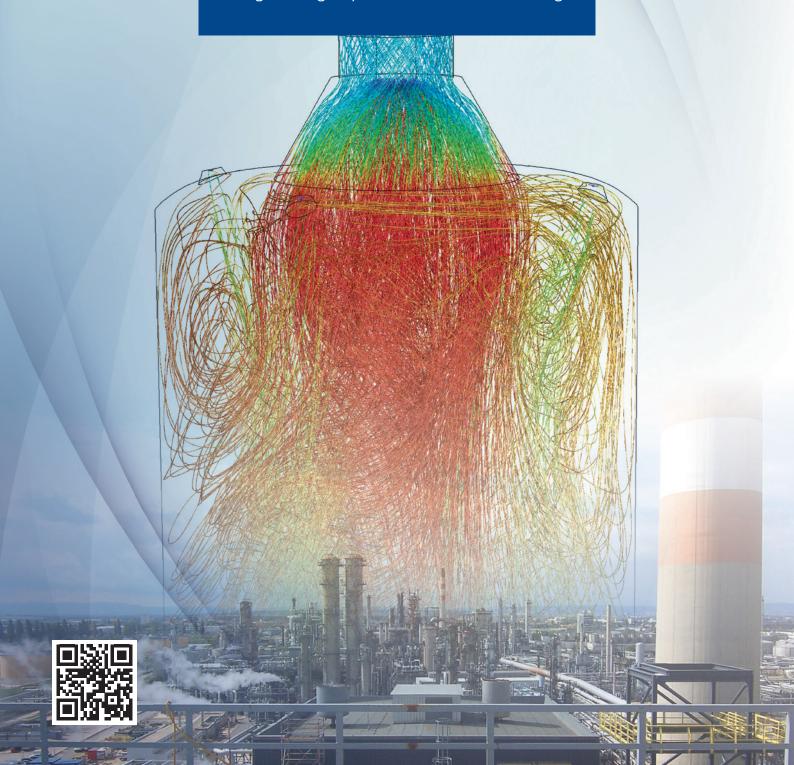


### Industrial Flow Technology and Flue Gas Cleaning

Engineering - Optimization - Manufacturing



# From the beginning in good hands

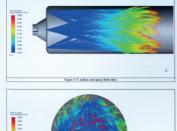
Flowtech - a reliable partner in flow technology for over 20
years in flow technology. Small enough to act quickly and flexible, but at the same time large enough to solve even complex tasks effectively. Reliability and precision are the basis of our actions.

We see ourselves not only as consultants and as developers, but also support you in the implementation: we manufacture decisive key components ourselves. We not only concentrate on new developments, but also optimize existing systems and processes. Your advantage: we offer everything from a single source, right through to commissioning and beyond.

We support you during daily operation and offer a comprehensive aftersales service to ensure that your systems work reliably, safely and economically.









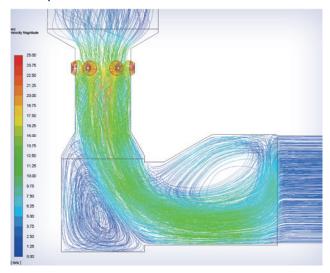
# Solutions for a wide range of applications

Fossil Power Plants, Gas Turbines, Waste Incinerators, Refineries, Cement Plants, Steel & Paper Mills, Engines, Marine

Cleaning and filter technology solutions are part of our core competence; flue gas cleaning processes are one of our key areas of expertise. We use our know-how to always find the best process for the application you require.

Our processes and system components are used, among other things, to reduce emissions in coal-fired power plants or waste incineration plants as much as possible. Another field of application is the reduction of exhaust gas in combined-cycle gas and steam power plants. In general, we apply our expertise wherever the aim is to reduce exhaust gases and by-products resulting from the combustion of fossil fuels.

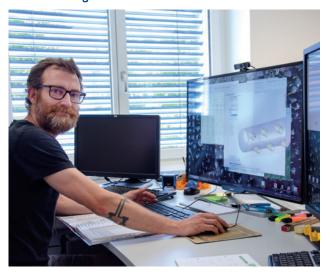
#### Flow optimization





**Key Components** 

#### Process design & Construction





**Catalyst installation** 

## We are partners with solutions from A-Z

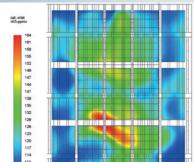


Before we start working, we sit together with our customers.

Because for a perfect result, it is crucial to speak the same language right from the start. On this basis, we develop the optimum solution for the customer.

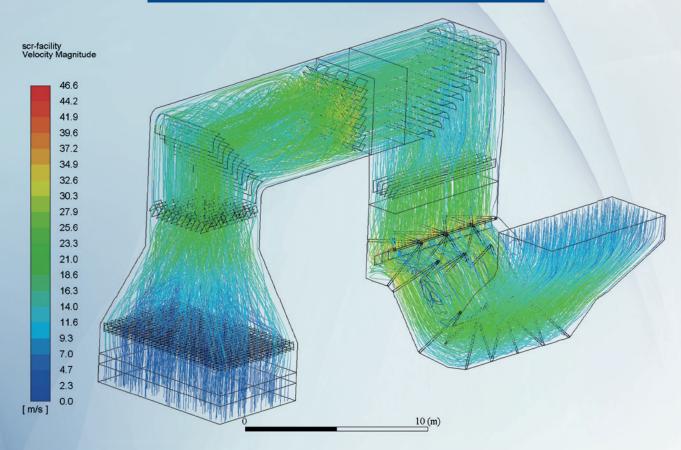
This starts with CFD simulations and experimental flow models (scale 1:10) to avoid planning errors in advance, process design and optimization as well as the production of the system components. We also carry out the corresponding factory tests, system maintenance and any necessary adjustments.







# Numerical flow simulation and experimental flow models





We play it safe and carry out in-depth numerical flow simulations (CFD). This means that 3-dimensional components can be simulated and evaluated. Thanks to our many years of experience, we are able to develop optimum geometric solutions in the shortest possible time. These evaluations form the basis for the construction of large, real systems according to our specifications.

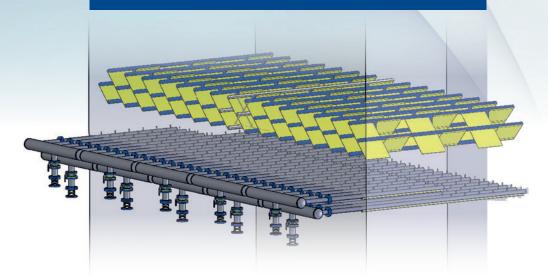
In addition to flow analysis, our simulations also include various parallel chemical processes and process engineering sequences.



We are an active partner to plant constructors and operators and are responsible for optimum planning. This applies not only to new plants, but also to retrofits and the problem analysis of process engineering systems.

Using experimental, full-scale flow models, we have been optimizing new exhaust gas cleaning systems for fossil combustion processes (denitrification, desulphurization, dedusting) in our laboratories for many years. Using upscaling methods, the data obtained from the experimental measurements is converted into large-scale plant planning. Each individual plant is designed and optimized using CFD or flow models.

### In-house Production

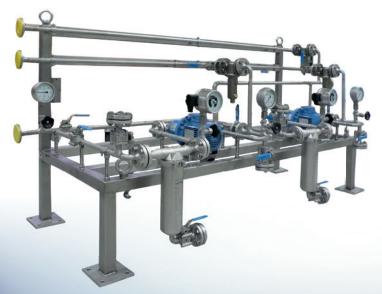


Our in-house manufactured products meet the highest quality standards. We always use the latest manufacturing processes for this. From mechanical steel processing and laser welding to mechanical machining and electrical wiring of the control cabinets - everything from a single source.

Our products are continuously developed in the laboratory. The droplet sizes of new nozzle heads for atomizing liquids are measured by laser method.

Our own assembly team carries out maintenance work on our customers' industrial plants. Among other things, we replace catalytic converters or maintain and test installed ammonia systems. We also carry out commissioning and maintenance work - service that is standard for us.

In general, the following applies to development: always the shortest routes from 3D design to production, product testing and quality assurance. This saves time and ultimately reduces investment costs.





### **Key Components**

We supply our customers worldwide with our own key components for installation in flue gas cleaning systems. These ensure flawless operation with minimum energy consumption.

Flow optimization results in ideal injection concepts for ammonia or urea upstream of catalytic converters. It therefore makes sense to supply the entire system of tank storage, pumps, regulation, dosing and mixing from a single source.

The process design results in flow installations such as specific baffles, static mixers, etc.

**Ammonia Evaporator** 



Flowtech injection lance for ammonia with compressed air





Ammonia Flow Control Unit



Static Mixer Flowtech Flowte-X



Settled in Switzerland - at home in the world.

#### Flowtech Industries AG

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