and Sustainable solutions - a combination that helps Power plants in Condenser Air Evacuation, Ash Handling and Gypsum De-watering Applications.

KAKATI Systems in Power Industry

Condenser Exhauster Systems



Condenser Air evacuation Package for 500 to 800 MW

Kakati Condenser Exhauster Systems are self-contained and effectively remove air leakages and extra dissolved air from condensers. This improves the turbine output by lowering turbine back pressure thereby improving heat rates and reducing production costs.

The package comes Skid Mounted with the pump, heat exchanger, Separators and associated controls. These exhausters are industry work horses and are built to last for a lifetime. The conical design along with a shrouded rotor provides better efficiencies and eliminates cavitation at high vacuum levels.

System for 7.5 to 90 MW

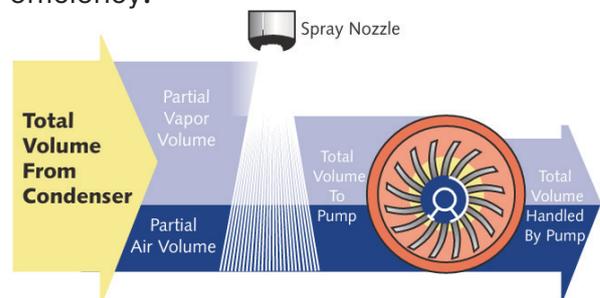


System for 120 to 500 MW



Capacity Advantage

In KAKATI condenser exhauster systems, condensing water vapor prior to entry into the liquid ring vacuum pump reduces volumetric load on the pump. This results in a capacity gain and improved energy efficiency.



The benefit is made possible through KAKATI's optimized hydraulic design and precision engineered porting, ensuring dependable performance in continuous power plant operation.

System Solutions for Every Requirement

In addition to condenser exhaust applications, Kakati provides complete system solutions for a wide range of power plant requirements.

These include economical and reliable systems for sludge dewatering, fly ash handling, flue gas desulfurization, and water box priming, all contributing to improved environmental performance and optimum condenser backpressure.

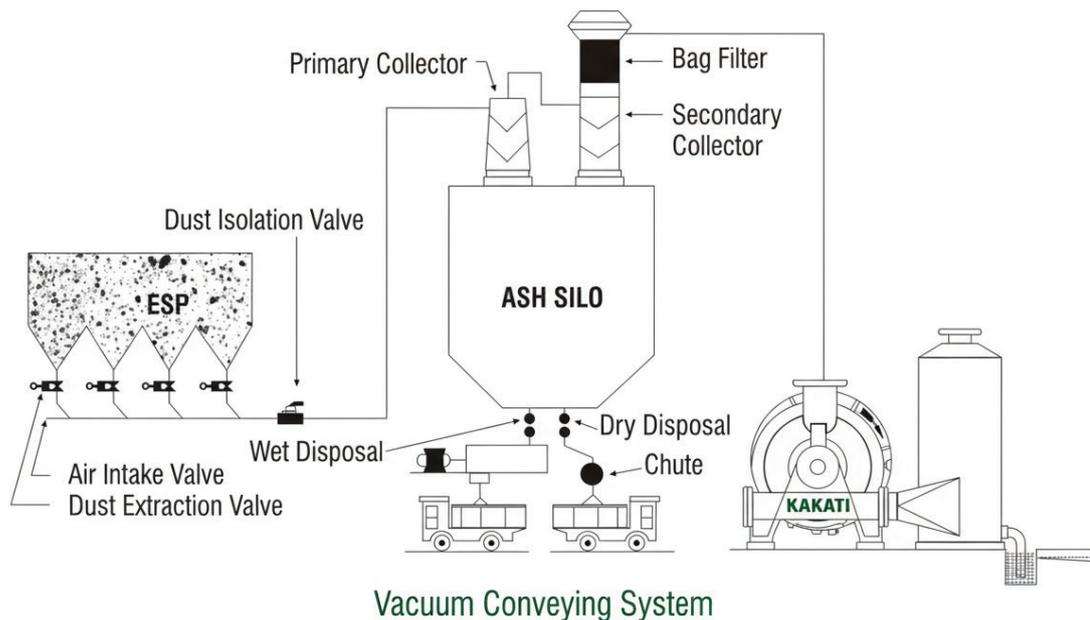
Kakati is the only liquid ring vacuum pump manufacturer in India with advanced wet air testing facilities, ensuring proven performance and reliability under actual operating conditions.

With decades of expertise, Kakati delivers engineering support and customized solutions to meet the specific needs of every plant.

Fly Ash Handling

This involves conveying fly ash from the precipitator hoppers to a central dry collection point under vacuum.

A barrage of pumps works synchronously to evacuate the ash from the hoppers. A good vacuum system effectively reduces your carbon footprint.

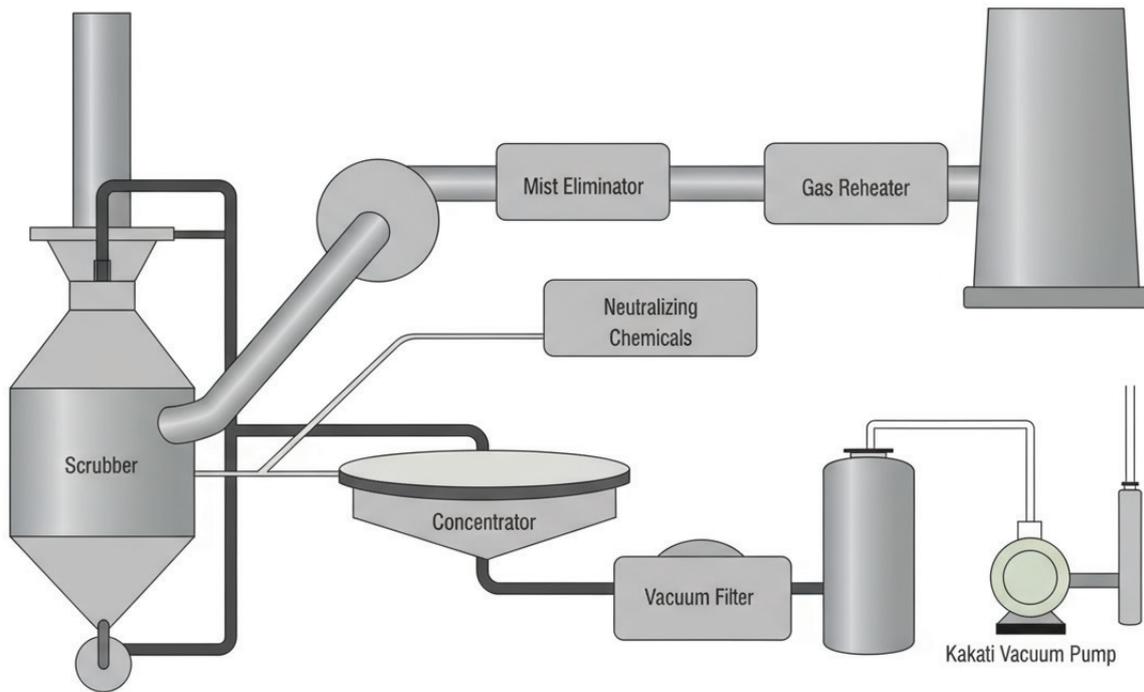


- Over 5000 installations worldwide.
- Available in Cast Iron, Stainless Steel and other materials of construction.

Flue Gas Desulfurization

Kakati Vacuum pumps are connected to vacuum filters effectively removing sulphur compounds from the aqueous slurry.

A thoroughly designed pump can improve your process efficiencies and improve rate of separation.



- Over 500 installations in filtration applications worldwide.
- Available in Cast Iron, Stainless Steel and other materials of construction.

Providing Solutions for Complete System Reliability

With over six decades of experience and thousands of successful installations, Kakati delivers complete liquid ring vacuum system solutions for the thermal power sector.

From new plants to upgrades, our systems are engineered for reliability, efficiency, and long-term performance.

- 60+ years of expertise in liquid ring vacuum technology.
- Thousands of proven installations in India and abroad.
- Complete in-house design and manufacturing.
- Only Indian manufacturer with advanced wet air testing facilities.
- Built to ISO 9001 standards and 100% performance-tested before dispatch.
- Supported by a comprehensive warranty.

Why Choose KAKATI?

Quality Control

We at KAKATI are committed to deliver quality vacuum pumps, systems and other allied products and services, meeting the standards and customer requirements.

Every product undergoes rigorous testing to meet international standards such as **BS, HEI, ISO, and PNEUROP** before dispatch.

Kakati's advanced **wet air testing facility, capable of handling up to 1 MW power, sets us apart as the only liquid ring vacuum pump manufacturer in India with such capabilities. This ensures our pumps deliver reliable performance** & meet the precise requirements of our clients in even the most demanding industrial environments.

Kakati has been certified with ISO 9001:2015, ISO 140001:2015, BSOHSAS 18001:2007 and CE certificate.

Energy Efficiency

At KAKATI, we understand the importance of enhancing operational efficiency, reducing energy and water consumption, and lowering overall operating costs — all without compromising performance.

Our innovative vacuum solutions are engineered to minimize power and utility usage, ensuring long-term savings and reliable operation across demanding applications.

KAKATI liquid ring vacuum pumps are built with optimized internal porting and precision engineering to deliver **maximum efficiency even under varying load conditions.**

Optimum Performance

Bigger or faster isn't always better. A vacuum pump running at off-design conditions can consume significantly more energy.

At **KAKATI**, our experienced engineers specialize in **accurately sizing and selecting vacuum pumps** that match your exact process requirements. We ensure that your Turbine operates at **peak efficiency and performance**, helping you save on energy while maintaining consistent production. **Trust KAKATI** for reliable, application-specific vacuum solutions that deliver real operational value.

Experienced Engineering Team

When precision matters, rely on **KAKATI's experienced engineering** team to provide the technical expertise you need — from system design to performance optimization.

Our **KAKATI-Engineering Support** ensures that your vacuum system is correctly sized, properly configured, and tailored to your specific application. We leverage **original design data, performance analytics**, and decades of field experience to deliver **customized, high-efficiency solutions**. As part of our engineering deliverables, **KAKATI will provide:**

- **P&ID (Piping & Instrumentation Diagrams)**
- **GAD (General Arrangement Drawings)**
- **Control Logic Diagrams**
- **Detailed Datasheets**

These documents are essential for accurate planning, seamless installation, and effective integration into your existing plant infrastructure. Whether you're executing a new installation, upgrading an existing system, or resolving performance issues, our engineering team is here to guide you with **data-driven recommendations & project-specific support.**

Pumps and Systems with Long Life

KAKATI vacuum pumps are trusted across industries for their rugged construction, dependable performance, and long service life. Many of our pumps installed in Power Plants and process plants decades ago are still operating efficiently today, delivering consistent, trouble-free performance.

Select models are equipped with corrosion-resistant coatings and robust internal materials, ensuring enhanced protection against wear and tear in demanding environments.

All **KAKATI** pumps are backed by our commitment to quality offering you peace of mind and lasting value.

Inspections and System Analysis

Preventive maintenance starts with smart inspection. At **KAKATI**, we offer comprehensive inspection and system analysis services to identify early signs of calcification, erosion, scaling, and mechanical wear — before they lead to costly breakdowns or performance losses.

Our diagnostic services include:

- Condenser, Ash Handling system Audits
- Vacuum Pump Efficiency Test Audits
- Fiber scope Inspections
- Vibration Analysis
- Overhauling/Refurbishment of Old Pumps



KAKATI – Engineered in India, Trusted Worldwide.

Post Installation Service and Support

When it comes to **repairs, overhauls, and rebuilds**, there's no better choice than the original manufacturer.

KAKATI is equipped with **skilled technicians, genuine OEM parts**, and access to **original design specifications & engineering drawings** to restore your pump to factory standards.

In addition, we offer **performance-enhancing upgrades** and apply the **latest design improvements** to ensure your vacuum pump operates with **optimal efficiency, reliability, and longevity**.

Performance Enhancements for Existing Installations

In a constantly evolving industry, you need vacuum systems that are flexible, efficient, and built to adapt. You also need a reliable partner who can deliver tailored solutions that grow with your operational demands.

At **KAKATI**, we offer expertise in upgrading and re-engineering existing vacuum installations — whether it involves increasing or redirecting capacity, or modifying system configurations to improve performance and efficiency. Replacement of existing Condenser air evacuation Vacuum ejector system with Liquid ring Vacuum Pump (LRVP) System.

Our Products for Power Industry



KV- Liquid Ring Vacuum Pumps

Most popular vacuum pump ever built by Kakati. Liquid ring vacuum pumps which are sturdy and rugged.

Capacity: Upto 16,000 m³/hr
Vacuum range: Upto 710 mmHg



KTC-Series Liquid Ring Vacuum Pumps

Integral 2 stage liquid ring pumps with improved performance at vacuum levels down to 0.8" HgA (27 mbar). Pumps are built to accommodate large amounts of liquid carry over with ease.

Capacity : Upto 4,000 m³/hr (30 SCFM)
Vacuum range : Upto 740 mmHg



KVT Two Stage Liquid Ring Vacuum Pumps

Two stage liquid ring vacuum pumps used primarily in evaporation and turbine condenser vacuum applications. Owing to its very sturdy and unique design these pumps can be run for very long periods between overhauls.

Capacity: Upto 5,000 m³/hr (30 SCFM)
Vacuum range: Upto 740 mmHg



KDS-Series Liquid Ring Vacuum Pumps

KDS series-two stage vacuum pumps are created for high vacuums applications. They are designed to operate in low suction pressures while offering peak efficiency. Common applications include turbine condenser evacuation, black liquor evaporation, vacuum distillations, vapour recovery systems etc.,

Capacity: Upto 6,000 m³/hr (40 SCFM)
Vacuum range: Upto 740 mmHg



2KE4-Liquid Ring Vacuum Pumps

The 2KE4 Series Liquid Ring Vacuum Pumps are Single stage port plate type liquid ring vacuum pumps. These pumps are optimized to offer 6% better efficiency over previous Plate Type models. These pumps operate in various applications including pulp and paper, mining, sugar, power, chemical processing industries etc.

Capacity: Upto 42,000 m³/hr
Vacuum range: Upto 710 mmHg

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