WE ARE ONE STAGE AHEAD
SEKA, THE HIGHLY EFFECTIVE DRYER
EXHAUST GAS CLEANING SOLUTION

With many years of application in practice, SEKA has been established as a reliable, two-stage wet electrostatic precipitator in the wood based panels and pellets industry. At high degrees of separation, water-soluble substances and larger particles are separated in advance. A two-stage electrostatic precipitator then cleans fine dust and aerosols. At the end, the steam plume is almost entirely deplumed.

THE BENEFITS

- **High degree of cleaning**
  - Very good dust and aerosol separation ("blue haze")
  - Very good separation of organic materials and odors

- **Excellent availability**
  - Safety reserves thanks to the two-stage design
  - Many years of application in practice

- **Output range**
  - 100,000 to 1,000,000 Am³/h

- **Low operating costs**
  - Low maintenance requirements due to self-cleaning condensation
  - Recondensation from the exhaust gas saves fresh water
  - Integrated process water treatment
  - Low pressure loss thanks to rising air flow
1. **Quench**
The exhaust gas is saturated before entering the filter by injecting process water, bringing it down to the cooling limit temperature (quench). This guarantees optimum separation and a high level of safety.

2. **Wet scrubber**
Water-soluble substances and larger dust particles are separated in the wet scrubber. The uniform flow distribution across the entire filter cross-section also provides optimal separation conditions in the wet electrostatic precipitator.

3. **Condensation wet electrostatic precipitator**
Fine dust particles and aerosols („blue haze“) are separated in pipe-shaped, two-stage electrostatic precipitators. At the same time, cooling air is led into the cross-flow through the pipe bundles. A thin film of condensation then forms on the interior of the pipe, which prevents the build-up of dirt. This keeps the pipes as clean as possible.

   In addition, the separation areas are cleaned periodically. This ensures that there is always one stage in operation and guarantees separation over the entire service life.

4. **Depluming**
The steam plume is almost entirely deplumed upstream of the clean gas outlet by means of a targeted air flow. As a result, the steam plume visible from the chimney is either eliminated or vastly reduced.

5. **Water treatment**
Pollutants and solid materials are deposited via sedimentation and are removed with a centrifuge. In this process, the process water is cleaned. The optimum separation of the separated materials is ensured by means of additional substances.