

WASTE DISPOSAL



INNOVATION

ENGINEERING

OPTIMIZATION

Waste Treatment – Incineration of Special Waste

Our service ...

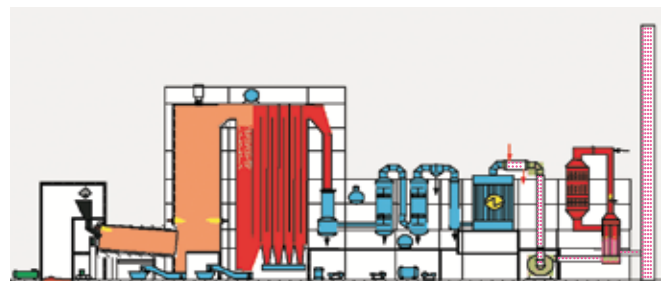
Our specialist environmental protection personnel offer a full range of design and construction services for incineration plants for hazardous waste in solid, liquid or paste form.

We have the process engineering expertise and the experience with project management and plant operation to ensure professional service.

Our services embrace the entire life cycle of a project – from inception through commissioning and plant management:

- consultancy services and engineering design to arrive at the most suitable concept;
- selection of the optimal delivery and storage concept for the various waste streams;
- selection of the incinerator;
- design of energy recovery and off-gas treatment stages;
- selection of the optimal control mode for the plant;
- support in the selection of general contractor or component suppliers;
- review of the process engineering design and concepts for plant & equipment engineering;
- drafting of an operating concept;
- support services for plant commissioning.

We also provide services for the planning of capacity increases for older plants.



Hazardous waste incinerator, Bayer Dormagen



Waste incinerator VA3, Leverkusen, Germany

... is your gain

Our services are based on 30 years of experience in the construction and operation of waste incineration plants. We view the process from the standpoint of both the waste producer and the operator of the incineration plant. We therefore also see the requirements through the eyes of the customer. This is just one of the reasons why we can provide a customized plant concept with the lowest possible operating costs.



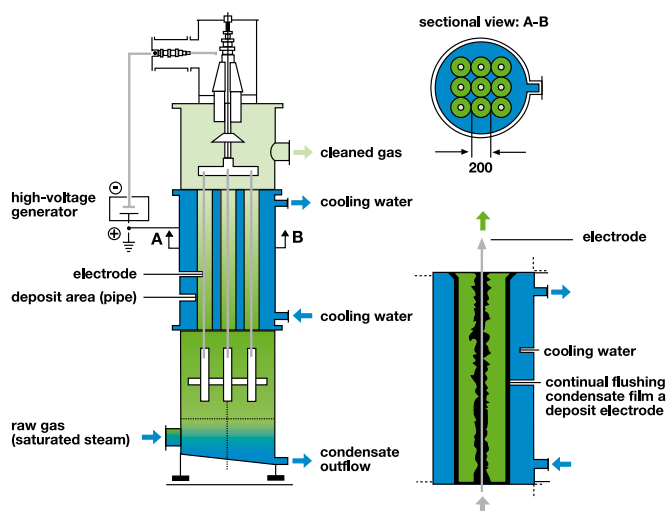
Bayer Technology Services
Powering Your Performance

We always view the process in its entirety, including the logistics aspects upstream and downstream of the incineration plant.

The incineration of difficult and/or special forms of waste is part of our daily business and the solutions that we propose have been tested at our facilities and their effectiveness has been demonstrated.

Our department was responsible for all of the retrofitting work for Bayer plants required under the German regulations governing emissions (17. BImSchV).

We not only have the expertise to manage incineration projects from start to finish, but also the measurement and analytical instrumentation required by the regulatory authorities for acceptance purposes. Our clients naturally also benefit from this.



Condensation-electrical-gas-cleaning system for fine dust and salt aerosols (developed by Bayer AG)

Our approach

The first step is to establish the exact requirements, including the project-specific boundary conditions. A project team with members drawn from process developers and specialist designers is then appointed to draft the concept for the client, leveraging our experience in plant engineering.

The project work includes the following aspects:

- problem definition and careful analysis of the baseline data;
- development of calculation and simulation models;
- performance measurements and analyses of waste streams using our sampling and lab equipment;
- experimental investigations;
- specialist planning throughout all phases using the latest planning tools.

References

The plants listed below attest to our expertise. They use the best available technology and have the highest possible availability. The strict requirements of 17. BImSchV are consistently and reliably met.

- Rotary kiln incinerator, Bayer AG, waste incinerator VA1, Leverkusen; capacity 45,000 t/y, solid and liquid waste, drums, wastewater, commenced operation 1967/89
- Rotary kiln incinerator, Bayer AG, waste incinerator VA2, Leverkusen; capacity 30,000 t/y, solid and liquid waste, drums, wastewater, commenced operation 1976/92
- Combustion chamber, Bayer AG, hazardous waste incinerator RV, Brunsbüttel, Germany; capacity 27,000 t/y, liquid waste, wastewater, 1980
- Rotary kiln incinerator, Bayer AG, hazardous waste incinerator RVA2, Krefeld-Uerdingen, Germany; capacity 20,000 t/y, solid and liquid waste, drums, wastewater, 1985
- Multiple-hearth furnace, Bayer AG, incinerator VA3, Leverkusen, capacity 80,000 t/y, sludge, paste and liquid waste, 1988
- Combustion chamber, Bayer AG, incinerator VA4, Leverkusen, capacity 10,000 t/y, liquid waste, wastewater, 1988
- Rotary kiln incinerator, Bayer AG, hazardous waste incinerator RVAD Dormagen, Germany; capacity 45,000 t/y, solid and liquid waste, drums, liquid waste, wastewater, 1994
- Rotary kiln incinerator, Bayer India Ltd., Thane; capacity 1,800 t/y, solid and liquid waste, 1989
- Rotary kiln incinerator, Bayer Brazil, Belford Roxo; capacity 6,000 t/y, liquid waste, drums, 1992