

**HYBRID FILTER**



## **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 Hybrid Filter

Thanks to the synergy resulting from the combination of a practically maintenance-free electrostatic precipitator with a fabric filter, very good pure gases can be achieved at low energy costs.

The ELEX custom-designed and manufactured hybrid filter systems reflect decades of experience and continuous research to achieve the best possible outcome.



**CEMENT WORKS, Spain**  
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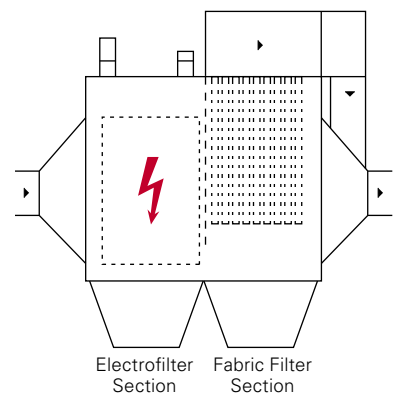
**CEMENT WORKS, Brazil**  
**PREHEATER KILN**

## ELEX hybrid filters increase the efficiency of existing installations

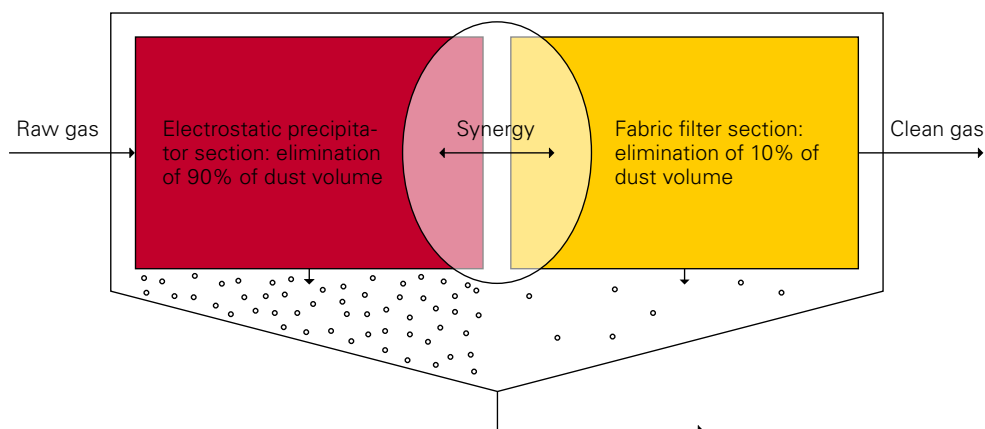
Often, when operating conditions change or production capacity is to be expanded, the existing filter installation may no longer fulfil requirements. In such cases, the electrostatic precipitator can be converted into a hybrid filter to comply with the new conditions without the need to replace the entire equipment.

## The advantages compared with conventional fabric filters

One electrostatic precipitator field alone is capable of eliminating at least 90% of the dust volume at very low energy consumption. Thanks to the ionisation and agglomeration effect in the electrostatic precipitator section, pressure loss in the fabric filter is reduced by up to 40%. As only 10% of the cleaning performance is carried out by the fabric filter, the use of compressed air is significantly reduced, which consequently significantly extends the life and maintenance intervals of the filter media. As a result, overall efficiency is higher than with fabric filters.



**Hybrid Filter**

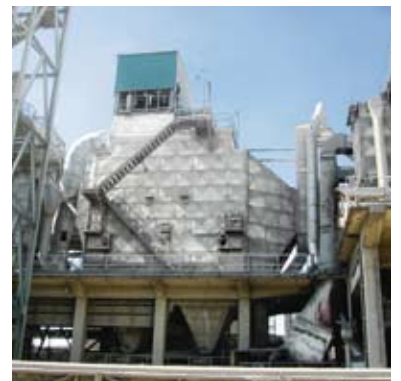


## Our engineers look forward to the challenge

Hybrid filters are used most frequently in the cement industry and for boilers, fired with coal or biomass. In a preliminary discussion with us we can identify the best solution for your circumstances. We will gladly provide you with references that correspond to your future project.



**CEMENT WORKS, Spain**  
**PREHEATER KILN**



**CEMENT WORKS, Spain**  
**CEMENT MILL**



**POWER STATION, India**



**Mixed Sources**

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

Cert no. SQ5-COC-22290

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