

EVAPORATIVE COOLER



ELEX – Excellent industrial gas cleaning since 1934

ELEX is the globally recognised leader for the cleaning of industrial gases and recovery of reusable materials. Since 1934, more than 7,000 units have been installed worldwide, each designed to focus on specific customer needs. Depending on stated requirements, units are either completely manufactured by ELEX or, within the parameters of project-related cooperation agreements, as new units or extensions to existing plants.

World-renowned ELEX engineering has always been committed to highly innovative technology and to the reliability and longevity of its products. This balance guarantees outstanding cleaning of industrial gases across many decades. Unrivalled in quality, ELEX remains innovative, at the very least, for the next 7,000 units.

To us, quality means our customers can forget about us

Quality to us means not only perfect technology and reliable and durable products, but also the best possible service in all phases.

During the planning stage, we listen carefully and ask pertinent questions to present the customer with the best possible solution in the shortest time-frame and with the least effort on the customer's part. Our Swiss reliability ensures that everything will be carried out to your utmost satisfaction. Deadlines and costs will be adhered to, while the effects on your operations until handover of the plant will remain minimal.

Once a plant has been installed and the technical staff instructed by our engineers, our customers rarely need our support. You will have the same experience. However, should you need our help, for instance, for longer maintenance, upgrading with new components, or advice on plant modernisation, we will of course be at your service.

ELEX Evaporative Cooler

In the case of certain gas-cleaning processes, particularly in the cement industry, it may be necessary to cool down the gases prior to the cleaning process, or to condition the gases to the most favourable physical state.

The perfect design of the evaporative cooler and its adaptation to the target specifications of the installation are decisive elements in reaching the maximum degree of efficiency and a long life of the entire plant. Our engineers' experience guarantees the right technological solution to create the correct physical conditions.



CEMENT WORKS, Italy
PREHEATER KILN



CEMENT WORKS, Vietnam
PREHEATER KILN

Easy integration into a wide range of plant concepts

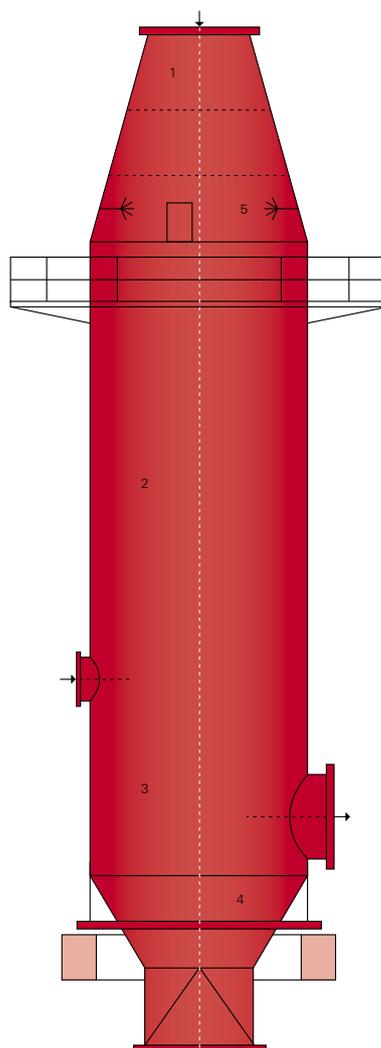
ELEX evaporative cooling towers are based on a modular system.

A feed-forward regulating system is available in case a highly constant outlet temperature is required in combination with quickly changing inlet conditions. The system captures diverse operating parameters to ensure optimal operating control.

The operating principle of an evaporative cooling tower system is simple. By injecting water in very fine droplet sizes which are subsequently evaporated, the temperature of the waste gas is lowered to the necessary level, and its volume and the specific resistance of the dust in the gas is reduced. However, only optimal dimensioning of the individual components of the installation will provide top efficiency.

General operating data for evaporative cooling towers:

- › Temperature range inlet: 250–1,000 °C
- › Temperature range outlet: 120–300 °C



1 Gas inlet cone with gas distribution device

2 Cooling tower casing in which the exhaust gases are cooled and conditioned by evaporation of water

3 Integrated mixing zone in the cooler which, in special cases, is attached to the evaporative section

4 Dust collection hopper

5 High-pressure water spray system with spill-back nozzles, or, alternatively, low-pressure system with air atomising spray

The total is more than the sum of the individual parts

Also for your plant, we will find the best solution from all of the components at our disposal. Challenge us so you can count on the highest efficiency, reliability and competence.

Reference installations of satisfied ELEX customers can be found on our website www.elex.ch



Mixed Sources
Product group from well-managed
forests, controlled sources and
recycled wood or fiber

Cert no. SQ5-COC-22290
www.fsc.org
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