It's time for change!

"Everything should be made as simple as possible, but not simpler."

Albert Einstein
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## Impressum and contact
ZANNI GROUP is active worldwide since 1994.

Over the decades, the ZANNI GROUP has acquired a wide range of technical KNOW-HOW which is incorporated into the development of modern industrial and combustion plants.

We are all confronted with climate change, environmental damage and disease.

In order to be able to offer solutions to the environmental problems, we must consider all biological and technical possibilities.

This includes as well the use of modern waste incineration plants to limit the greenhouse gases caused by the rotting of waste. Engineering and supply of modern incineration plants is a core business of our company.

Our systems and environmental solutions can be an important part of against environmental damage and the greenhouse gas methane.

Our business areas

- Incineration
- Consulting & Environment
- Gas & Water

complement each other and enable us to find holistic solutions.

This enables us to offer excellent products that meet your and our expectations of high quality.

Why you should to work with us

Our employees and freelancers have all the necessary skills and qualifications in their respective business areas.

Our company is working in accordance to the ISO 9001:2015 quality standard.

We produce our goods according to highest quality standards in first-class workshops in Germany and all over the world if it is required by our customers.

Our quality principles and our business philosophy ensure sustainable added value for our customers.

Our most important asset is our workforce and knowledge of technology, our many years of specialist experience, ensure our good reputation - in many countries throughout the world.

Our client portfolio ranges from international companies to governmental organizations.

The points mentioned here will be dealt with below.
Anti-corruption commitment

Our company is committed to a sustainable use of the resources, the growth of our company, the economy itself and also for fair trading.

A decisive factor for the success of our company is our reputation. It applies to us to protect it.

Hard but fair competition forced us in the past and also in the future to clear and immutable values.

Our company makes only legitimate deals!

Our commitment is based on integrity, fairness, sustainability, and honest partnership with our customers, suppliers and employees.

As our customer and supplier, you can be confident that we are legally correct and well-formed.

Each employee is personally responsible for compliance with our code of conduct.

Donations and advantage grants of any kind in and by our company are forbidden as far as an intention is existing to influence the own or the behavior of the business partner in an incorrect manner.

We are available for legitimate projects and deals and are convinced that it is possible and necessary!

We call on the behavior of our employees and business partners to remain integer and not to participate in corruption!

The company will not support any kind of corruption!

Business philosophy

The relationship with our customers, suppliers and co-workers is characterized by understanding, consideration and support.

We treat everyone with equal respect.

Our social and political commitment is determined by the passing on of knowledge and skills and by humanity.

We are nothing other than that what we do day by day and bear the responsibility for ourselves and our actions.

We believe that dealing with people, nature, and energy in a way that preserves resources will pay off in the long run.

Therefore, we make no short term decisions, but always consider the consequences of our actions.

We perceive ourselves as part of a society with human values, in which social commitment cannot be demanded but will be expected.

We do not tolerate any behaviour that violates human dignity.

We do not accept any resentment against gender, race or religion.

We condemn all forms of radicalism and anti-Semitism.

We do not accept exclusion or bullying.

This self-commitment provides a basis for confidence that we will respond to with loyalty and the will for a long-term business relationship.

We fully support our customers, suppliers and co-workers and be always at your side.
Corporate culture

Human capital is a very important success factor for our company.
We also let our employees feel it by pursuing a transparent and open corporate culture.
We do not tolerate any behaviour that violates human dignity.
We do not accept any resentment against gender, race or religion.
We condemn all forms of radicalism and anti-Semitism.
We do not accept exclusion or bullying.
We stand together as ones.
We show appreciation for the performance and commitment of our employees.
With our open door policy, we promote and demand courageous conversation, i.e. open dialogue between all areas of the company and employees and managers.
We always have an open ear and always try to respond to the individual needs within the scope of our possibilities.
Flexible working hours, helpfulness, equality, protection against mobbing and belonging as a full member of a connected community enable more satisfaction and productivity at work and in the workplace.
In the end, only the common goals count, which we also only want to achieve together.
That's the way it goes:
"If everyone says it doesn't work or you can't do it, then find a way, believe in yourself, your knowledge, your abilities and just do it. If you fall down, then it is not a disgrace, but it is an opportunity to stand up and also to realign yourself!"

Environment policy

The environmental challenges in our world are many and interlinked.
Air pollution caused into deaths, and millions people still do not have access to safe drinking water and adequate sanitation.
Added to these, releases of hazardous chemicals, climate change, effective engagement of the public in decision-making and access to environmental information and justice are among major concerns we need to address urgently.
To meet these challenges we work to improve the environmental situation with our projects and to reduce pollution and the damage it causes.
We believe that dealing with people, nature, and energy in a way that preserves resources will pay off in the long run.
Therefore, we make no short term decisions, but always consider the consequences of our actions.

Environmental protection for production processes and offered facilities
Consulting and development of a huge range of environmental impact product's is a part of our business.
Environmental protection as a primary goal describes very well how we develop our products.

Innovative environmentally friendly products
We exclusively offer products with the aim of minimizing pollutants and saving energy.
We use energy-saving and environmentally friendly production processes and facilities.
Gentle use of natural resources

We use natural resources as sparingly as possible.

Energy and water, raw and auxiliary materials may only be planned and used effectively and efficiently.

Continuous improvement

The aim is to continuously review and improve the existing environmental and energy management system, as well as all processes and energy-related performance.

Environmentally conscious project management

Environmentally conscious planning, specification and project implementation means permanent monitoring and compliance with all laws, official requirements, regulations and ordinances.

Environmental protection and the improvement of energy-related performance

The consideration of environmental protection, the optimization of energy efficiency, which also includes the reduction of energy consumption, must be achievable in all operational concerns.

For this purpose, it is necessary to constantly adapt the strategic and operational goals and to demand corresponding rules of conduct.

Avoidance of waste and emissions

Gases are purified and filtered to the maximum, liquid and solid residues are recycled or disposed of thermally, for example, without endangering people or the environment.

This also includes preventive handling of the environment and energy through comprehensive information.

Avoidance of environmental impacts

When new products and processes are introduced, their environmental impact and energy efficiency are assessed in order to avoid environmental, energy and safety risks.

To this end, we consider the entire service life of our products, including their disposal.

Involvement of customers, suppliers and other interest groups

In order to avoid environmental pollution and energy waste, we try to promote environmental and energy awareness through our information to customers, suppliers and other interest groups.

Our products and services demonstrate this philosophy.

Our clear statement on environmental protection

The Statement of Environmental Policy will be communicate to all sites and workplaces.

The organisation and arrangements for implementing the Policy will also be available at each site and workplace for reference by any employee as required.
Health and safety policy

It is this Company's intention that its work will be carried out in accordance with the relevant statutory provisions and all reasonably practicable precautions taken to avoid risk to its employees, other contractors and members of the public.

Management and supervisory staff have the responsibility for implementing this Policy throughout the Company and must ensure that health and safety considerations are always given priority.

All employees and sub-contractors are expected to cooperate with the Company in the implementation of this Policy and must ensure that there own work, so far as is reasonably practicable, is carried out without risk to themselves or others.

The Board of Directors has appointed the Managing Director with particular responsibility for Health, Safety and Welfare and to whom reference should be made in the event of any difficulty arising in the implementation of this Policy.

The management and staff of the Company will monitor the operation of this Policy.

To assist them in this respect, the Company has appointed a Safety Advisor to visit sites and workplaces and to give advice on the requirements of the relevant statutory provisions and safety matters generally.

The Statement of Company Policy will be displayed prominently at all sites and workplaces.

The organisation and arrangements for implementing the Policy will also be available at each site and workplace for reference by any employee as required.

Know-how and publications

Patents

1992 Publication number DE000004213125C2
Title [DE] Vorrichtung zum wahlweisen Umleiten einer Gasströmung in einem Gaskanal
Title [EN] Device for selectively diverting a flow of gas in a gas duct

download Original document
download Searchable text

1992 Publication number DE000004213125A1
Title [DE] Schwenkklappe
Title [EN] Swivelling flap flow control for gas turbine - has convexly curved aerofoil shape constructed of stiffening ribs

download Original document
download Searchable text

1997 Publication number DE000019737507A1
Title [DE] Anordnung zur Beeinflussung des Dralls eines Abgasstroms
Title [EN] Twist influencing device of exhaust gas flow in turbine

download Original document
download Searchable text

1997 Publication number DE000019718147C2
Title [DE] Anordnung zur Überführung des eine Gasturbine verlassenden Abgasstroms zu einem Abhitzekessel und/oder zu einem Abgaskamin
Title [EN] Arrangement for transfer the exiting exhaust stream of a gas turbine to a waste heat boiler and / or to an exhaust chimney

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1997 Publication number DE000019718147A1
Title [DE] Anordnung zur Überführung des eine Gasturbine verlassenden Abgasstroms zu einem Abhitzelekkessel und/oder zu einem Abgaskamin
Title [EN] Waste gas diverter unit between gas turbine and waste heat boiler

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1999 Publication number DE000019905818C2
Title [DE] Gasturbinenkraftwerk
Title [EN] Gas turbine power plant

download Original document
download Searchable text

1999 Publication number DE000019905818A1
Title [DE] Gasturbinenkraftwerk
Title [EN] Gas turbine electrical power plant

download Original document
download Searchable text

2014 Publication number DE202014008440U1
Title [DE] Transportable und modulare Verbrennungsanlage
Title [EN] Transportable and modular incinerator unit

download Original document
download Searchable text

2015 Publication number DE202015002160U1
Title [DE] Transportable und stationäre Desinfektionseinheit
Title [EN] Portable and stationary disinfection unit

download Original document
download Searchable text

2020 Publication number DE202020000033U1
Title [DE] Waermetauscher mit austauschbaren Rohrbuendeln
Title [EN] Heat exchanger with exchangeable tube bundles

download Original document
download Searchable text

2020 Publication number DE202020000952U1
Title [DE] Verbrennungsrost mit gefuehrter Verbrennungsluft und Schindelauflage zur Verbrennung von festen und schlammigen Abfallen
Title [EN] Combustion grate with guided combustion air and shingle support for the incineration of solid and sludgy wastes

download Original document
download Searchable text

Source:
German patent information system (DEPATIS) provided by the German Patent and Trade Mark Office (DPMA).
Url: http://depatisnet.dpma.de
Other publications

1995-1997
Internal insulation for gas diverter and flue gas ducts.
Casing of a gas diverter.
Sealing seat of a gas diverter.
Standard components of modern dampers.
Flow and temperature distribution around the diverter flap, a mathematical modeling of the flow field.

1998
Metallurgical controlling of temperatures and thermal reactions in thermal systems

2000
Business Plan Guide [Business Plan Software]

2007
Mobile incinerator [Wikipedia]

2010
Mobile incinerator Units [Wikipedia] [e-book] [Pediapress]

and much more.
Quality management system

ISO 9001:2015 is a voluntary standard for quality management systems, issued by ISO, the International Organization for Standardization. ISO 9001:2015 has been designed to help organizations ensure that they meet customers’ needs and that quality is consistently improved.

Certificates

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<th>Certificate type</th>
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<td>2020 *</td>
<td>ISO 9001:2015 * in progress</td>
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<tr>
<td>2018</td>
<td>ISO 9001:2015</td>
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Quality principles

Our quality system is based on eight quality management principles.

These principles can be used by senior management as a framework to guide their organizations towards improved performance.

Principle 1 - Customer focus
Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations.

Principle 2 – Leadership
Leaders establish unity of purpose and direction of the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization's objectives.

Principle 3 - Involvement of people
People at all levels are the essence of an organization and their full involvement enables their abilities to be used for the organization's benefit.

Principle 4 - Process approach
A desired result is achieved more efficiently when activities and related resources are managed as a process.

Principle 5 - System approach to management
Identifying, understanding and managing interrelated processes as a system contributes to the organization's effectiveness and efficiency in achieving its objectives.

Principle 6 - Continual improvement
Continual improvement of the organization's overall performance should be a permanent objective of the organization.

Principle 7 - Factual approach to decision making
Effective decisions are based on the analysis of data and information

Principle 8 - Mutually beneficial supplier relationships
An organization and its suppliers are interdependent and a mutually beneficial relationship enhances the ability of both to create value.

Quality policy

Each partner company, each employee is responsible for the quality of their work themselves. It / he knows the requirements to meet the required quality in its sphere of activity. Missing information are to request from the supervisor or in the case of the partner companies from ZANNI GROUP immediately.

Through continuous improvements in organizational, operational and technical issues, we increase the quality of our services and products.

At the same time we keep our costs to as low as possible, secure and improve our market position.

Our target is for all our processes and supports an integrated business, environmental behavior of all stakeholders. Our sub-contractors we accept as a partner with which we are in an open, performance-oriented maintain communication.
For household, hazardous, industrial, clinical, contaminated and sludgy waste

The heart of every plant is of course the combustion chamber, with its grate and combustion system philosophy.

For this, all parameters of the combustible material are taken into account, as well as the question of sustainability in dealing with the waste.

Our combustion furnace has a two-chamber ceiling loading system consisting of a manual or optionally automatic chamber opening, together with a driven slide system to separate the combustion chamber.

Two burner systems are used to heat up the system and to support the firing at low calorific values of the waste. One burner system for the main combustion chamber and one burner system for the afterburner chamber. This is divided into two chambers.

Depending on the setting, the combustion chamber temperature is 850 - 950 °C in the main combustion chamber and 950 - 1150 °C in the afterburner chambers. The firing temperatures are automatically controlled according to local specifications. An emergency system (pressure and temperature dependent) is available.

The ventilation of the main chamber is on the front side and is adapted to the patented combustion grate system.

The afterburner chambers are ventilated on the side. Ventilation is provided by one or more combustion air fans, the control of which is regulated by corresponding oxygen measurements to ensure sufficient oxygen enrichment and thus complete combustion.

The system contains 2 sight glasses into the combustion chamber as well as numerous connections and connection possibilities for necessary and additional measuring instruments.

The ash is removed manually via 3 large ash removal doors or optionally via an automatic wet ash removal system.

There is no uniform solution, but only adaptable technical solutions in general. Each plant is therefore designed to meet the specific requirements and of course the highest environmental standards. We have a wide range of solutions available for this purpose.

Mid-sized incineration plants as an example of a sustainable investment

Key figures

- Up to 400 kg/hour capacity.
- Suitable for all types of waste, such as clinical, contaminated and sludgy materials.
- Automatic control systems.
- Patented grate systems.
- Manual feeding via top loading device (closed chamber system).
- Large side chamber doors, also usable for revision access.
- Inspection opening at the front for easy replacement of the combustion grate.
Optional system components for combustion furnaces

- Automatic feeding possible.
- Automatic ash removal possible.
- Liquid injection possible.
- Patented Air/Air cooler for an easy and quick change of the tube bundles.
- Wide range of adaptation options for filter systems and flue gas cleaning possible.
- Heat recovery and energy generation possible.

Everything you need to know about other components

Of course a system could also include other components, such as;

- Pipelines,
- Emergency and primary chimneys,
- Additive systems,
- Filter systems (bag filter or ceramic filter systems),
- Suction and fresh air blower,
- Sensors and control systems,
- Conveyor belts,
- Exhaust gas monitoring system,
- and other plant components,

partly included, partly optional, depending on the individual configuration of a plant.

However, these are to be planned individually, if necessary also locally available and therefore not part of a general presentation.

To protect the environment and to avoid unnecessary transports we would like to point out our licence option. Let’s talk about it. Thank you.
In the past, we have also for the flue gas coolers and heat exchangers used old-fashioned technology that reliably fulfilled its tasks, but reached its limits in the area of wear and tear and also in maintenance. In the same order as we did with the combustion grate system we took a closer look at these problems and created a new type of flue gas cooler that is very easy to maintain.

But easy to maintain is not the only target what we had focused on.

The new design is long resistant against heat, abrasion and acids which is naturally dependent on selected materials.

Since the cooling circuit is shielded from the flue gas and the heat and thus energy transfer to the cooling air is due to the engineering enormous, it is nearly inevitable that this cooling air can be used further and thus the efficiency of a plant can be increased.

Of course also the efficiency of an older, existing plant can be increased.

The design of the new cooler and the way it is implemented is both logical and consequent. The cooler design is an air/air cooler. In the design, the flue gas and cooling air side are considered as independent systems.

One system, the flue gas side, must be resistant to heat, abrasion and corrosion and the other, the clean cooling air side, to sometimes enormous temperatures, depending on the design of the plant. We have also constructively implemented the thermal, mechanical problems that arise on the cooling air side.

Of course, the flue gas pipes are still exposed to a great deal of stress and their durability can be increased by using special steels, but they are still nothing more than wearing parts from a classical point of view.

If you take this problem into account, then you inevitably have to create a simple maintenance option, which we have implemented in our cooler.

The entire rear chamber part can be easily removed and the tube bundles can be replaced just as easily on their sliding frame. This significantly reduces downtime and keeps maintenance costs to a minimum.

The temperature ranges for the flue gas side are, depending on the design of the upstream plant, between 850 - 1200 °C and the cooling air side between 300 - 650 °C.

Deviations are of course possible depending on the individual design of each plant.

Advantages of the new and patented cooler design

- Easy to maintain.
- Long resistant against heat.
- Long resistant against acids.
- Long resistant against abrasion.
- Heat recovery via clean cooling air possible.
- No material attack of the secondary air cooling circuit by aggressive media.
- Long service life.

Each system requires an individual configuration.

Of course larger boiler systems are also available!
Chimneys for exhaust systems

For household, hazardous, industrial, clinical, contaminated and sludgy waste

Emergency chimneys
The emergency chimney contains a ventilation and non-return flap as well as 2 measuring points which can either be optionally equipped with measuring instruments or used for own purposes. The chimney can be insulated on the outside.

Cooling air chimneys
The cooling air chimney contains a ventilation and non-return flap as well as 2 measuring points which can either be optionally equipped with measuring instruments or used for own purposes. The chimney can be insulated on the outside. Depending on the operating conditions and use of the cooling air, which can also be used for heat recovery, it may be necessary to equip the system with an additional chimney cooling air fan to mix cold ambient air into the clean hot cooling air. Therefore, a connection of this optional system via the non-return flap is provided.

Clean gas chimneys
The main stack contains 6 measuring points which can either be optionally occupied with measuring instruments, for example for continuous emission measurement, or used for own purposes. The chimney can be insulated on the outside.

All chimneys are offered in a standard construction height of 6 m, with the possibility of an extension to 9 or 12 m. Other heights as special design.

Standard executions

Materials: Depending on media
Carbon and stainless steel of various classes

Construction height: 6, 9, 12 m (others on request)

Diameter: 355.6, 508, 559 mm (others on request)

Wall thicknesses: Determined by design

Gas measuring connection: Up to 6 pieces

Insulation: External insulation possible

Please note that each system requires an individual configuration. Therefore, examples cannot be used for planning purposes, but only serve as rough information. We always calculate your system individually according to your specifications and requirements.
Filter systems and flue gas cleaning

There are two ways to filter the exhaust gas.

On the one hand, there is the wet and dry washing technology, and on the other hand, the electrostatic filter technology. For our systems, we mainly use the dry washing technology.

For our dry washing technology, we can offer ceramic filters and fabric filters. We prefer ceramic filters for our furnaces up to 400 kg/h, as these have a very high filter efficiency on the one hand and a very long service life on the other.

Which of these both filter technologies is suitable is mainly a question of the amount of exhaust gas and the media itself.

For our dry-washing systems, we additionally recommend to use a dry-scrubbing-solvent injection system.

A dry-scrubbing-solvent injection by means of a dosing station is used to remove particles and gases from the exhaust gas streams via dusted air filters.

These dry-scrubbing systems are used to remove corrosive and toxic gases (for example SO2 and HCl) from the exhaust gas. They are very effective with low investment and operating costs.

Many acid gases, such as ammonia and hydrogen chloride are water soluble and react aggressively when moisture is added to the gas. Dry gas scrubbers add either no or very little liquid to the exhaust gas they are cleaning. This means that they are less prone to corrosion. This means that they do not require waste water disposal procedures or steam plumes - common scrubber accessories.

The dry gas scrubber simply injects a sorbent that efficiently captures and absorbs acid gases. Odorous, corrosive gas by-products can be additionally removed from the exhaust gas by adding activated compounds that treat certain pollutants.

Once it has absorbed all harmful compounds, it is removed from the filter elements together with excess sorbent by a control device.

Dry scrubbing systems are an important part of gas phase filtration and are therefore best suited for maintaining high environmental standards.

The functionality of the filter system is based on its filter in interaction with the dry scrubbing solvent system.

At a certain differential pressure level, the filter will be cleaned by pressure air with a reverse jet cleaning system, which clean the filter by a jet impulse and the dust layer on the outside surface of the filter will fall down.

At the bottom of the filter, the ash feed by a rotary valve to a big bag or ash container.
Corrosion protection of filter systems

The insulation at the outside of filter body keeps it from corrosion, during shut down periods.

The dust inside is contaminated with sulphur and other components.

If the temperature falls below the dew point, corrosion could happen.

Therfor a standstill heater is additionally recommended to protect the housing from corrosion. This heater is only an option, because if it is necessary depends always only on local conditions.

The filter can easily removed when necessary.
It can be replaced by operation staff after training.

Please note that each system requires an individual configuration. Therefore, examples cannot be used for planning purposes, but only serve as rough information. We always calculate your system individually according to your specifications and requirements.
De-Ashing systems

For household, hazardous, industrial, clinical, contaminated and sludgy waste

The ash is removed manually via 3 large ash removal doors or optionally via an automatic wet ash removal system. The burnt-out ash falls behind the last grate zone through a foreseen ash shaft into the water bath of the wet de-asher and is cooled down there.

From the de-asher bath the material will be transported via a scraper conveyor to a collecting container or other requested system.

Other ash removal systems, such as dry ash removal systems, are of course also available, whereby the wet ash removal systems have proven themselves.

For the use of an ash removal system, the plant must be jacked up according to the ash removal system height. All necessary components are optionally available.

Continuous emission monitoring systems (CEMS)

For household, hazardous, industrial, clinical, contaminated and sludgy waste

CEMS are used as a tool to monitor flue gas for oxygen, carbon monoxide and carbon dioxide to provide information for combustion control in industrial settings.

They are currently used as a means to comply with air emission standards.

Facilities employ the use of CEMS to continuously collect, record and report the required emissions data.

Envisaged analyses could be for example:

- HCl (hydrogen chloride),
- Cl2 (chlorine),
- NOx (nitrogen oxides),
- SOx (sulfur oxide),
- CO (carbon monoxide),
- TOC (total organic carbon).

The standard CEM system consists ordinary of;

- a sample probe,
- a filter,
- a sample line,
- a gas conditioning system,
- of course a calibration gas system,
- and at least a series of gas analyzers for monitoring of the required parameters.

In monitoring the emissions, the system must be in continuous operation and must be able to sample, analyze and record data at least every 15 minutes and then averaged hourly. That means the operation frequency can be either continuous operation or activation at a predefined frequency or upon demand.
PLANT CONCEPT

The whole plant is mounted on container sized frames and consists of four segments, where the basic unit consists of a combustion module with a chimney and supply module. The plant concept based on durability to reduce maintenance efforts under site conditions which can be difficult for the operators at site.

It has all necessary auxiliaries on board, like diesel pump and a compressor system. The incinerator can be delivered with a lance spray system for liquids, a power generator and a two-stage filling system (concrete gate valve with feeding hopper) for top loading of the waste as an option. The refractory lining is based among others on extremely heat-resistant ceramic fiber and a wear-resistant fire concrete. The exact composition and its structure, is a part of protected expertise for high-temperature furnaces. The rigid construction and the easy operability improve the transportable usage under field conditions.

The two basic modules combine a stand-alone unit and consist of a 2 stage incineration module with a supply module (including chimney).

THE INCINERATION MODULE

Standard execution
- 2 stage incineration module with chimney
  Main combustion chamber up to 850 °C
  Post combustion chamber up to 1100 °C
- No grate
- Burner system with fuel pump
- Front feeding door
- 3 side doors for de-ashing

Options
- Two stage top filling system
- Lance spray system for liquids
- Cooler system for flue gas
- Filter system
- Grate
- Generator

THE SUPPLY MODULE

Standard execution
- Container, control cabinet, compressor and fan
Engineering and Services

We supply engineering and services for plants including standard or special machinery for the industry and support our clients in following fields:

1. Determination of administrative, commercial and technical frame conditions,
2. feasibility studies,
3. basic and detail engineering,
4. organization of procurement,
5. manufacturing,
6. commissioning,
7. after sales service.

A lot of experience and quality control led us every day to new and improved products and designs.

Of course the old is not bad, but if we use all the new engineering possibilities the new designs could be much better and only that pushes us forward.

We are very proud of a lot of new patents and product developments for us and our clients as well.

Our focus is lying allways on products which are easy to expand and to maintain than any other.

Project management and procurement

We offer project management and consulting that combines technical and commercial concepts.

Our plant specialists are at your service with their experience to achieve an optimum quality and price on procurement.

After Sales Service and Spare Parts

We can supply any kind of spare parts as well as customer support and maintenance for any plant regardless of whether it is constructed by us or not.
Our environmental protection and analytics team provides a wide range of services to assist you to save the ecosystem and to keep our environment clean.

**Our services**

- Environmental due diligence,
- ground and building recycling,
- security at buildings, plants and leisure facilities.

**Environmental Due Diligence**

Environmental Due Diligence, the examination on possible environmental risk or contaminated buildings, brings the facts to surface that you should know before you going into an investment. Possible risks of liability or need of cost-intensive redevelopment will be predetermined so the purchase price can be made conditional or the purchase contract can properly be secured.

The Environmental Due Diligence can be conducted according to international standards or to national laws, regulations and guidelines.

**Ground and building recycling**

Grounds for constuction are limited and thus expensive. An interesting, economic alternative to this is rehabilitation of old construction sites for reuse instead of using valuable green areas.

**Our range of services**

- Soil and groundwater investigation,
- building checks,
- appraising of the actual condition,
- sanitation and demolition plan,
- reconstruction, recycling and utilization planning,
- sanitation of existing pollution, reorganization and planning,
- appraisal of pollutants,
- pollutant survey and classification,
- construction material investigation,
- preparation of bill of quantities,
- construction supervision,
- construction site management.

**Security at buildings, plants and leisure facilities**

We supports you consistently by checking your compliance to legal requirements and adherence to your responsibilities. Our job site coordination offers you a package of safety-relevant aspects for planning, organization and controlling of the works through all building phases.

Our experts are at your service on plant safety topics, from risk-auditing of environmentally hazardous plants to plant examinations acc. to VAwS or boiler water and feed water investigations.

... and much more

Please visit our Homepage.

Thanks
Our products and services

We design and manufacture HP and LP Gas Pressure Reducing & Metering Stations. The natural gas is transported normally by means of pipelines under the pressure of 70 to 80 bar. The end-user of the gas needs it generally at a lower pressure. To reduce the pressure an HP Reducing Station is required to reduce the gas pressure, for example, down to about 20 bar for the gas turbine applications. For most of the other applications, an HP Reducing Station is required as a first stage pressure reducing station followed by an LP station to reduce the gas pressure according to the requirements of the end-user, mostly down to less than 4 bar.

A typical gas reducing station is consisting of emergency shut-off device (ESD), condensate knock-out drum, filter station, flow measuring, heater, line safety shut-off valve(s), pressure reducing valve, silencer, pressure relief valve(s), outlet section, instrumentation and control system. As auxiliaries it has condensate collecting facility, N2-purging facility, flare and venting facilities. According to application, some of above facilities may not be needed.

Filtering to clean the gas from impurities and liquid droplets is important generally but it is very important for industrial plants since they are using a huge amount of gas. Therefore, our gas systems include every time a reliable filtering system that guarantees a cleaning of impurities up to 99.5%.

We have designed and installed several High Pressure and Low Pressure Reducing Stations according to International and German standards around the world.
Equipment of a typical gas reducing station

- emergency shut-off device (ESD)
- condensate knock-out drum
- filter station
- flow measuring
- heater
- line safety shut-off valve(s)
- pressure reducing valve
- silencer
- pressure relief valve(s)
- outlet section
- instrumentation
- control system

and it has following auxiliaries:
- condensate collecting facility
- N2-purging facility
- flare
- venting facilities.

Our gas systems are designed, manufactured and put into operation under control of engineers certified and authorized by DVGW by following the rules of the association strictly.
Our valves are produced and used successfully since 1976 in all over the world.

Our production started with control valves which is very specific type of valve. After gaining extensive experience, our spectrum of products was extended to cover all types of valves. You will find here brief and general information about our range of valves.

Please specify your valve need so that we can serve you better.

Fields of application

Our valves find application in following sectors:

- energy
- environment protection
- power plants
- chemical plants
- petrochemical plants
- mining industry
- iron and steel works
- water resources technology
- and many others where a reliable valve is needed.
Since every valve in industrial applications must be carefully selected and designed, please state in your inquiry as much information as possible about the working conditions. This will help our experts to see your specific need better and offer best possible valve.
We have extensive experience in power plant and energy generation sector. Thanks to our engineers, who spent more than 30 years in this field to make things better.

We supply mechanical, electrical, control and instrumentation engineering for any main or auxiliary system of a power plant as well as planning of a whole plant for you.

Our activities in this field is not limited to new power plants or their parts but we also do modernizing, retrofitting, refurbishment and upgrading of existing plants.

Know-How

Based on their many years of experience, our engineers have the know-how on power plants. Information on this can be found in chapter „Know-how and Publications“ on pages 7 to 9.

Some of the systems we are involved are:

- gas systems, such as gas pressure reducing stations,
- fuel oil systems such as pumping stations, etc.,
- air and flue gas systems, such as ventilators, desulphurization systems,
- steam and condensate systems such as steam reducing station, feed water tank and pumps, etc.,
- boiler equipment, such as burners, soot blowers, furnace camera, etc.,
- water systems, such as water treatment plant, waste water treatment plant, etc.,
- control and instrumentation of all systems including analyzers,
- all kind of valves, isolators and dampers,
- other power plant equipment and systems, such as emergency power plant, compressor station, and others.

Our services

- Project management,
- engineering; full or partial,
- procurement,
- supervising of erection,
- commissioning and after sales service.

After sales service and spare parts

As after sales service, we offer not only all kinds of spare parts, but also customer support and maintenance of your plant. We supply spare parts for many type of power plants, regardless of whether it is constructed or designed by us or not.

We help you to find the best solution.
Impressum

ZANNI GROUP

All legal information about us:
https://www.zanni.group/Legal-Information/Impressum/

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