



Doosan Lentjes
Press kit
2022

DOOSAN

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Photo on the right: Visualisation of the new WtE plant, Warsaw, Poland

Credit: MPO Sp. z o.o. w m.st. Warszawie



DOOSAN Lentjes

About Doosan Lentjes



About Doosan Lentjes

Who is Doosan Lentjes?

Doosan Lentjes provides proprietary environmental technologies for thermal waste treatment and energy generation. Our areas of expertise include the incineration of renewable fuels such as waste, sewage sludge and biomass, heat recovery systems and flue gas cleaning equipment. We deliver flexible solutions for long-term waste disposal safety and climate-friendly steam and power generation.

As a member of the globally acting Doosan Group, Doosan Lentjes is part of a strong international network of companies providing complementary technologies, skills, and value to customers the world over.

Integrated solutions

Doosan Lentjes has a long history of project management experience. The company offers integrated customised solutions and expertise for the waste management and energy generation industry from a single source. Solutions are synonymous with technological leadership and developed on the basis of a true understanding of individual customers and their business requirements.

Key milestones in our company history

1928	Ferdinand Lentjes founds boiler-manufacturing company
1982	Company designs, builds, and commissions the world's first commercial CFB (circulating fluidised bed) boiler
1984	Acquisition of Gottfried Bischoff GmbH – a specialist in flue gas cleaning (FGC) technology
1989	Company enters the grate-based waste-to-energy (WtE) market
2011	AE&E Lentjes GmbH became proud member of Doosan Group to form Doosan Lentjes GmbH
2016	Doosan Lentjes celebrated the 40 th anniversary of its CFB combustion technology
2018	90 th company anniversary & re-entry into the market for the incineration of municipal sewage sludge
2020/2021	Doosan Lentjes expands its market leadership in thermal waste treatment in Poland with further orders in Olsztyn and Warsaw

We are part of Doosan Group

As a member of the global Doosan Group, the environmental technology specialist Doosan Lentjes provides the resources to deliver complete process solutions from one trusted source.

With Doosan's global network, Doosan Lentjes combines international market know-how with German state-of-the-art engineering — a winning combination for providing innovative solutions for customers the world over.

Doosan Lentjes benefits from the Group's international sourcing and manufacturing capabilities. High quality workshops under the full control of Doosan in Changwon/Korea and Vina/Vietnam provide best practice procurement of goods and services while maintaining and ensuring compliance with laws, regulatory guidelines, and internal control procedures. Procurement hubs in Beijing and Shanghai/China underline Doosan Lentjes' efforts for cost optimised solutions.



Top left: Changwon, Korea
Bottom right: Vina, Vietnam

DOOSAN Lentjes

Doosan Lentjes at a Glance



Doosan Lentjes at a Glance

Full company name and address

Doosan Lentjes GmbH
Daniel-Goldbach-Straße 19
40880 Ratingen, Germany
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dl.info@doosan.com
www.doosanlentjes.com

Board of management

Dirk Stokvis
Managing Director (CEO)

Areas of activity

Doosan Lentjes offers proprietary environmental technologies for thermal waste treatment and energy generation.

Products

Waste-to-energy (WtE) technologies
Sewage sludge incineration (SSI) technologies
Circulating fluidised bed (CFB) boilers
Flue gas cleaning (FGC) technologies

Media contact

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DOOSAN Lentjes

Industry &
Technologies



Industry & Technologies

Our industry

The environmental technology industry is a key sector when it comes to reducing humanity's ecological footprint and stopping climate change.

Due to climate change and global population growth, the demand for environmentally friendly waste disposal and energy generation is increasing. While waste can no longer simply be dumped in landfills but must be treated in a way that conserves resources, energy generation must be as clean as possible. Here, it is important to support the ideas of the circular economy and implement the global energy transition.

Our technologies

The company's product portfolio includes proprietary environmental technologies for thermal waste treatment (waste-to-energy) and sewage sludge incineration, circulating fluidised bed boilers and flue gas cleaning systems.

Waste-to-energy

Doosan Lentjes waste-to-energy technologies help to treat non-recyclable waste in a safe and environmentally friendly way. Doosan Lentjes has been contracted to provide more than 80 plants worldwide that reduce the volume of waste and harness the energy contained in the fuel. In addition, the residues from incineration can be fed into recycling processes to recover valuable materials such as metals and minerals.

Various flue gas cleaning processes are available that meet the requirements of the 13th, 17th or 44th BImSchV or the revised European BAT (Best Available Techniques) documents.

Technologies for the incineration of sewage sludge

Doosan Lentjes' proven sewage sludge incineration technologies have been developed to realise safe treatment of municipal sewage sludge according to the latest legal guidelines: The use of mono incineration solutions enables the recovery of valuable phosphorus from the incineration ash in a separate process step. Reliable flue gas cleaning systems help to meet the requirements of the German 17th BImSchV or the European BAT directives.

Doosan Lentjes has built more than 10 incineration plants in Germany and beyond, all of which ensure safe and legally compliant disposal of municipal sewage sludge.

Circulating fluidised bed boilers

Doosan Lentjes circulating fluidised bed (CFB) boilers offer maximum flexibility in the combustion of renewable or alternative fuels whose combustion characteristics are often difficult. No matter how low the calorific value, reactivity value or ash melting temperatures, CFB boilers ensure efficient use of fuels for steam and power generation.

To meet strict emission regulations, limestone can be added to the furnace to capture sulphur dioxide. A low combustion temperature prevents the formation of thermal NO_x.

Doosan Lentjes CFB boiler technology contributes to efficient and environmentally friendly power generation to meet energy needs while taking climatic aspects into account.

Flue gas cleaning systems

Doosan Lentjes offers advanced flue gas cleaning technologies for waste and sewage sludge incineration plants, power stations and industrial facilities. The (multi-stage) solutions include dry / semi-dry processes (Circoclean® & FER-DI®), technologies for particle separation, denitrification and heat extraction as well as wet scrubbers.

These processes are used to remove acid gases, hydrocarbons, heavy metals, dust as well as nitrogen oxides from the flue gases. The strict emission regulations according to the revised BAT reference documents or the 13th, 17th and 44th BImSchV are reliably complied with.

Worldwide, Doosan Lentjes has more than 650 reference units that reliably reduce emissions to the applicable guidelines.

DOOSAN Lentjes

Press Releases



Doosan Lentjes is to supply flue gas cleaning for new enfinium waste-to-energy plant in the UK

23rd June 2022

Doosan Lentjes, a specialist in environmental technologies, has been contracted by the general contractor Acciona to supply the flue gas cleaning system for a new waste-to-energy plant in West Bromwich, UK. The owner and operator of the new plant is enfinium Kelvin Limited.

The proven Doosan Lentjes Circoclean® flue gas cleaning technology is applied to ensure that the new waste-to-energy plant will comply with all emission limits according to the stringent European BREF requirements.

Doosan Lentjes' scope of supply includes the design, manufacture, and delivery of the entire flue gas cleaning system as well as support for the general contractor during installation and commissioning.

„The latest order intake shows that our flue gas cleaning technology meets the high demands of the highly competitive European market,“ says Daniel Borke, Product Manager Air Quality Control Systems (AQCS) at Doosan Lentjes. „Moreover, we see the current order as an important step towards our future business activities, which will focus on the process chain of thermal waste treatment. Our highest priority will be the successful execution of the project in compliance with specified time and economic targets. In doing so, we draw on decades of experience with this type of project, from which both the general contractor and the end customer will benefit.“

Doosan Lentjes is headquartered in Ratingen, Germany, and belongs to the Korean Doosan Group. The company's areas of expertise include flue gas cleaning systems, the combustion of renewable fuels such as waste, sewage sludge and biomass, and heat recovery systems.

Higher employee satisfaction: Doosan Lentjes strengthens its feedback culture

08th April 2022

„Your voice matters“ - under this motto, the Ratingen-based specialist for environmental technology Doosan Lentjes is strengthening its feedback culture. The aim is to increase employee satisfaction and create more transparency. Regular surveys on satisfaction and personal mood form the core of the feedback process. Initial results underline the great value of a good feedback culture - for employees and the company.

Comprehensive insights into the realities of work

The reasons for the offensive were manifold: „Due to well-filled order books, we grew strongly in recent years - many new colleagues have become part of the Doosan Lentjes family,“ says Linda Azmee, responsible for Recruiting & Employer Branding at Doosan Lentjes. „In order to counter the serious shortage of skilled workers, which we feel particularly strongly in engineering, we have been thinking about how we can make ourselves attractive to talented people as an employer. In doing so, we have asked ourselves what makes us special and unique as a company. But we didn't want to do this secretly, quietly in our offices. Rather, we wanted to hear the voices of our colleagues. On closer consideration, we found that the relevant questions overlapped significantly with the topics of the legally required mental risk assessment. We combined the questions - the result is a comprehensive survey on employee satisfaction that gives deep insights into the working realities of our employees.”

Changing working environments

„The situation surrounding the global Corona pandemic has once again increased the need for a continuous feedback culture,“ adds Diana Baganz, Marketing Manager at Doosan Lentjes and responsible for the project together with Linda Azmee. „Many new colleagues have started their new jobs from the mobile office. How they are doing there, where they see strengths and weaknesses of the company, is essential for them to feel part of Doosan Lentjes. But also our existing employees suddenly found themselves in a changed working world - many meetings only took place via MS Teams. The personal exchange and agreements in the „short official channels“ in the coffee kitchen were often no longer possible. And the nationwide trend towards mobile working will continue. The loyalty of employees to the company, considering these framework conditions, will play a decisive role in terms of economic success.”

Employees at the heart of success

„In response to the serious shortage of skilled workers and the changing work environments, we have been driving efforts to establish a stronger and more continuous feedback culture,“ says Dirk Stokvis, Managing Director of Doosan Lentjes. „Our goal is to make our employees feel like an important and valued part of the company through regular feedback. After all, we know that our products and services are only as good as our employees. After all, they are the ones who develop our technologies and build state-of-the-art plants for our customers all over the world - in a very intense competitive environment.“

Digital extension of the feedback process

Until now, the feedback process consisted primarily of analogue 1:1 conversations between supervisors and employees. This process has now been extensively expanded digitally: Doosan Lentjes uses the CompanyMood software to record feedback for employees at all locations in Germany and abroad. In addition to a „major“ employee satisfaction survey, which is conducted once a year, employees have the opportunity to regularly rate their personal mood and to send their feedback directly to their supervisor via a chat function. But CompanyMood also forms the core of the feedback culture that is lived beyond the evaluation. „All measures that we develop together with the colleagues from the feedback are stored in the system transparently and visibly for everyone involved,“ says Linda Azmee. „Every employee knows at any time which measures have been developed and how they are progressing. In this way, we aspire to optimise interfaces and ensure maximum transparency in the feedback process. It is important to us that everyone who works for us realises that their voice is heard and that it serves as a basis for improvement.”

Valuable information on corporate culture

The results, which have already been evaluated as part of the first employee satisfaction survey, provide valuable information on the corporate culture. They show where there is potential for optimisation, but also reveal clear strengths of the company. Particularly positive is the cohesion within the team and the great trust in the superiors: 96% of the respondents can agree with the statement that the employees help each other. Almost 100% of the respondents stated that they have trust in their colleagues. 94% have trust in their superiors. 96% rate the team cohesion as good. „Even before the survey, we heard many positive voices about social cohesion in our company,“ says Diana Baganz. „The results now also prove with specific figures that this is one of our greatest strengths. It will be our task to maintain this strength and thus not only to retain our existing employees, but also to inspire new talents to join us. We take this task very seriously. Together, we want to continue to reliably deliver technologies for thermal waste treatment and energy generation that contribute to the achievement of global climate goals“.

Doosan Lentjes is headquartered in Ratingen, Germany, and is part of the Korean Doosan Group. In addition to thermal waste treatment, the company's areas of expertise include technologies for sewage sludge incineration, circulating fluidised bed boilers and flue gas cleaning.

Changes in the management at Doosan Lentjes

21st January 2022

Dirk Stokvis, previously responsible for Finance & Operations in the management of Doosan Lentjes GmbH, will take over the position of Chief Executive Officer at the company specialising in environmental technologies with immediate effect. He succeeds Thomas Stetter, who is leaving the company after six years on the management board.

Dirk Stokvis has been with Doosan Lentjes since 2001 and has extensive knowledge of both the company and the market: He already held various management roles with a focus on operations before being appointed Managing Director in July 2018. Likewise, Dirk Stokvis has been Managing Director of the Czech engineering subsidiary Doosan Lentjes Czech s.r.o. since 2013.

„I would like to thank Thomas Stetter for the successful and very collegial cooperation over the past years and I am looking forward to my new task. In a challenging market environment, we have managed to establish our company as an important partner in the field of thermal waste treatment by consistently focusing on customer requirements,“ says the new CEO, who is determined to further expand the positive business development of the past years. „The successful completion of our won projects to the satisfaction of our customers will continue to be a clear priority for me. In addition, deepening the value chain in close cooperation within the Doosan network and positioning Doosan Lentjes as a reliable one-stop supplier for the entire process of thermal waste treatment and sewage sludge incineration will be essential for me. Our company’s ability to offer proprietary technologies across the entire hot process chain of thermal treatment as a tailor-made partial or total plant concept is an important pillar of our business success.“

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DOOSAN Lentjes

Selected Case Studies



Selected Case Studies



Waste-to-energy plant, Olsztyn, Poland

Contract award: 2020

Fuel: Refuse derived fuel (RDF)

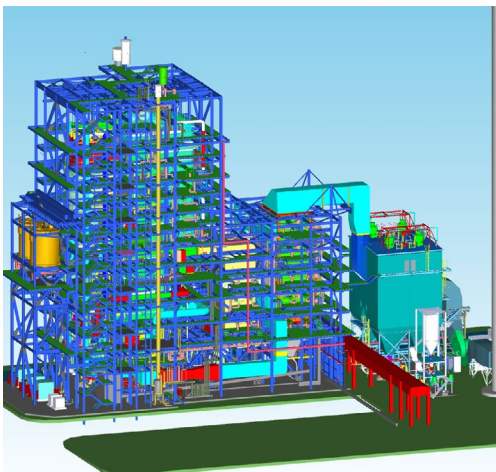
Doosan Lentjes, in consortium with Doosan Heavy Industries & Construction, will supply the new turnkey waste-to-energy plant in Olsztyn, Poland. The new plant will use Doosan Lentjes' proven water-cooled reciprocating grate, boiler and flue gas cleaning technologies. All BAT emission limits will be met.



Sewage sludge incineration plant, Belfast, Northern Ireland

Fuels: (Dewatered) sewage sludge, screenings from the sewage treatment plant

Doosan Lentjes was responsible for the design, construction and commissioning of the mono-sludge incineration plant in Belfast, Northern Ireland. Today, the operator benefits from the mono incineration concepts, which is the basis for the implementation of the new legal requirements for phosphorus recovery.



Circulating fluidised bed boiler plant

Contract award: 2018

Fuel: Biomass

Doosan Lentjes is supplying the CFB boiler technology for the new 75 MW_e biomass power plant in Sodegaura, Japan. The order includes the engineering and procurement of the boiler island including the key boiler and flue gas cleaning equipment.

DOOSAN Lentjes

Environmental Technologies in 360°



Environmental Technologies in 360°

Experience our environmental technologies in a 360° environment



Virtual Doosan Lentjes reference list

Visit our website

<https://www.doosanlentjes.com/en/> and open the Virtual Doosan Reference List. There you will have the opportunity to visit our reference plants worldwide and experience the technologies applied.



Virtual 360° flight through a waste-to-energy plant

Visit our YouTube channel and open the following video: <https://www.youtube.com/watch?v=lxfb33EC0Lw>. Here you have the opportunity to experience the path of waste through the entire process of thermal waste treatment.



Construction progress of the waste wood incineration plant Dinslaken in 360°

Open the following link <https://vrs.link/doosan-lentjes/dinslaken/> and take a 360° look at our construction documentation of the Dinslaken facility. Walk (virtually) across the construction site in great weather.

DOOSAN Lentjes

Corporate Social Responsibility (CSR)



Corporate Social Responsibility (CSR)

We take our corporate responsibility very seriously, which is we do not see CSR activities as an „add-on“, but as an integral part of our business activities and processes. In doing so, we strive for a world that is characterised by mutual respect. In this world, people live and do business in harmony with the environment and nature. To this end, our CSR strategy is based on three main pillars developed in accordance with these goals: People, sustainability and charity.

People are at the centre of everything we do. Our efforts are directed at all people we influence through our entrepreneurial existence. The goal is to create an environment that promotes motivation and creativity and gives the highest priority to physical and mental well-being.

The second pillar focuses on sustainability. Here, we not only implement individual measures to achieve improvements in our environmental performance, but also understand sustainability as the foundation of our business model and activities. Along our entire value chain, we emphasise the highest environmental standards and the reduction of our CO₂ footprint.

Charity is the third pillar on which our CSR activities are built. With this element of our social responsibility strategy, we follow our conviction that it is our corporate duty to make a positive difference for others. In doing so, we do not limit ourselves to our communities, but help where help is urgently needed.