

Selected References in Implementation of Projects

Power station technology

Waste incineration

Hazardous waste incineration

Flue gas cleaning

Thermal destruction of ammunition

Mechanical and biological treatment of waste

Landfill

Biomass gasification

Effluent treatment

Thermal utilisation of sewage sludge

Renewable energy

Engineering GmbH



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Power-plant Technology, Mechanical, Biological and Thermal Treatment of Waste, Engineered Landfill, Effluent Treatment, Flue Gas Treatment, Renewable Energy

Zweckverband Abfallwirtschaft Raum Würzburg

Waste co-generation plant – Würzburg

Planning of the extension of the waste incinerator with a complete new third combustion unit with:

Furnace and boiler

Turbo set

Flue gas treatment with dry additive process and SCR

Electrical and control equipment construction unit

Slag and flue dust melting

- fundamental investigation and project planning
- invitation of tenders (EU - wide)
- evaluation of tenders and of processes with recommendations
- drafting of the contract
- allocation of the order
- planning for authorization
- planning of the execution
- coordination and time scheduling
- supervision of construction
- documentation
- supervision of erection at site
- supervision of costs

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Zweckverband Abfallwirtschaft Raum Würzburg

Waste co-generation plant – Würzburg

Modernization of the flue gas treatment plant, combustion unit 1 and 2, adaption to the requirements of the law (17. BImSchV), drying process and SCR, extension of the social- and operating building.

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders and of processes with recommendations
- drafting of the contract
- allocation of the order
- planning of the authorization
- planning of the execution
- coordination and time scheduling
- supervision of construction
- documentation
- supervision of costs

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Stadtwerke Würzburg AG

Heating Power Station Friedensbrücke

Coal fired boilers

Adoption of the flue gas treatment to the GFAVO, 13. BImSchV (Desulphurization by means of the dry-additive process)

- invitation of tenders
- evaluation of tenders and of processes with recommendations
- drafting of the contract
- allocation of the order
- planning of the authorization
- planning of the execution
- coordination and time scheduling
- supervision of construction

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ESG Linz/Austria

Heating Power Station Linz

planning of the execution of the desulphurization plant and of the hot water boiler
co-ordination and time-scheduling
inspection at site

Berliner Stadtreinigungsbetriebe

Refuse Disposal Plant North - MVA Ruhleben/Berlin

Supervision of construction at site concerning building work on boiler housing east:

- elevation of boiler housings for boilers 2 and 3
- new front walls of the boiler housing east
- new steel staircase tower on the east front

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Stadtwerke Solingen/Germany

Waste Incineration Plant Solingen

Large-scale repair on boiler 2:

- invitation of tenders
- evaluation of tenders
- drafting of contract
- allocation of order
- coordination and time scheduling
- supervision of construction
- documentation
- inspection of erection at site

New planning for cooling water circuit:

- project planning
- invitation of tenders
- evaluation of tenders
- supervision of erection

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Stadtwerke Solingen

Waste Incineration Plant Solingen/Germany

Flue gas treatment plant and erection of the third combustion unit

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders and processes with recommendations
- drafting of the contract and allocation of the order
- planning of the authorization
- supervision of the planning of execution
- coordination and time scheduling
- supervision of construction
- documentation
- inspection at site

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Müllverbrennung Hameln GmbH

Waste Incineration Plant Hameln/Germany

Modernization of the flue gas treatment of the combustion units 1 and 2, supplying of the new combustion unit 3 with flue gas treatment, adoption to the 17. BImSchV by means of drying process, SNCR/SCR, carbon-filter and desorption.

fundamental investigation and project planning

comparison of the processes:

- two - stage washing, hearth - furnace coke - filter, alternative flue flow, SCR and vitrification of the flue dust alternative:
- dry processing, cloth - filter, hearth-furnace coke-filter, low-temperature SCR
- invitation of tenders for both processes
- evaluation of tenders
- drafting of the contract and allocation of the order
- planning of the authorization
- planning of the execution
- coordination and time scheduling
- project-management
- inspection at site
- supervision of costs

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Müllverbrennung Hameln GmbH

Waste incineration plant Hameln

Extension of the waste incineration plant with a new complete third combustion unit

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders and of processes
- drafting of the contract and allocation of the order
- planning of the authorization

(co-ordination with flue gas treatment as a joint application)

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BEWAG Berlin

Power Station Reuter-Alt in Berlin

Modernization of the power-plant units 1, 2 and G by means of flue gas desulphurization plants (lime-stoned based wet scrubber) and DeNO_x-plants (SCR behind desulphurization plant)

for the desulphurization range

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders and of processes
- allocation of the order
- coordination and time scheduling
- basic problems and studies:
 - E-filter installations
 - disposal of the desulphurization plant-products
 - disposal of the desulphurization waste water salts
 - problems of technical details
 - structure of water inlet construction

for the DeNO_x range

- planification of sketches and drafts
- operational behaviour/NO_x emissions
- planning of the authorization
- invitation of tenders
- evaluation of tenders and of processes
- allocation of the order

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BEWAG Berlin

Power Station Oberhavel/Berlin

Modernization of two power plant units by means of flue gas treatment plants for desulphurization (lime-stone based wet scrubber) and high-dust SCR

for desulphurization

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders and of processes
- coordination and time scheduling
- running of the waste water evaporation

for DeNO_x

- preliminary planning
- project planning
- authorization planning
- invitation of tenders
- evaluation of tenders and processes

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Disposal Centre Filis – Athens/Greece

Integrated waste disposal location for 1.5 million t/year of domestic and industrial

Waste complete planning for:

- sorting, preparation
- composting
- incineration
- Landfill

The order contains:

- fundamental investigation
- pre-planning and project planning
- necessary extra reports
- drawing up of the documents for the invitation of tenders
- evaluation of tenders and of processes
- supervision of erection
- management of the whole project

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Zweckverband Abfallwirtschaft Raum Würzburg

MHKW - Würzburg

Modernization of the flue gas treatment plants on the basis of the coke/coaltechnology (coke-filter)

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders
- planning of the authorization-

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Thermoselect S.r.l. *

Thermoselect standard plant for high temperature waste incineration
Fondotoce, Italy

Planning of the authorization for erecting a THERMOSELECT-plant in Germany.

Based on the planning documents of the supplier the part of an authorization request, that is not depending of a certain site, is worked out:

- stock - taking of the planning state
- subdivision into operation units
- description of the processing engineering
- drawing up of the processing flowsheets
- description of the material flows
- recording of the technical equipment
- updating of the documents

* in collaboration with **RWTÜV Essen**

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RWE Energie AG, Essen

Waste co-generation plant Essen Karnap

planning of the layout

evaporation of waste waters from the flue gas treatment production of utilizable residues like:

- gypsum
- salt
- calcium chloride

slag treatment

flue dust melting

RWE Energie AG, Essen

Power station Niederaußem

Erecting and running of a pilot-plant for flue gas desulphurization

- fundamental investigation
- construction and planning of the execution
- erection of the pilot plant
- start up of the plant
- trial run of the plant
- test programme
- evaluation of the trial runs

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Energie- und Wasserwerk Rhein-Neckar AG (RHE), Mannheim

Waste co-generation plant Mannheim Friesenheimer Insel

Modernization of the flue gas treatment of units 1 - 3, adoption to the 17. BImSchV by means of DeNOx-plant (SCR) and active coke-filter after wet scrubber

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders and of processes
- drafting of the contract and allocation of the order

Bayernwerk AG München

Power station Ingolstadt

- basic planning of FGD/DeNOx
- invitation of tenders
- evaluation of tenders and of procedures
- special processing tasks

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EVS Stuttgart

Power station Heilbronn

Ammonia storehouse

- execution and authorization planning
- coordination and time scheduling
- supervision of construction

Berliner Wasserbetriebe

Sewage treatment plant Ruhleben und Marienfelde

Modernization of the flue gas treatment plants in Ruhleben and Marienfelde (3 combustion units each), adaption to the "TA Luft 86" -prescription limit values by means of scrubbing on burnt lime/limestone basis, waste water treatment

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders and of processes
- planning of the authorization
- drafting of the contract and allocation of the order

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Landkreis Stendal

Evaluation of tenders and of processes for a Europe-wide invitation of tenders "Planification, Financing, Construction and Operation of a Plant for the Thermal Treatment of Residuals" Variants: 40,000/80,000/120,000 Mg /year gross (Pre-qualif.)

The order contains:

- Carrying out of the EU-wide invitation of tenders
- Evaluation of tenders and of processes
- Summarizing account
- Recommendation for the qualification

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Pilot plants for FGD/DeNOx

Erection and operation of three pilot plants (each of 1,000 m³/h, Desulphurization, DeNOx and waste water evaporation). In the BEWAG -Power Plant Oberhavel with different installation circuits and processing engineering, in order to determine operational behaviour and performance of the plants, mainly that of the DeNOx - plants, on different designs and procedures.

- fundamental investigation and project planning
- invitation of tenders
- evaluation of tenders and of processes
- coordination and time scheduling
- testing programme
- operational test in 3 - shifts
- evaluation, EDP -systems
- design and construction of a mobile measuring vehicle.

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BEWAG Berlin

Heating Power Station Lichterfelde

Testing of an alternative process for NO_x -diminution

Process: NO_xOUT - process from the Fuel Tech Company with the use of urea

- planning of authorization
- recording of the actual state
- time scheduling
- evaluation of tenders
- planification of tests
- evaluation of tests
- intermediate and final report

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Bau- und Liegenschaftsbetrieb NRW NL Duisburg

Ammunition Thermal Dismantling Plant Hünxe

Planning of the thermal destruction of ammunition findings and treatment of flue gas

fundamental study

- technologies
- measurement programmes

Implementation

- pre-planning
- project planning
- invitation of tenders
- evaluation of tenders and of processes
- drafting of the contract and allocation of the order
- planning of the authorization
- planning of the execution
- coordination and time scheduling
- supervision of construction
- inspection of erection at site
- inspection of commissioning and guarantee performance
- Take over of plant

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Staatshochbauamt Stendal

Ammunition Thermal Dismantling Plant Hottendorf

Planning of the thermal destruction of found and old ammunition and treatment of flue gases

fundamental study

- technologies
- measurement programmes

Implementation

- pre-planning
- project planning
- invitation of tenders
- evaluation of tenders and of processes
- drafting of the contract and allocation of the order
- planning of the authorization
- planning of the execution
- co-ordination and time scheduling
- supervision of construction
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GVoA Minden/Germany

Planning of Waste Management Centre including mechanical, biological treatment and engineered landfill

- pre-planning
- project planning
- invitation of tenders
- evaluation of tenders and of processes
- drafting of the contract and allocation of the order
- planning of the authorization
- planning of the execution
- coordination and time scheduling
- supervision of construction
- inspection of erection at site
- inspection of commissioning and guarantee performance
- Take over of plant

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Waste Management Centre for Malta

Planning of Waste Management Centre including mechanical, biological treatment and engineered landfill

- pre-planning
- project planning
- invitation of tenders
- evaluation of tenders and of processes
- drafting of the contract and allocation of the order
- planning of the authorization
- planning of the execution
- coordination and time scheduling
- supervision of construction
- inspection of erection at site
- inspection of commissioning and guarantee performance
- Take over of plant