

Evaporative coolers are installed mainly in the cement industry. They create, if it's required, very favorable physical conditions at the electrostatic precipitator inlet which considerably reduces the required size of the electrostatic precipitator.

The essential components of an evaporating cooler are:

- The gas inlet cone with accessories for gas distribution devices.
- The cylindrical cooling tower casing in which the exhaust gases are cooled and conditioned by evaporation of water.
- An integrated mixing zone in the cooler which in special cases is added to the evaporative section.
- The dust collection hopper
- Water spray system with high pressure spill back nozzles: lances fixed to the tower casing, water supply with multi-stage pumps and motor control valve in the return line, temperature control system with sensor, controller and indicating instruments or alternatively:
- Spray system with air atomizing low pressure spray system: lances fixed to the tower casing, water supply, compressed air supply, temperature control system with sensor, controller and indicating instruments.
- A feed forward regulating system is available in case a highly constant outlet temperature is required in combination with quickly changing inlet conditions.

