



Noise Control Solutions for Power Plants From a Single Source

Setting standards for future energy generation

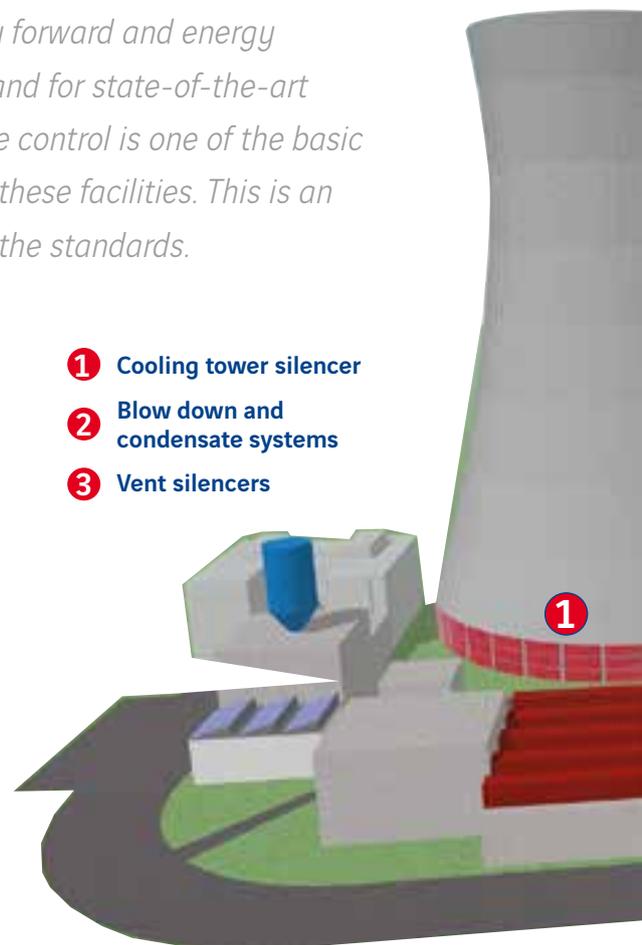


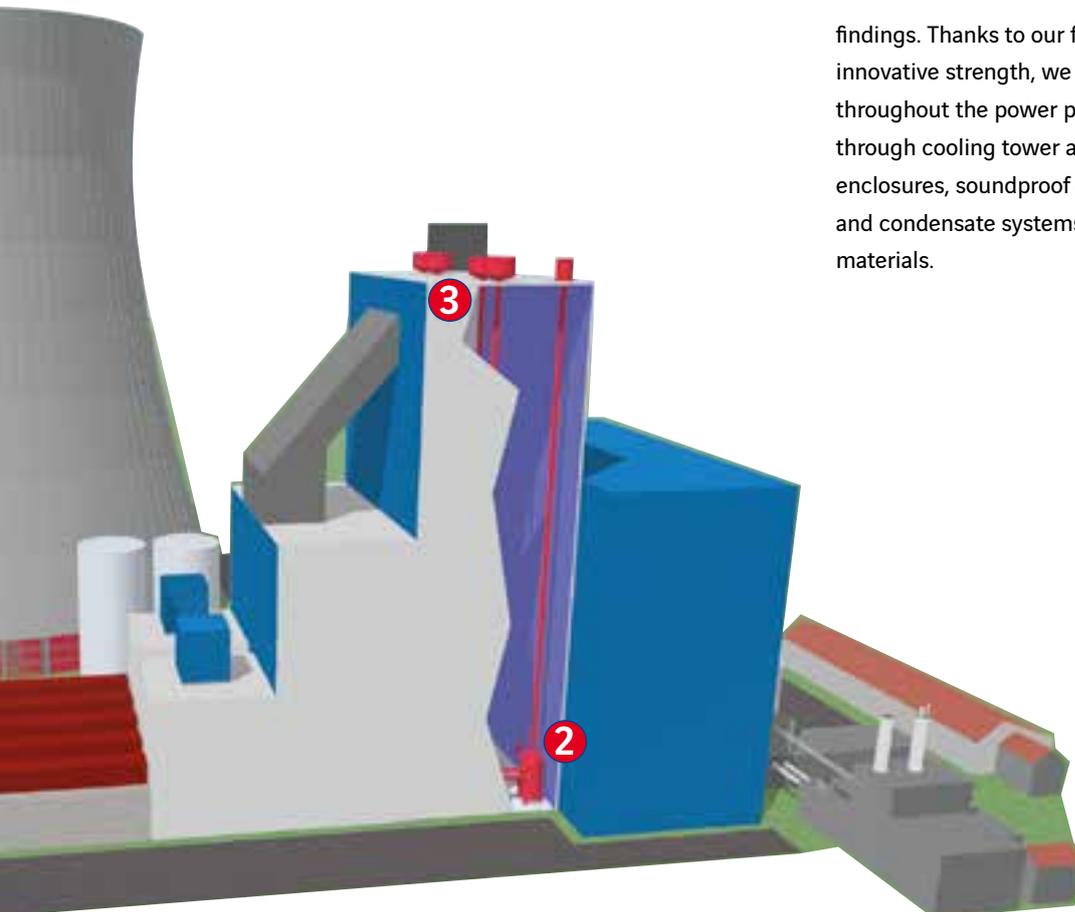
In a world in which progress marches inexorably forward and energy consumption is growing all the time, the demand for state-of-the-art power plants continues to rise. Effective noise control is one of the basic requirements for the successful operation of these facilities. This is an area in which G+H Noise Control Bochum sets the standards.

G+H Noise Control is a long-standing company that draws on decades of experience in noise control technology and uses this expertise to continuously design new and innovative noise control solutions. Our employees develop effective noise control measures tailored to the precise requirements of our customers.

It's a long time since economical aspects were the only factor taken into account during the development and construction of new power plants. The latest generations also satisfy the toughest environmental standards. We create a successful balance between economical and environmentally friendly power plants that meet the highest technical standards and incorporate the latest scientific

- 1 Cooling tower silencer**
- 2 Blow down and condensate systems**
- 3 Vent silencers**





findings. Thanks to our flexibility, experience and innovative strength, we ensure optimum noise control throughout the power plant cycle. This is achieved through cooling tower and vent silencers, acoustical enclosures, soundproof casings, customized blow down and condensate systems and risers made of special materials.

Cooling tower silencers transform noisy giants into soft steppers



If you're looking to silence your cooling towers, G+H Noise Control has the perfect solution for effective and yet economical noise control.

Regardless of whether you employ wet, dry or hybrid cooling towers, G+H Noise Control's many years of experience ensure maximum quality in the planning and installation of silencers for any kind of cooling towers.

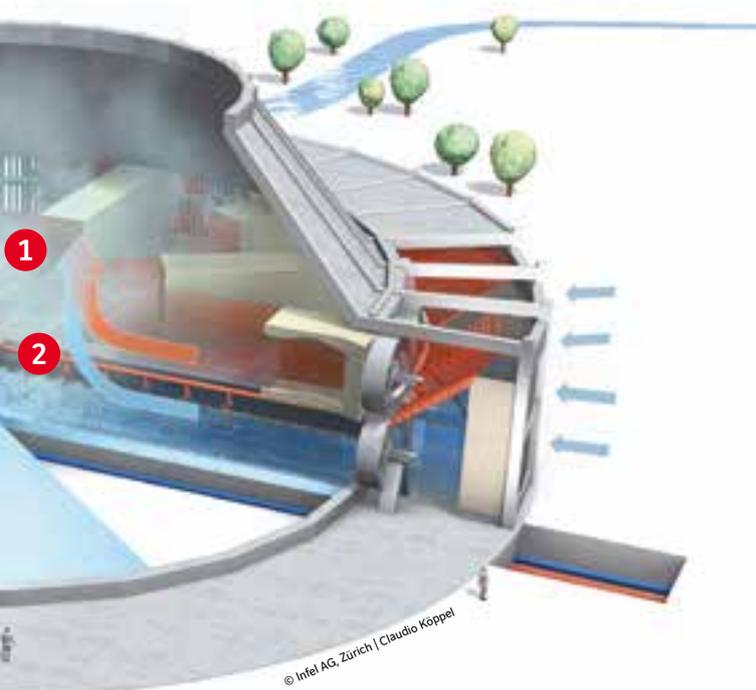
Fan noise from 32 Hz up to 8 kHz and water noise up to 4,000 Hz in wet cooling towers need extremely effective noise control measures. The same applies to natural draught wet cooling towers in which frequencies of over 500 Hz are measured at a sound pressure level of over 80 dB(A) in the drip-off section of the cooling water.

Large-volume silencers are needed to satisfy the noise level prescribed for cooling towers. The G+H Noise Control team makes sure that the associated flow pressure losses and costs are kept as low as possible.





Our all-inclusive service starts with consulting to define the customized noise control measures for each project and extends all the way through to production, delivery, installation and acoustic certification. Our in-house, cutting-edge test facilities ensure accurate measuring and analysis results and, in conjunction with the expertise we have built up from many projects, deliver the most effective and economical noise control for cooling towers.



- 1 Dry exhaust air baffle silencer
- 2 Wet exhaust air baffle silencer
- 3 Wet intake air baffle silencer
- 4 Dry intake air baffle silencer

Water/steam separation: Blow down and condensate systems for power plant construction



Complete start-up systems with blow down tank, collecting tank and the corresponding pipes and silencers are needed for steam generators. G+H Noise Control supplies these components as turnkey systems.

The separation of pressurized water/steam mixtures takes place in the blow down tank. The steam is released into the atmosphere via downstream pipes and silencers.

Pressure reduction in the blow down tank takes place via specially designed multi-step blow down stages. The water condensate is fed into a collecting tank via pipes.

Special installations are used (e.g. impact crushers, throttle stages) depending on the design of the blow down tank and pipes.

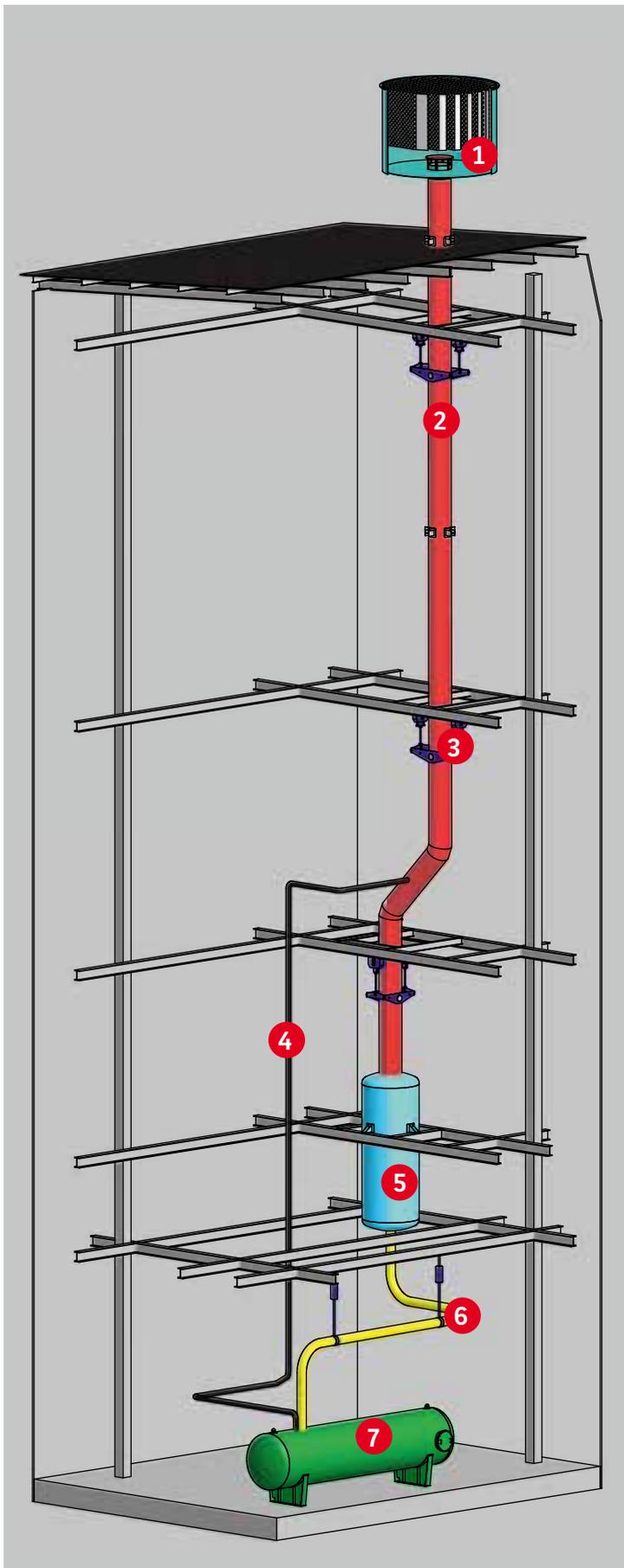
G+H Noise Control tailors the start-up systems to the application in question and modifies their dimensions to offer the best technical and most cost-effective solution possible. The component strength can be configured to meet common regulations inside and outside Germany.

To manufacture these components, we have certified production facilities for ferritic, austenitic and martensitic materials (e.g. P 91).

Our scope of supply includes:

- Configuration and design
- Production
- Certification and delivery

DENSATE SYSTEMS FOR POWER PLANT CONSTRUCTION



- 1 Silencer
- 2 Vapor pipe
- 3 Mounting brackets
- 4 Ventilation pipe
- 5 Blow down tank
- 6 Condensate pipe
- 7 Condensate collector



Combi blow down tank



Start-up blow down tank



Blow down stages

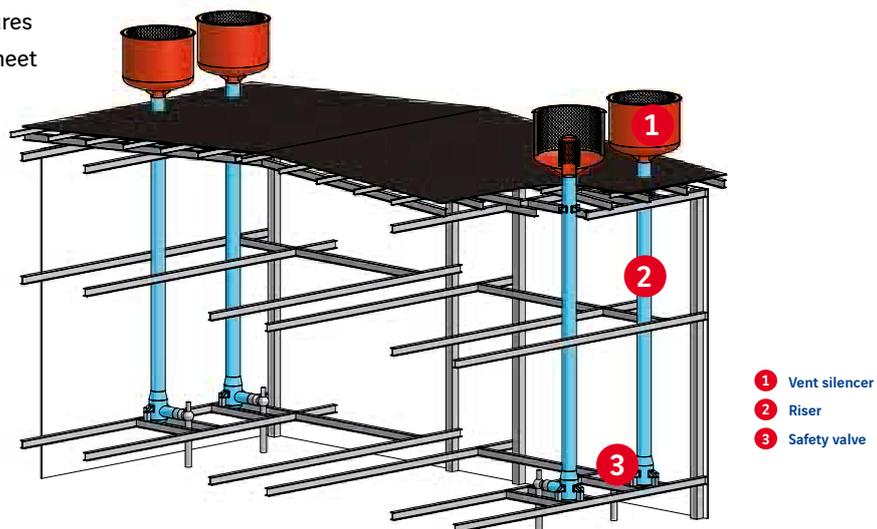
A match for extreme conditions: Pressurized vent silencers for power plant construction



Silencers with corresponding pipes are needed for large-scale steam generators. These components are often subject to high pressures, high mass flow rates and high temperatures. G+H Noise Control supplies these components as turnkey systems.

Very high sound power levels are generated during blow down processes via safety valves or start-up control valves in the steam system. Therefore, G+H Noise Control configures specific vent silencers to meet the requirements of each application. Due to pressurization, the design involves multi-step blow down stages, e.g. using radial perforated plate screens. Depending on the acoustic requirements, sound-absorbing lining

in the form of edge baffles may have to be installed downstream.



9 VENT SILENCERS IN POWER PLANT CONSTRUCTION



We tailor the vent silencers to the application in question and modify the dimensions and weight to offer the best possible solution. The strength of the pressure parts used for the silencers can be configured to meet common regulations inside and outside Germany. We have certified production facilities for ferritic, austenitic and martensitic materials (e.g. P 91).

Our scope of supply includes:

- Configuration and design
- Production
- Certification and delivery



Know-how has a name: G+H Noise Control



We are one of the leading companies in the technical acoustics industry. Our solutions are the result of over half a century of research, development and project experience.

We are active across the globe wherever our customers need us – in power plants, industrial facilities, factories, production sites, measuring rooms and test benches.

And wherever the environment needs to be protected against noise and vibrations.

As a full-service provider, we offer our customers all the services required for technical acoustics – from analysis and application-oriented development in our in-house acoustics laboratory to consulting, planning, project management and turnkey implementation. We always look at the “big picture”. With large-scale technical systems in particular, our services extend far beyond noise protection. We combine flexibility and service orientation with the advantages of being a global company.

Other sectors of industry trust in our expertise, too. For example, we are an expert partner for leading automakers and automotive suppliers.

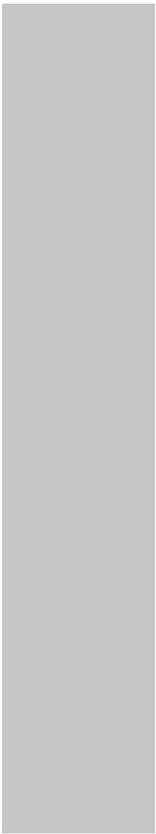
The engine test cells at Hamburg and Leipzig airports demonstrate our expertise in the aviation industry. Our vibration isolation elements protect people, machin-

ery and buildings against structure-borne noise and vibrations.

Our international projects are coordinated at our headquarters in Mannheim. We are certified to DIN EN ISO 9001:2000. Customers benefit from our flexibility and the expertise we have built up from international projects.

Our company is part of VINCI S.A., one of the world’s largest construction groups and the market leader for concessions, construction and related services.

This makes us a supremely reliable and safe partner for projects of any size.



S I C H E R H E I T S
C E R T I F I K A T
C O N T R A K T O R E N





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