

KC Cottrell

Air Quality Control Systems

> Particulate Removal System

- Dry Electrostatic Precipitator
- Wet Electrostatic Precipitator
- Bag Filter
- Ash Handling System
- Tunnel ESP
- Hybrid Module Type Precipitator

> Gas Treatment System

- Wet Flue Gas Desulfurization
- Semi Dry/GSA
- SCR/SNCR
- VOCs Control System
- Exhaust Gas Cleaning System (For Marine)

Retrofit & Maintenance

- Air Quality Control System Retrofit
- Technical Service
- Feasibility Study

Manufacturing Services

- Dampers
- Steel Work

New & Renewable Energy

- Solar Power System
- Biomass & Waste to Energy



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Particulate Removal Systems

Dry Electrostatic Precipitator

Global Leader in Green Technology
 - People & Technology keeping our planet sustainable...

www.kc-cottrell.com



For decades we provide State-of-the-Art Technologies in Electrostatic Precipitation Equipments for the power generation, oil & gas and heavy industries. KC Cottrell Electrostatic Precipitators are designed to meet with high reliability and the highest standards for the more and more stringent environmental regulations.

Process

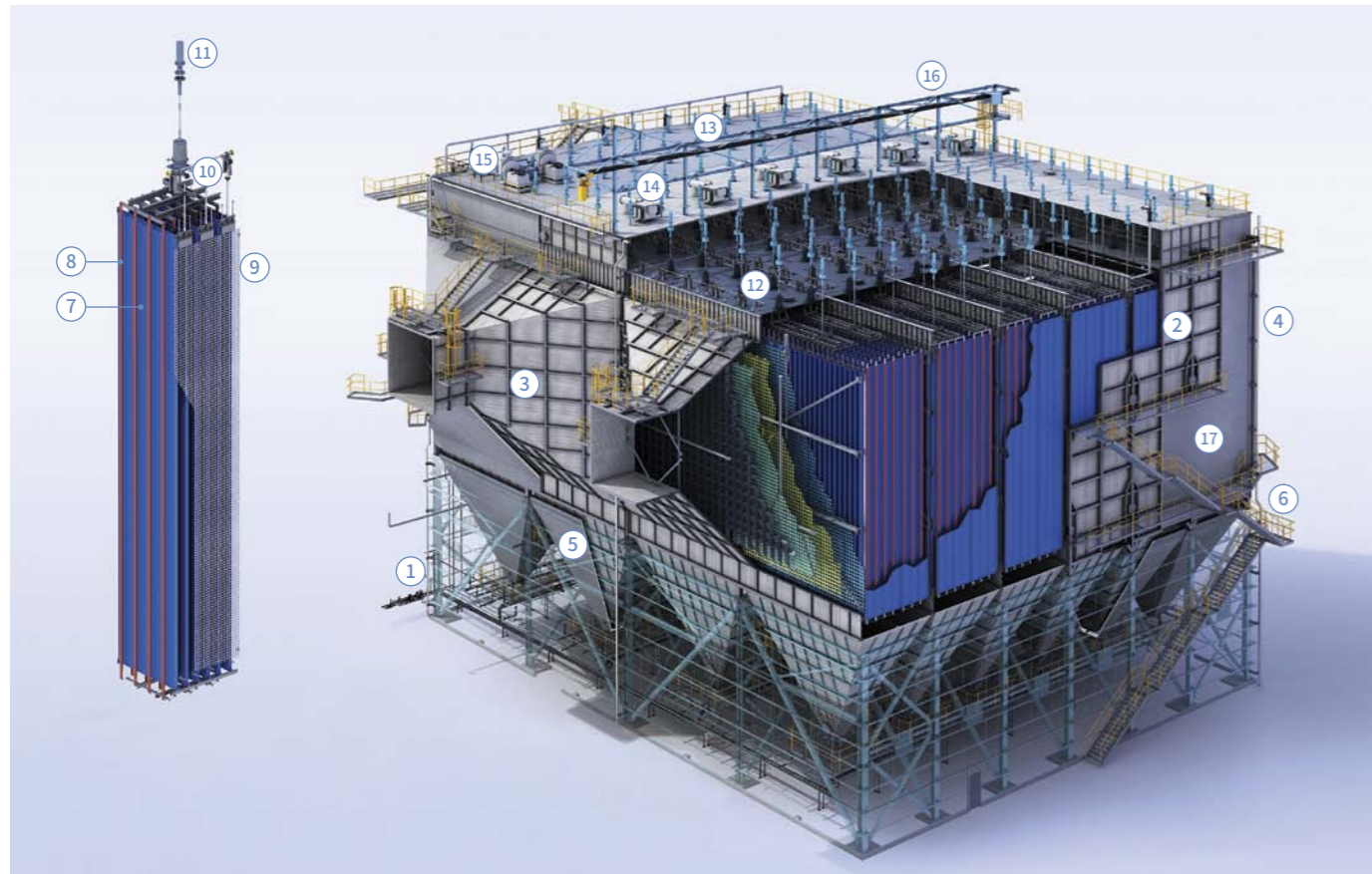
- The gasses pass through an ionized zone created by DC high voltage applied to the discharge electrodes.
- The particles present in the gas are electrically charged and migrate towards the collecting plates.
- Collected particles agglomerate on the collecting plates and are dislodged by efficient rapping system.
- The particles are finally collected in the hoppers.

Advantages

- Optimum design for power generation, cement, steel, petrochemical and heavy industry
- More than 600 references
- Collecting Electrode providing ideal gas flow to minimize re-entrainment
- Discharge Electrode with high durability and high efficient electrical characteristics
- Electromagnetic (Magnetic Impulse) and Mechanical (Hammer) rapping system
- State-of-the-Art energization systems

Part Name

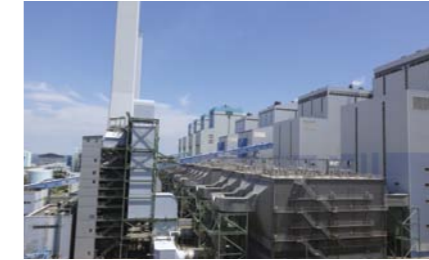
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|----------------------|------------------------------|---------------------------|
| 1. Support Structure | 7. Collecting Electrode(C.E) | 13. Penthouse Roof |
| 2. Casing | 8. Discharge Electrode(D.E) | 14. Transformer Rectifier |
| 3. Inlet Nozzle | 9. Perforated Plate | 15. Purge Air System |
| 4. Outlet Nozzle | 10. C.E Rapper | 16. Monorail Hoist |
| 5. Hopper | 11. D.E Rapper | 17. Insulation & Lagging |
| 6. Access Walkway | 12. Hot Roof | |



ESP 3-D VIEW

References : Power Generation

- Dangjin Thermal Power Plant No.9~10 1,000MW X 2, Korea (2016)
- Samcheok Green Thermal Power Plant No.1~2 1,000MW X 2, Korea (2017)
- Pagbilao Thermal Power Plant No.3 420MW X 1, Philippines (2018)
- NTPC Meja Thermal Power Plant 660MW X2, India (2019)
- Long Phu 1 Thermal Power Plant 600MW X 2, Vietnam (2019)
- Shinseocheon Thermal Power Plant No.1~2 1,000MW X 1, Korea (2019)



Dangjin Thermal Power Plant



Samcheok Green Thermal Power Plant



NTPC Meja Thermal Power Plant



Taean Thermal Power Plant

Iron & Steel

- SNNC Gwangyang Fe-Ni Plant No.2, Korea (2006)
- POSCO Gwangyang Steel Mill, Steel Making No.4, Korea (2013)
- POSCO Gwangyang Steel Mill, Sinter Plant No.2, Korea (2015)



SNNC Gwangyang Fe-Ni Plant

Other Industries

- Yeongwol Plant Units 3, 5, Ssangyong Cement, Korea (2008)
- PT. Petrokimia Gresik, Indonesia (2010)
- Yeocheon Plant, GS Caltex, Korea (2012)
- UHV RFCCU Plant, Thailand (2013)
- UOP Plant, Iraq (2016)



UHV RFCCU Plant