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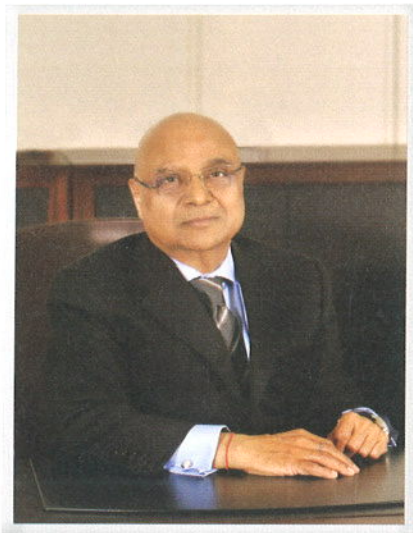
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Chairman's Message



"People with goals succeed because they know where they are going...it's as simple as that." Earl Nightingale.

Since our inception Macawber Beekay has always believed in keeping pace with evolving technology. The organization has grown from strength to strength by continuously innovating, ideating & collaborating to offer material handling systems solutions to our customers, aided by our state-of-the-art infrastructure and an experienced human capital.

With a clear vision and focus of being the numero uno in our field; our vibrant team continues to create value for our customers by offering quality solutions on a consistent basis. We at Macawber Beekay, have always seen our work as a service to the environment and are consistently driven to create more value, by keeping ourselves abreast with technology and innovate to offer environment friendly solutions.

We use our technical acumen to simplify complex problems faced by our customers and resolve them in the most effective and efficient ways. It is our vision, values and fundamentals that has given us the position of being an undisputed leader in our area of expertise.

We thank our stakeholders for their resolute and endless support in our long journey and we commit to value the faith entrusted in us. We will continue being a reliable partner who never compromises with the quality of excellence and deliver success time and again.

A handwritten signature in black ink, appearing to be 'Ajay K Gupta', written in a stylized, cursive script.

Ajay Kumar Gupta
Chairman & Managing Director

About us

Macawber Beekay, was established in 1984 as a joint venture company between BSBK Engineers Pvt. Ltd. of India and M/s Clyde Bergemann Material Handling Ltd. of UK (formerly Simon-Macawber Limited) to bring to India the technology of Dense Phase Pneumatic Conveying for transfer of bulk material especially Dry Fly Ash.

With a tremendous growth and various mergers and acquisitions, Macawber Beekay is now a 100% Indian equity. The company executes Bulk Material Handling Projects for handling Coal, Ash etc., throughout the power industry for solid fuel-fired boiler of size upto 1000 MW, fulfilling the need for environmental pollution control with energy conservation. Macawber Beekay's unique systems offer solutions to bulk material handling problems, other specific requirements of the core sectors of the Industry namely, power, cement, alumina, steel, chemicals, sugar, paper and foundry.





Our Vision

- ▶ Partnering and guiding the concept to completion chain by aligning industry leads to the development of effective and efficient engineering solutions.
- ▶ To be the trendsetters, that use innovation in development of process solutions and engineering products.
- ▶ To consistently re-evaluate our actions for desired vertical growth that enables the group to be seen as a knowledge hub by stakeholders.
- ▶ Consciously taking steps in reducing the carbon footprint and adopting environmental friendly practices.

Our Mission

- ▶ Become an ethically solid Corporate Citizen.
- ▶ Attain global market leadership in Material Handling Systems by a consistent improvisation in design innovation.
- ▶ Synergize and align business practices with global environmental needs and set standards.
- ▶ Enkindle the spirit of entrepreneurship and team work that consistently builds a productive, knowledgeable process driven organization.

Our Core Values

The core guidelines that directs Macawber Beekay's philosophy is based on the fundamentals of:

- ▶ Customer Delight - On time delivery is our pledge.
- ▶ Quality Assurance - Excellence through quality is inherent in every component of our corporate process and progress.
- ▶ People - We invest in IQ and EQ development of our human capital, assisting to create a knowledge environment.
- ▶ Attain success by directing the business focus towards creating an environment adaptable and friendly engineering solutions.

Our USP

- ▶ We want to guide and partner our customers with success through world class solutions and add value to our customer's business.
- ▶ We want to set the benchmarks in the market for products, services and solutions.
- ▶ As a global organisation we want to maintain a sustained growth which benefits our customers, employees and shareholders.



Occupational Health and Safety Management System (ISO 45001:2018)

Quality Policy (ISO 9001:2015)

"We are committed to meet specific requirements of our clients to achieve full customer satisfaction and make concerned efforts to attain continual improvement, technical expertise and human excellence by adopting total quality management in all spheres of the organization's activities and to maximize gross margin to be shared amongst stakeholders."

Environmental Policy (ISO 14001:2015)

"We are committed to sustainable development through:

- ▶ Optimum Utilization and Conservation of Natural Resources.
- ▶ Prevention of Pollution.
- ▶ Compliance with Legal and other requirements.
- ▶ Improve Environmental performance continuously through effective implementation of Environmental Management System (EMS) according to the requirements of ISO 14001:2015".





Ash Handling System (For Pulverised Coal Fired Boilers)

Bottom Ash Handling - Jet Pumping System (For Pulverised Coal Fired Boilers)

MBPL's product profile includes Jet Pumping System for intermittent removal of ash collected at the bottom of the furnace. The system comprises of water impounded refractory lined up by Bottom Ash Hopper (BAH), inclined hydro-pneumatically operated feed gate, clinker crusher and jet pump for intermittent de-ashing through high pressurized water to pump the bottom ash slurry to dewatering bins/slurry slump. MBPL's Jet Pumping Systems are installed upto a capacity of 135TPH and for power plants upto 800MW.





Bottom Ash Handling - De-watering Bin System

Certain applications call for periodical disposal of bottom ash, available in slurry form collected in the bin either through trucks or can be fed to high concentration slurry disposal system for disposal in paste form along with the fly ash. De-watering bins with the decanting system remove water from the bottom ash and this water can be recycled through a set of settling tanks, surge tanks, transfer pumps, etc. MBPL's De-watering Bin Systems are installed with a capacity of upto 1022MT/1500M3 and for power plants upto 4x600MW.

Bottom Ash Handling – In Dry Mode (DRYCON)

When bottom ash is required in dry form for the utilization or economic disposal methodology, Dry Bottom Ash Handling System (DRYCON), a complimentary world-class product is the solution. DRYCON system is mounted fully sealed to the combustion chamber and continuously removes bottom ash collected at the furnace bottom. The negative pressure inside the boiler sucks air in a controlled manner mainly at the top end of the DRYCON system into the main system. This air travels in counter-flow direction along the surface of the ash that rests on the conveyor belt. This activates a re-burning process of the glowing ash which reduces the unburned carbon level and frees up additional thermal energy. The air is heated up before it enters the combustion chamber and adds additional thermal energy to the steam generating process inside the boiler. DRYCON systems are installed upto a capacity of 90TPH and for power plants upto 800MW. DRYCON, a product of Clyde Bergemann is manufactured at MBPL workstation for installations across India.



Dry Bottom Ash Handling - Pressure Pneumatic Conveying System

Dry bottom ash collected in hopper/silo through DRYCON sometimes needs to be transported beyond the plant boundary for utility purpose. For such applications, MBPL's Pressure Pneumatic Conveying System takes precedence. MBPL's Pressure Pneumatic Conveying Systems operates on batch/continuous operating concept and can provide the much coarser particles of bottom ash. MBPL's Pressure Pneumatic Conveying Systems are installed upto a capacity of 88TPH for distances upto 800m and for power plants upto 600MW.

Fly Ash Handling - Vacuum Extraction System

MBPL's product profile includes Vacuum Extraction System for extraction of fly ash collected at Air Pre Heater / Electrostatic Precipitator hoppers of PF type boilers. Vacuum Extraction System is generally adopted when the extraction distance is less, when the number of hoppers are more and when the project layout demands for two stage conveying. MBPL's Dome Valve has proved to be one of the best valves for the vacuum applications. MBPL's Vacuum Extraction Systems are installed upto a capacity of 74TPH and for power plants upto 800MW.





Fly Ash Handling - Pressure Pneumatic Conveying System

MBPL offers Pressure Pneumatic Conveying System for conveying coarse ash/fly ash collected at Economiser/ Air Pre Heater/ Electrostatic Precipitator Hoppers. Pressure Pneumatic Conveying System is generally adopted due to many of its advantages like positive pressure system, low velocity, lesser erosion rates, conveying of fine and coarse ash separately collected (thus increasing its utility), capability to convey longer distances in a single stretch (upto 1km directly from ESP and upto 3km from intermediate silo to remote silo), etc. The system operates on a batch concept for the first stage conveying system and on a continuous mode for second stage transportation system. MBPL's Dome Valve has been the best proven valve for pneumatic material handling application. MBPL's Pressure Pneumatic Conveying Systems are installed upto a capacity of 150TPH for distances upto 2.3km and for power plants upto 1000MW.

Fly Ash Handling - Hydro-sluicing System

For projects requiring Hydro-sluicing System for transfer of coarse ash/fly ash collected at Economiser/ Air Pre Heater/ Electrostatic Precipitator hoppers or along the vacuum system or at buffer hoppers/silo's of PF type boilers; MBPL provides various modules like flushing apparatus system, wetting head cum slurrifier system, feeder ejector/hydro ejector system etc. depending upon the requirement of application. MBPL's Hydro-sluicing Systems are installed upto a capacity of 120TPH and for power plants upto 800MW.



Ash Handling Systems

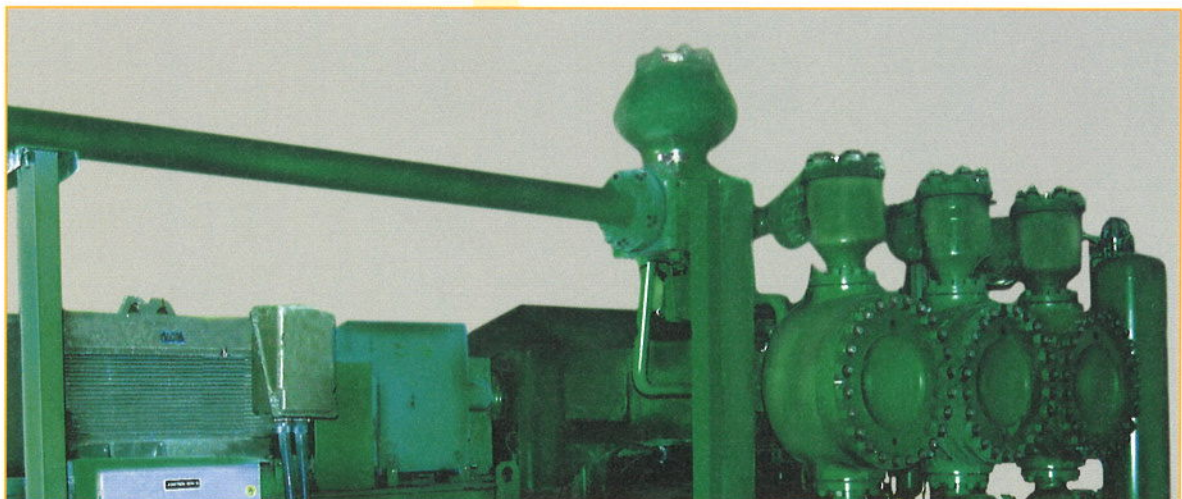
(For AFBC/CFBC/WHRB type of Boilers firing Coal/Lignite/Bagasse/Rice husk)

Ash Handling – Mechanical System

Certain applications which specially require Mechanical System, like in case of CFBC type boilers for transportation of bed ash collected at furnace bed, MBPL provides a drag chain conveyor system followed by pressure pneumatic conveying system as per the application requirement. MBPL's Mechanical Systems are installed for a wide range of capacities in power plants.

Ash Handling - Pressure Pneumatic Conveying System

MBPL offers Pressure Pneumatic Conveying System for conveying bed ash/ coarse ash/ fly ash collected at Furnace Bed/ Economiser/ Air Pre Heater/ Electrostatic Precipitator hoppers of AFBC/CFBC/WHRB etc. type boilers firing various fuels like coal/lignite/bagasse/rice husk etc. MBPL with its Dome Valve and Dense Phase Pneumatic Conveying technology has always kept a brand name for these applications by giving practical solutions to various requirements arising from time to time, irrespective of the batch type/continuous conveying, shorter/longer distances, lower/higher capacities, temperature ranges etc. MBPL's Pressure Pneumatic Conveying System's installation capacity range is undoubtedly remarkable.





Ash Slurry Disposal Systems

Ash Slurry Disposal – Lean Slurry Disposal System & Ash Water Recovery System

Lean Slurry Disposal System & Ash Water Recovery System have been conventionally used for disposal of ash slurry in dilute form generated at various power plants and are still in demand. MBPL offers such systems which comprises of centrifugal slurry pumps for disposal and clariflocculator or tube settlers for recovery of water. MBPL's Lean Slurry Disposal System & Ash Water Recovery System are installed upto a capacity of $4 \times 1255 \text{ m}^3/\text{hr}$. for distances upto 16km.

Ash Slurry Disposal – High Concentration Slurry Disposal (HCSD) System

MBPL has been a pioneer in adopting the environmental friendly High Concentration Slurry Disposal (HCSD) Systems in India by commissioning the HCSD system for a combination of fly ash and bottom ash, a first of its kind in India. HCSD system comprises of a controlled & monitored feeding system for fly ash and bottom ash followed by a homogenous mixture in an adequately designed Agitator Retention Tank (ART) and further pumping to disposal area through the piston diaphragm/hydraulic piston pumps. HCSD system operates on a higher concentration of about 60%, that's why the water consumption is drastically reduced and literally no water is released at the disposal area. The ash slurry disposal takes place based on a sloped disposal concept thereby it spreads and solidifies, leaving hardly any residual ash to fly off. The system has unique advantages of less land area requirement, lesser leaches in the disposal area, low velocity system, lesser size pipes and less power consumption. MBPL's HCSD systems are installed upto a capacity of $315 \text{ m}^3/\text{hr}$. for distances upto 17km.

Ash Slurry Disposal – Mine Backfilling

For Mine Backfilling, MBPL has employed both lean slurry disposal system as well as HCSD/MCSD systems in India. MBPL's Mine Backfilling systems are installed upto a capacity of $3 \times 1250 \text{ m}^3/\text{hr}$ and for distances upto 25km.



Material Handling Systems

(For industries like Cement/Steel/Paper/Foundry/Chemical/Process)

Material Handling- Mechanical System

Certain applications specially require Mechanical System for conveying fly ash. For transportation/feeding/blending/classification of fly ash in cement industry, MBPL provides various system like bagging/bag unloading system, truck & tanker loading/unloading system, wagon loading/unloading system, bucket elevator system, air slide system, weigh bin system, classifier system, blending system etc. as per the application requirement. MBPL's Mechanical Systems are installed with a wide range of capacities in cement industries.

Material Handling - Pressure Pneumatic Conveying System

MBPL offers Pressure Pneumatic Conveying System for conveying of various powdery materials like clinker dust/sand/bentonite/salt, etc. for industries like Cement/Steel/Paper/Foundry/Chemical/Process etc. MBPL with its patented Dome Valve design and Dense Phase Pneumatic Conveying technology has always kept a brand name with these industries by giving practical solutions to the various requirements arising from time to time, irrespective of the batch type/continuous conveying, shorter/longer distances, lower/higher capacities, extreme physical/chemical properties, temperature ranges etc. MBPL's Pressure Pneumatic Conveying Systems installation capacity range is undoubtedly remarkable.

Bulk Material Handling Plant (Coal/Lime)

MBPL executes projects of Bulk Material Handling (Coal/Lime Handling) on Turnkey/EPC basis. MBPL undertakes system design and supply of all associated equipments like Wagon Tipplers, Track Hoppers, Paddle/Plough Feeders, Crushers, Screens, Belt Conveyors, Apron Feeders & Stacker cum Reclaimers, apart from execution of civil, structural and electrical works. MBPL's Coal/Lime Handling Plants are installed upto a capacity of 2000TPH, lengths upto 1.5km and for power plants upto 2x660MW.



SHIP/BARGE LOADING SYSTEM

Macawber Beekay specializes in ship / barge loading systems, especially for fly ash application. This system is more pertinent to the power plants, located near coastal area, those need to export fly ash generated in their plant. Macawber Beekay backed with extensive experience in fly ash handling, offers Stationary type Ship / Barge Loading System to be installed on Jetty.

SHIP LOADING SYSTEM PROCEDURE

Pivoting Operation

Once ship is placed, Main arm of boom structure rotate either for loading or stowing. When position is reached, boom rotation will soft stop by engaging brakes, holding the reached position without a bouncing effect.

Loading Operation

Once signal is active that pivoting operation is done, telescopic loader will be lowered to the ship level, hold at a height commanded by a radar sensor. Once in position, the de-dust blower will start to provide duct dedusting.

- When all clear, the first Loading screw conveyor will start, the second Feeding conveyor will run after a time gap and finally RVF at the silo will start.
- Then the silo outlet valve will open, and the material will come through RVF with a limited quantity. And ship loading is started.

Stopping Sequence

- First the silo outlet valve is closed. After this RVF will stop.
- Feeding screw conveyor will run for few seconds and then stop. After this, loading conveyor will run up for few seconds and then stop.
- Once completed, telescopic loader will rewind into its stowing position then finally the de-dusting blower can be stopped.
- After stopping sequence the main arm will be stowed to its initial position.



Red Mud Disposal Systems

MBPL's diversified area includes execution of Red Mud Disposal Systems on Turnkey basis for the aluminium industry. MBPL is in service for disposal of red mud collected from drum filters as well as Mud Washers/Thickeners. In case of drum filters, system comprises of screw feeder, belt conveyors and Agitator Retention Tank (ART). The softened slurry in ART is then pumped to the red mud pond through piston diaphragm pumps or centrifugal pumps. In case of Mud Washers/Thickeners, wherein the system comprises of direct pumping of the mud washer discharge in the red mud pond through piston diaphragm pumps. The decant water from the red mud pond is pumped back to the system through submersible pumps or centrifugal pumps installed on floating pontoons. MBPL's Red Mud Disposal Systems are installed upto a capacity of 350m³/hr, for distances upto 5.5km and for alumina refineries with a capacity of upto 1.5MTPA.

Operation and Maintenance

Proper operation & maintenance of a system can only deliver the desired output on sustainable basis. Taking note of the same, MBPL has always trained and guided their customers for better operation of the systems. For customers, who desire to have the regular operation and maintenance to be carried out through the technical expertise of the OEM, MBPL has a team dedicated to take up the O&M on a regular basis. O&M of MBPL's major installations are taken care of by MBPL directly.





Awards & Recognitions



API Tanks & Vessels - Refinery/Gassification Application

MBPL's diversified area includes engineering & manufacturing of Tanks & Vessels as per API (620,650 etc.) for refinery/gasification applications. MBPL has engineered the shop manufactured Slurry Mix Drums as per API 620/650, Slag De-Watering Bins as per API 620 (4.2m dia. x 20m long) & Sulphuric Acid tanks as per API 650 for gasification/refinery projects.



Major Projects

Overseas Projects

- 1x1000 MW (UNIT-4) Janamanjung TPP, Malaysia thru' Alstom, USA/China
- 1x1000 MW (UNIT-4) Tanjung Bin TPP, Malaysia thru' Alstom, USA/France/India
- 2x800 MW, Talin TPP, Taiwan A/c. IHI / CTCL thru' CBMHL, UK/China
- 3x800 MW Linkou TPP, Taiwan A/c. CTCL thru' CBMHL, China
- 3x700 MW Janamanjung TPP, Malaysia A/c ABB Alstom Power thru' CBMHL, UK
- 1x600 MW Mae Moh TPP, Thailand thru' ALSTOM, USA
- 2x600 MW Wangqu TPP, China thru' CBMHL, UK
- 2x600 MW Hancheng TPP, China A/c Harbin Power thru' CBMHL, UK
- 2x550 MW Taichung TPP, Taiwan A/c Mitsui Babcock, U.K. thru' CBMHL, UK
- 1x430 MW Pagbilao Expn. TPP, Philippines thru' Daelim, Korea
- 2x150 MW Therma Visayas TPP, Philippines thru' Hyundai, Korea
- 2x135 MW CFBC Boiler, PT Cikarang, Indonesia thru' Metso
- 2x103 MW CEBU TPP, Indonesia A/c KEPCO SPC Power thru' Doosan, Korea
- 3x18 MW KPC PT Kaltim Prima Coal, Indonesia thru' Punj Llyod

Coal/Lime Handling Systems

Athena Energy Ventures Pvt. Ltd

- 2x660 MW Singhitari TPP, Bhavanapadu, AP thru' Abir
- 2x600 MW Singhitari TPP, Janjgir-Champa, CG thru' Abir

JSW Ltd.

- 4 x 300 MW TPP, Ratnagiri, MS thru' EDAC
- 8 x 135 MW TPP, Barmer, Raj.

Meenakshi Energy Pvt. Ltd

- 2x300 MW TPP, Nellore, AP, thru' EDAC

Nagai Power Pvt. Ltd

- 2x150 MW TPP, Nagapattinam, TN

NTPC Ltd

- 1x500 MW TPP Simhadri, AP

TSGENCO

- 1x500 MW Kothagudam TPS
- 4x270 MW Bhadradi TPS thru' BHEL

Ash Handling Systems

Adani Power Ltd.

- 5x660 MW Tiroda TPP, MS
- 4x330 MW + 5x660 MW Mundra TPP, Guj.

Adhunik Power and Natural Resources Ltd.

- 2x270 MW MPSTPP, JH

Ahmedabad Electricity Co. Ltd.

- 1x60 MW + 3x110 MW Sabarmati TPS

Andhra Pradesh Power Generation Corp. Ltd.

- 3x210 MW Rayalaseema TPP

Aryan Coal Beneficiation (I) Ltd.

- 2x135 MW CPP at Korba, CG

Athena Energy Ventures Pvt. Ltd

- 2x660 MW Bhavanapadu TPP, AP thru' Abir

Bajaj Hindustan Ltd.

- 3x660 MW Lalitpur STPP, UP



Bihar State Electricity Board

- 2x250 MW Barauni TPS thru' BHEL

CESC Ltd.

- 2x300 MW TPP Haldia thru Punj Lloyd
- 2x300 MW TPP Dhariwal thru Punj Lloyd
- 2x250 MW TPP Budge-Budge
- 1x250 MW TPP Budge-Budge thru BHEL

Chhattisgarh State Power Generation Co. Ltd.

- 2x500 MW Marwa TPP thru' BGR
- 2x250 MW Korba (East) TPS thru BHEL
- 4x210 MW HTPS Korba West
- 440 MW KTPS Korba East

Coastal Energen Pvt. Ltd.

- 2x600 MW Mutiara TPP, Tuticorin, TN

Damodar Valley Corp.

- 1x500 MW Bokaro TPS thru BHEL
- 3x210 MW Mejia TPS thru Lafarge
- 1x140 MW and 1x210 MW Durgapur TPS

Essar Group

- 325 MW Vadinar Power Plant
- 270 MW Hazira Power Plant

Gujarat State Electricity Co. Ltd.

- 1x800 MW Wanakbori TPP thru BHEL
- 1x500 MW Ukai TPP thru BHEL
- 2x250 MW Sikka TPS thru BHEL
- 2x120 MW Sikka TPS thru Shree Digvijay Cement

GMR Energy Ltd.

- 2 x 685 MW GMR Chhattisgarh TPP, Korba (CG)

Haryana Power Generation Co. Ltd.

- 2x110 MW + 1x210 MW Panipat TPS thru Jaiprakash

Hindalco Group

- 6x150 MW CPP, Mahan, MP
- 4x100 MW (Unit 2-5) CPP, Hirakud, Odisha
- 11x67.5/70/80 MW CPP, Renuagar, UP

Hinduja National Power Corp. Ltd.

- 2x520 MW (1040 MW) VIZAG TPP thru' BHEL

Hindustan Power Projects Pvt. Ltd.

- 2x600 MW Anuppur TPP thru' Lanco

Ind Bharat Ltd.

- 2x350 MW Jharsuguda TPP

Jaiprakash Group

- 3x660 MW Prayagaraj STPP, Allahabad, UP
- 2x660 MW Nigre STPP, Singrauli, MP

Jindal India Power Ltd.

- 2x600 MW TPP, Angul, Odisha

Jindal Steel & Power Ltd.

- 4x600 MW TPP, Raigarh, CG
- 6x135 MW CPP + 3x180 TPH Boiler, Angul, Odisha
- 4x135 MW Raigarh TPP, CG
- 4x135 MW Dongamonga TPE. (CG)

JSW Energy Ltd.

- 4x300 MW TPP at Toranagallu, Karnataka
- 4x300MW TPP at Ratnagiri, MS
- 8x135 MW Lignite based TPP, Barmer, Raj.

KVK Nilachal Power Pvt. Ltd.

- 1x350 MW TPP, Odisha thru' EDAC

Karnataka Power Co. Ltd./Raichur Power Corp. Ltd

- 2x800 MW Yermarus TPS thru BHEL
- 2x210 MW Raichur TPS thru ACC Ltd.

LANCO

- 2x660 MW Babandh TPP, Odisha



Madhya Pradesh Power Generation Co. Ltd.

- 6x210 MW Satpura TPS

Maharashtra Power Generation Co. Ltd.

- 2x500 MW Chandrapur TPS thru' BGR
- 1x250 MW (Unit 8) Parli TPS as BOP package
- 4x210 MW + 3x500 MW Chandrapur TPS thru' Cement Cos.
- 4x210 MW Koradi TPS thru' Manikgarh cement
- 2x210 MW Khaperkheda TPS

Maruti Clean Coal & Power Ltd.

- 1x300 MW TPP, Korba (CG)

Meenakshi Energy Pvt. Ltd.

- 2x300 MW TPP, AP, thru' EDAC
- 2x150 MW TPP, AP, thru' Thermax

Nava Bharat Energy India Ltd.

- 1x150 MW CFPP, Paloncha, AP

National Aluminium Co. Ltd.

- 7x120 MW Angul CPP (Units 1-5, 9&10)

NCC Ltd.

- 2x660 MW NCC Power Project

Neyveli Lignite Corp. Ltd.

- 2x500 MW Neyveli TPS thru' Alstom & Essar
- 2x250 MW Neyveli TPS-II thru' BHEL
- 12x50 MW Neyveli TPS-I thru' DGIM

NLC-TNEB Power Ltd.

- 2x500 MW Tuticorin TPP through BHEL

NTPC Ltd

- 3x660MW North Karampura STPP, JH thru BHEL
- 2x500 MW Mauda STPP, MS
- 1x500 MW Vindhyachal STPP, UP
- 3x210 MW Badarpur TPS, Delhi
- 3x200 MW + 3x500 MW Korba TPP, CG thru BHEL
- 2x195 MW Muzaffarpur TPS, Bihar A/c KBUNL
- 2x500 MW – STPP-1 : NTPC Rihand
- NTPC – Varanashi 600TPD Waste to Energy

Odisha Power Generation Corp. Ltd.

- 2x210 MW IB Valley TPS thru' L&T Ltd.

Punjab State Power Corp. Ltd.

- 2x250 MW Lehra Mohabbat TPP thru' BHEL
- 6x210 MW GGSSTPP, Ropar
- 4x110 MW Bhatinda TPP thru' DCIPS

Rajasthan Rajya Vidyut Utpadan Nigam Ltd.

- 2x660MW Suratgarh TPS thru' BHEL
- 2x600 MW Kalisindh TPS thru' BGR
- 4x250 MW Suratgarh TPS thru' Grasim & Shree Cement
- 2x250 MW Chhabra TPS Direct and thru' Grasim & Punj Lloyd
- 3x210 MW Kota TPS thru' Birla Corp. & Grasim
- 1x195 MW Kota TPS thru' Grasim
- 1x125 MW Giral Lignite TPP
- 1x125 MW Giral Lignite TPP thru' Tata Projects
- 2x110 MW Kota TPS thru' ACC

Ratan India Power Ltd. (previously Indiabulls)

- 5x270 MW TPP, Amravati, MS
- 5x270 MW TPP, Nashik, MS

Reliance Industries Ltd.

- 4x500 TPH Boiler, Dahej, Guj.
- 5x500 TPH Boiler, Hazira, Guj

RKM Powergen Pvt. Ltd.

- 4x360 MW Uchchipinda TPP, CG

Sintex Infra Projects Ltd.

- 2x150 MW Shirpur TPP, Dhule, MS

Surana Power Ltd.

- 2x210 MW Surana TPP

TANGEDCO

- 2x600 MW North Chennai TPS thru' BHEL
- 1x600 MW Mettur TPP thru' BGR
- 3x210 MW Mettur TPS thru' Cement Cos.
- 2x110 MW Ennore TPS thru' BHEL
- 2x60 MW + 1x110 MW Ennore TPS thru' L&T



Tata Group

- 2x525 MW Maithon Right Bank TPP, JH
- 1x500 MW Trombay TPP, MS
- 1x250 MW Trombay TPP, MS thru BHEL
- 4x120 MW Jojobera TPP, JH

Thermal Powertech Corp. (I) Ltd.

- 2x660 MW STPP, Krishnapatnam, TN thru' BGR

TRN Energy Ltd.

- 2x300 MW TPP, Raigarh, CG thru' BGR

Telangana State Power Generation Corp. Ltd.

- 1x500 MW Kothagudam TPS
- 4x270 MW Bhadradi TPS thru BHEL
- 4x60 + 4x120 MW Kothagudam TPS

Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd.

- 2x500 MW, Anpara 'D' TPP thru BHEL
- 3x200 MW Obra TPP thru Jaiprakash
- 3x210 MW Anpara TPP

Vedanta Group

- 4x600 MW IPP at Jharsuguda, Odisha
- 9x135 MW CPP at Jharsuguda, Odisha
- 4x135 MW CPP + 4x300MW CPP at Korba, CG

West Bengal Power Development Corporation Ltd.

- 1x210 MW Bandel TPS – direct and thru Doosan, India

HCSD Systems

Adani Power Maharashtra Ltd.

- 5x660 MW TPP at Tiroda, MS

APGENCO

- 3x210 MW RTPP at Rayalaseema

Aryan Coal Beneficiations (I) Ltd.

- 2x135 MW CPP at Korba

Athena Energy Ventures Pvt. Ltd

- 2x660 MW TPP at Bhavnepadu, AP thru Abir

Bajaj Hindustan Ltd.

- 3x660 MW Lalitpur STPP, UP

CSPGCL

- 2x500 MW MTPS at Marwa thru BGR
- 4x210 MW HTPS at Korba West
- 440 MW KTPS at Korba East

GSECL

- 1x800 MW Wanakbori TPP thru BHEL
- 1x500 MW Ukai TPP

GMR Energy

- 2 x 685 MW GMR Chhattisgarh TPP, Korba (CG)

Jindal Power Ltd.

- 4x600 MW OPJSTPP, Raigarh, CG
- 2x600 MW TPP, Angul, Odisha,
- 6x135 MW + 3x80 TPH Process Boiler at Angul, Odisha
- Unit # 1&2 Raigarh Power Project, CG

JSW Ltd.

- 4x300 MW TPP, Ratnagiri, MS
- 8x135 MW Lignite Based TPP, Barmer, Raj.

Hindalco Group

- 6x150 MW CPP at Mahan, MP
- 3x30 MW CPP at Doraguda, Odisha

MAHAGENCO

- 2x500 MW CTPS at Chandrapur thru' BGR
- 1x250 MW (Unit 8) TPS at Parli as BOP package

NALCO

- 4x120 MW CPP at Angul

NTPC Ltd

- 3x660MW North Karampura STPP, JH thru BHEL
- 2x500 MW STPP at Mauda, MS

Ratan India Power Ltd. (previous Indiabulls)

- 5x270 MW TPP, Amravati, MS
- 5x270 MW TPP, Nashik, MS

SKS Power

- 2x300 MW TPP at Raigarh, CG

Tata Group

- 2x120 MW TPS at Jojobera, JH

Vedanta Group.

- 4x600 MW IPP at Jharsuguda, Odisha thru' SEPCO III, China
- 4x135 MW CPP at Korba, CG
- 3x30 MW CPP at Lanjigarh, Odisha thru' CMEC, China
- 3x50 MW + 3x30 MW CPP at Lanjigarh, Odisha

Mill Reject Handling Systems

Adani Power Ltd.

- 5x660 MW Tiroda TPP, MH
- 2x660 MW Kawai TPP, Baran, Raj.

APGENCO

- 1x500 MW Vijayawada TPS thru BGR
- 1x210 MW Rayalaseema TPP

DVC

- 2x600 MW Raghunathpur TPP thru' Reliance
- 2x500 MW Mejia TPS thru' BHEL
- 2x500 MW Kodarma TPS thru' BHEL
- 2x500 MW Durgapur TPS thru' BHEL

GMR Energy Ltd

- 2 x 685 MW GMR Chhattisgarh TPP, Korba (CG)

Hindalco Group

- 6x150 MW CPP at Mahan, MP

Hindustan Power Projects Pvt. Ltd.

- 2x600 MW Anuppur TPP thru' Lanco

HPGCL

- 2x600 MW Hissar TPS thru' Reliance
- 2x300 MW Yamunanagar TPS thru' Reliance

Jaiprakash Power Ventures Ltd.

- 2x660 MW Nigre STPP, Singrauli, MP.

Jindal Power Ltd.

- 4x250 MW OP Jindal STPP, Raigarh, CG

KPCL

- 2x500 MW Bellary TPS thru' BHEL

L&T Ltd.

- 3x700 MW Rajpura TPP, Patiala, PB

Lanco Infratech Ltd.

- 2x660 MW Babandh TPP, Dhenkanal, Odisha
- 2x660 MW Amarkantak TPP, (CG)
- 2x660 MW Vidharbha TPP, (MH)

MAHAGENCO

- 3x660 MW Koradi TPS thru' L&T Ltd.
- 2x500 MW Bhusawal TPS thru' Tata Projects
- 1x250 MW (Unit 8) Parli TPS as BOP Package
- 3x210 MW Nasik TPS
- 2x210 MW Bhusawal TPS
- 2x210 MW Chandrapur TPS
- 2x210 MW Parli TPS
- 1x200 MW + 2x210 MW Koradi TPS

MPPGCL

- 1x500 MW SGTPS, Birsingpur, MP thru' BHEL
- 2x250 MW Satpura TPP thru' BHEL

NCC

- 2x660 MW Nellore TPP, AP

NLC-TNEB Power Ltd.

- 2x500 MW Tuticorin TPP thru' BHEL

NTPC Ltd

- 2x800 MW Lara STPP thru' Doosan
- 3x800 MW Kudgi STPP thru' Doosan
- 3x660 MW Barh STPS thru' Technoprom Export
- 3x660 MW Sipat STPS thru' Doosan
- 2x660 MW Mauda II thru' BHEL



- 2x660 MW Solapur STPP thru' BGR
- 2x660 MW Meja STPP thru' BGR
- 2x660 MW Tanda STPP thru' L&T
- 4x500 MW Simhadri TPS thru BHEL
- 4x500 MW Talcher TPS thru BHEL
- 3x500 MW Kahalgaon STPS thru BHEL
- 2x500 MW Rihand TPS thru BHEL
- 2x500 MW Vindhyachal TPS thru BHEL
- 2x500 MW Sipat STPS thru BHEL
- 2x500 MW Mauda I thru BHEL
- 1x500 MW Ramagundam TPS thru BHEL
- 2x490 MW Dadri TPS thru BHEL
- 4x250 MW Nabinagar TPP thru' BHEL
- 2x210 MW Badarpur TPS
- 1x210 MW Unchahar TPS thru BHEL
- 2x195 MW Muzaffarpur TPS (A/c KBUNL) thru' BHEL

Ratan India Power Ltd.

- 5x270 MW TPP, Amravati, MS
- 5x270 MW TPP, Nashik, MS

RRVUNL

- 2x660 MW Suratgarh, TPP

Surana Power Ltd.

- 2x210 MW Surana TPP

TANGEDCO

- 1x600 MW Mettur TPS thru BGR.
- 1x500 MW Ennore TPS thru BHEL.

TATA GROUP

- 2x525 MW Maithon Right Bank TPP

TSGENCO

- 1x500 MW Kakatiya TPP thru BGR

UPRVUNL

- 2x600 MW Anpara CTPP thru Lanco
- 2x300 MW Rosa TPP thru Reliance
- 2x250 MW Parichha TPS thru Reliance
- 2x250 MW Harduaganj TPS
- 2x210 MW Parichha TPS thru Indure

WBPDC.

- 2x500MW Sagardighi STPP thru' BHEL
- 1x250MW Santhaldi STPP thru' BHEL
- 2x210MW Bakreswar STPP thru' BHEL

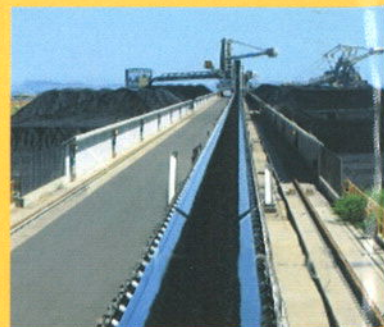
Red Mud Disposal Systems

- Balco - Alumina Refinery at Korba, CG
- Nalco - Alumina Refinery at Damanjodi, Odisha
- Utkal Alumina - Alumina Refinery at Doraguda, Odisha
- Vedanta Alumina - Alumina Refinery at Lanjigarh, Odisha

Operation & Maintenance

- Adani Power - 2x660 MW TPP, Kawai
- Adhunik Power - 2x270 MW TPP, JH
- APCL - 3x500 MW IG TPP, Jajjar
- APGENCO - 1x210 MW Rayalseema TPP
- Coastal Energen - 2x600 MW Tuticorin TPP
- CSPGCL - 2x250 MW Korba East TPP
- CSPGCL - 440 MW Korba East TPP
- CSPGCL - 4x210 MW Korba West TPP
- DVC - 3x210 MW + 2x500 MW Mezia TPP
- GSECL - 1x500 MW Ukai TPS
- GSECL - 2x250 MW Sikka TPS
- CSPGCL - 4x210 MW Korba West TPP
- HPGCL - 2x110 MW + 1x210 MW Panipat TPS
- HPGCL - 2x660 MW Rajiv Gandhi TPS, Hissar
- JSPL - 6x135 MW TPP, Angul, Odisha
- JSW Ltd. - 8 x 135 MW Lignite Based TPP, Barmer, Raj.
- MAHAGENCO - 1x210 MW Bhusawal TPS
- MAHAGENCO - 1x200 MW + 2x210 MW Koradi TPS
- PSPCL - 6x210 MW Ropar TPP
- PSPCL - 2x250 MW Lehra Mohabbat TPP
- RIPL - 5x270 MW Amaravati TPP, MS
- RRVUNL - 2x250 MW Chhabra STPP, Raj.
- RRVUNL - 2x600 MW Kalsindhi TPP, Raj.
- Vedanta Group - 4x600 MW IPP, Jharsuguda thru Evonik
- Tata Group - 2x525 MW Maithon TPP

WORLDWIDE INSTALLATIONS



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