

WATER INJECTION SYSTEMS



ELEX – EXCELLENT INDUSTRIAL GAS CLEANING SINCE 1934

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

We are dedicated not only to cutting-edge technology but also to the utmost reliability and durability of our products. This commitment lies at the heart of our product design, making our name synonymous with the flawless purification of industrial gases. Our expertise in crafting integrated solutions assures our customers that they can trust us both now and in the future. ELEX stands unrivaled in quality and our innovative spirit will undoubtedly continue to shape the next 7'000 units and beyond.



HIGH QUALITY ASSURANCE - YOUR WORRY FREE SOLUTION

When we talk about quality, we mean much more than just flawless technology, customer-oriented solutions and products that are reliable and durable. Our passion for quality runs like a red thread through every aspect of our collaboration – be it before, during or after the production and installation of your plants.

Our business philosophy is shaped by years of experience, highly skilled and flexible employees and our comprehensive expertise, which allows us to optimize your plant to meet your specific requirements throughout its entire lifecycle. Our goal is to always provide you with tailored solutions that meet your needs.

MINIMUM EFFORT DURING THE EVALUATION PHASE

Lightening your work load begins as early as the project-planning stage. We place great emphasis on listening to you and asking the right questions to provide you with the best possible solution in the shortest time and with the least effort on your part.



UNINTERRUPTED OPERATION DURING THE IMPLEMENTATION PHASE

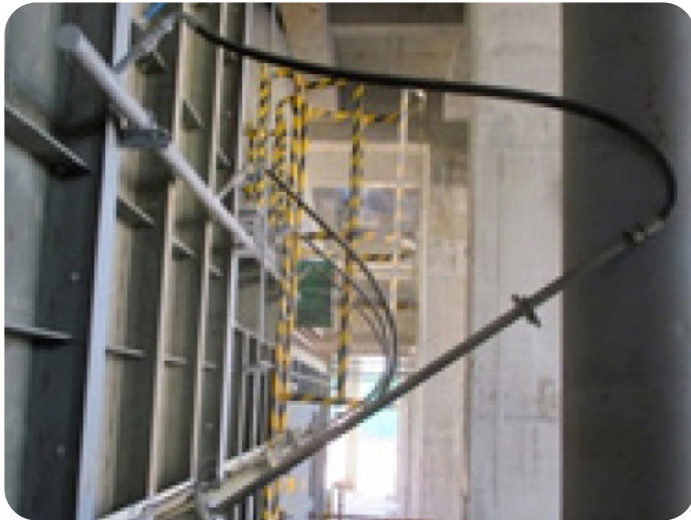
With Swiss reliability and thoroughness, we meticulously conduct our preliminary clarifications and holistic project planning to ensure that the installation of your plant leaves you entirely satisfied. We prioritize punctuality and cost adherence, while minimizing any impact on your operations until the handover of the facility.

MAXIMUM RUNNING TIMES DURING THE OPERATING PHASE

After our highly qualified engineers have installed the plants with their expertise and carefully trained your technical staff, it is extremely rare that further support from our side is needed. You will also experience this level of reliability. Our plants are known for their remarkable dependability and enduring performance. However, should you ever require our assistance, whether for comprehensive maintenance, integrating new components or consulting on modernizing the plant, we will be readily available to help.



Cement works, Vietnam
Clinker cooler



Cement works, Vietnam
Clinker cooler

WATER INJECTION SYSTEMS

High outlet temperatures from the clinker cooler can be critical for the following components. In order to protect the precipitator or bag house against damage caused by high exhaust gas temperatures, a water injection is installed in the clinker cooler. The water distribution and the purge air are installed in a compact unit. The accompanying water tank is provided for supplying adequate amount of water for cooling whenever required.

SCOPE OF APPLICATION

In the cement industry, water injection systems are successfully utilized. We are here to assist you in finding the optimal solution for your specific needs. With our extensive experience and tireless research, we offer carefully tailored plants that consistently deliver the achievable optimum for your operations.

SUCCESS FIGURES

43 WATER INJECTION
SYSTEMS

7 STAGES
REGULATION

**CLINKER COOLER
OF ALL TYPES** RANGE OF
APPLICATION



Cement works, Vietnam
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THE 2-STAGE CONTROL

Two line sections are used in the 2-stage control. Each line section has its own pump. The first pump is switched on when a preset temperature limit is exceeded. As soon as the temperature has returned to its normal range, the pump will be switched off.

If the temperature still continues to rise, the second pump will also be switched on and the maximum water quantity will be injected.

To avoid soiling and overheating of the nozzles, a ventilation system is used. It switches on automatically for every line section at standstill of the according pump.

THE CASCADE CONTROL

The cascade-control consists of three line sections with different injection performance. The amount of water injected can be varied in 7 steps. The temperature measurement after the clinker cooler serves as a reference value for the cascade control. Depending on amount of water needed, the required line sections will be activated.

If the maximum temperature is exceeded for some time, all line sections are switched on to protect the downstream filter from overheating by injecting the maximum water quantity. If the temperature falls below the limit value, the temperature controller takes over the lead again.

To avoid soiling and overheating of the nozzles, a ventilation system is used. It switches on automatically for every line section which is not in operation.

OUR ENGINEERS LOOK FORWARD TO THE CHALLENGE

Our water injection systems are designed for clinker coolers of all types in the cement industry. In a personal preliminary discussion with us, we will find the optimal solution for you, precisely tailored to your specific requirements. We are pleased to provide you with references that match your future project and offer insights into our successful implementations. You can rely on our comprehensive expertise to optimize your cement production and achieve outstanding performance.



WE WILL NOT SETTLE FOR LESS THAN THE BEST WORLDWIDE

For a list of references and for more information, please visit our website at www.elex.ch.



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