



 **Deurotech®** Group

Wessel
Environmental Technologies

airprotech 

EISENMANN
Environmental Technology

 **OSCHATZ**



The Deurotech Group is committed to the responsible use of our planet's finite resources.

Therefore, we have made it our task to use all the effort of the members of the Deurotech Group and their partners for sustainable, energy-efficient and economic concepts.

Deurotech Group



The Deurotech Group

The Deurotech Group is a partnership of leading experts in plant engineering and offers turnkey solutions for various industries as well as environmental technologies.

The owner of the Deurotech Group GmbH is the Deuring Group from Bregenz, Austria that is entirely family-owned (www.deuring-group.com).

Wood processing and paper industry

With the acquisition of OSCHATZ Power in 2023, the Deuring Group intended to complete its expertise in the environmental sector.

Particularly in the Deurotech Group's core market segment, the wood processing and paper industry.



Werner Deuring, CEO and owner of the Deurotech Group

Deurotech Profil

Company name

Deurotech Group GmbH
Deurotech® Community Trade Mark

Founding

2015

Registered office

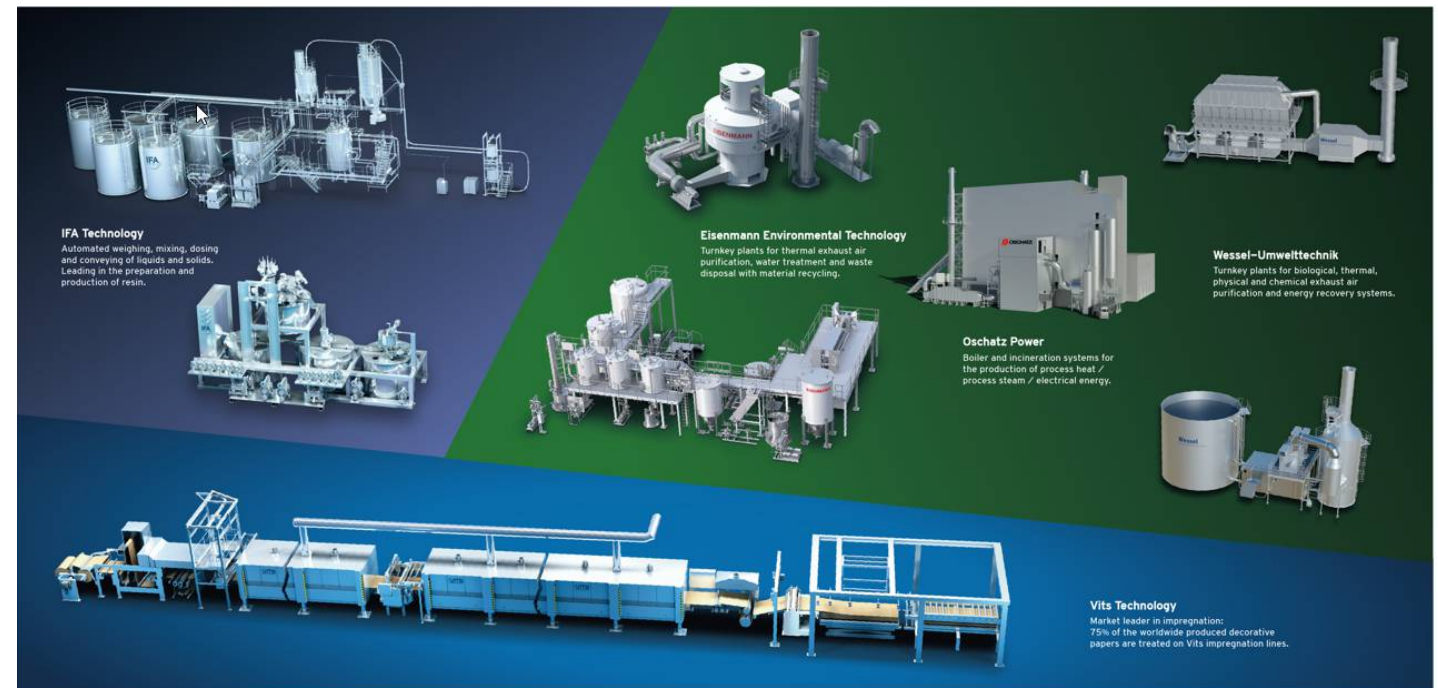
Langenfeld, Germany

Revenue

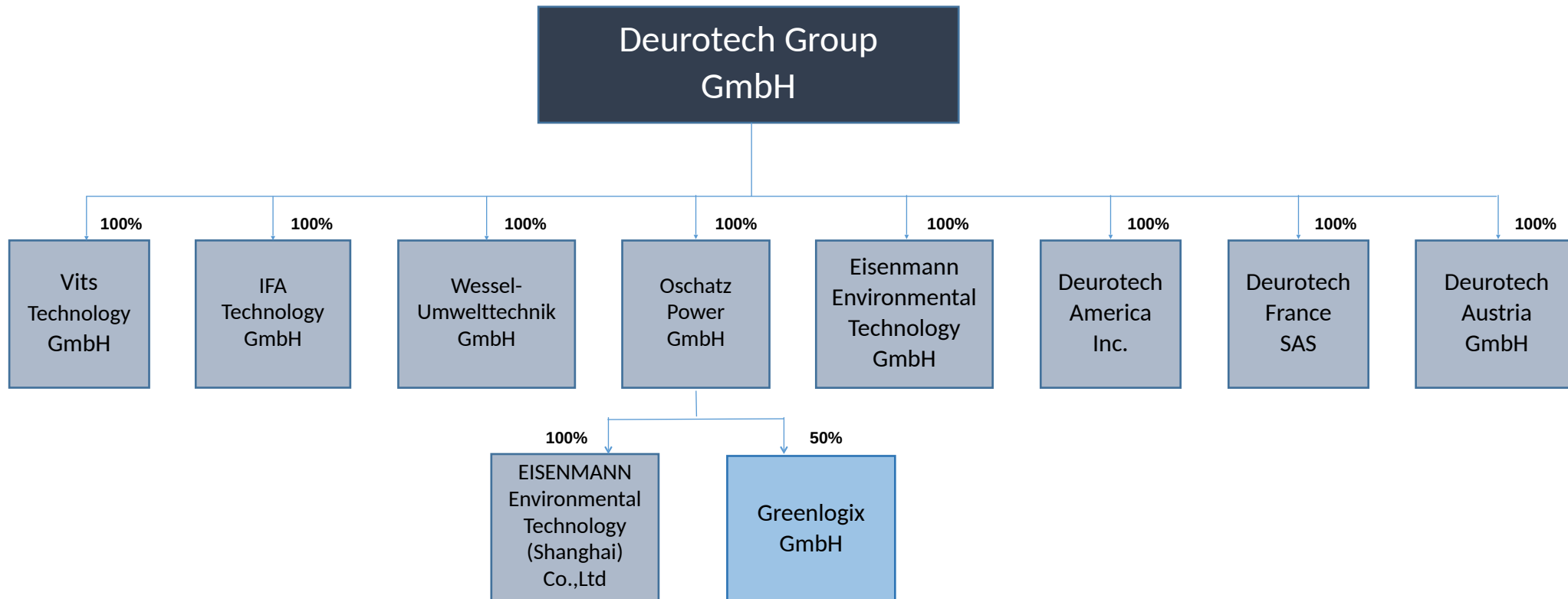
approx. 123 Mio. € sales in 2023

Industry

Processtechnology, machinery and plant engineering/construction,
exhaust air purification, components for the wood processing and paper industry



Targeting Efficiency – Excellence in Impregnation, Resin Preparation and Environmental Technologies





OSCHATZ

Member of  Deurotech Group

With effect from 1st of February 2023, the youngest member of the Deurotech group of companies – introducing the **OSCHATZ** Power Ltd.

OSCHATZ Power GmbH is known as an innovative and leading expert for highly efficient solutions for the thermal utilisation of numerous industrial energy sources and fuels.

However, the “youngest” member of the group is the “oldest” in experience.





OSCHATZ

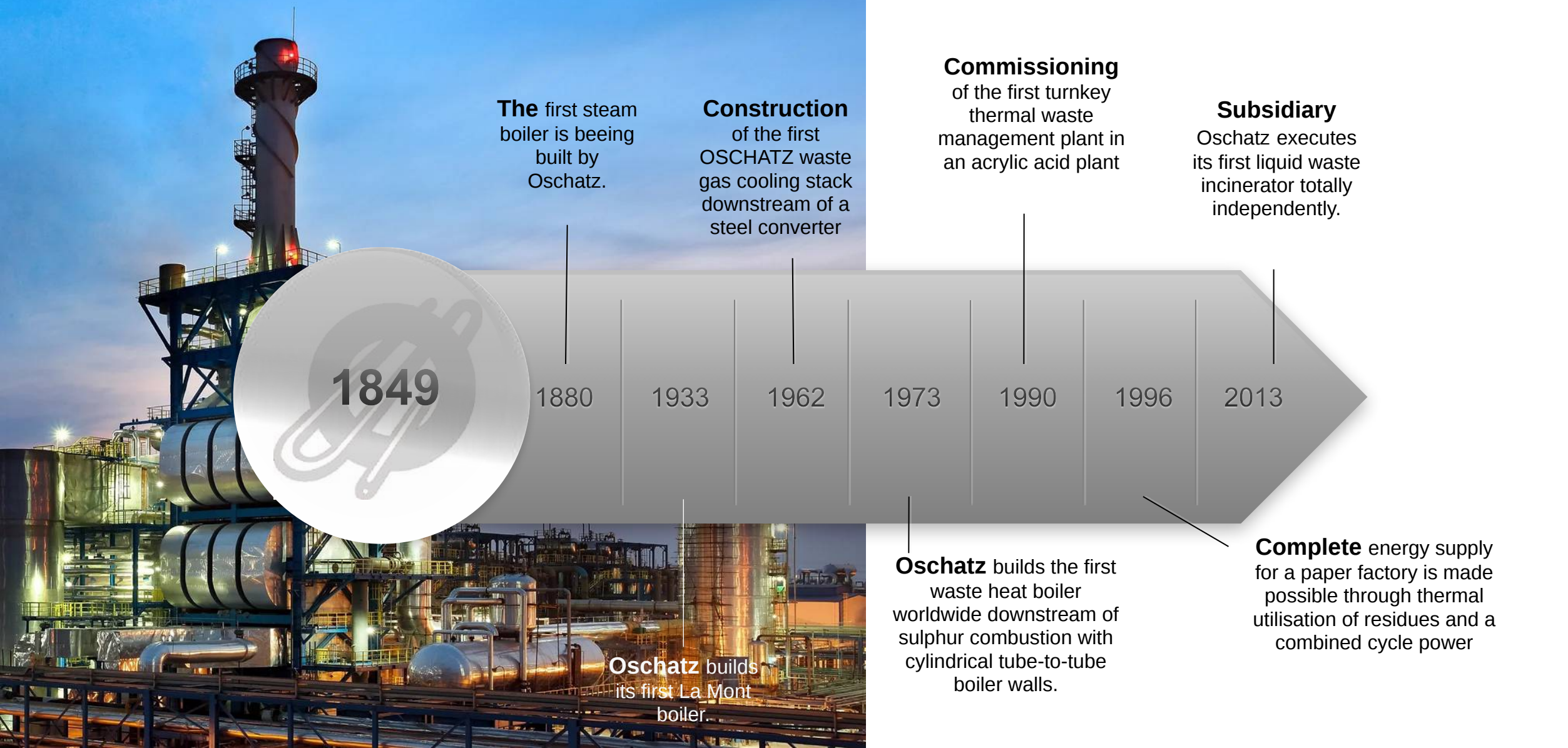
Member of  Deurotech Group

Founded in 1849

With more than 170 years of experience Oschatz is today a leader in the product areas of chemical industry , non-ferrous industry, iron and steel industry as well as environmental and power plant technology.



Introduction: Technical milestones



Overview

Facts & Figures

- Number of projects worldwide: more than 1.200 installed plants
- Experience: 170 years
- Worldwide activities: in more than 60 countries

References

Company Profile



Technologies

- **Solid Fuel fired Power Plants (turnkey solutions)**
 - Biomass fired Power-Plants
 - WTS Plants (rejects, RDF from commercial and/or municipal waste, etc.)
- **Waste Heat/Gas Recovery and Incineration Technology (turnkey solutions)**
 - Oil and gas fired steam generators,
 - Incineration plants for gaseous/liquid waste fuels and residues
- **Industrial Heat Recovery**
 - Metallurgy
 - Chemical Industry

Services

- Basic & detail engineering
- Process engineering
- Procurement, fabrication supervision, construction
- Site-supervision, commissioning, start-up, training
- After sales services, spare parts, revamps

OSCHATZ POWER – REFERENCES „Solid Fuels“

INCINERATION PLANTS SOLID FUELS

Description

Customized power plants for incineration of municipal and/or sorted waste (RDF), ensuring high levels of productivity and economic efficiency

Applications

- Waste to Energy plants
- Biomass fired Power-Plants
- Paper and sewage sludge

Highlight

optimized and customized design features for competitive solution, with grate- or bubbling fluidized bed systems from 20 to 100 MWth.



OSCHATZ POWER – REFERENCES „Solid Fuels“



Boehringer Ingelheim, Germany, 36 – 68 t/h
Biomass, Waste Wood, Sorted Waste – RDF



Chemtex, Italy, 50 MWth, 50 t/h
Biomass (Lignin from Bioethanol Production)



Andernach, Germany, 60 MWth, 65 t/a
Sorted Waste – RDF



Hagenow, Germany, 30 MWth, 6.8 MWel, 33.5 t/h
Sorted Waste – RDF



ZASO, Germany, 29.5 MWth, 32.7 t/h
Sorted Waste – RDF



Wilmersdorf, Germany, 29.5 MW, 28 t/h
Biomass – Wood Chips (AI – AIV) – Green Wood



MKG, Germany, 24 MWth, 5 MWel, 27 t/h
Rejects and Paper Sludge



Weig Karton, Mayen, Germany, 15 MWth, 15 t/h
Rejects and Paper Sludge

OSCHATZ POWER – REFERENCES „Liquid & Gaseous Fuels“



INCINERATION PLANTS LIQUID/GASEOUS FUELS

Description

Direct fired steam boilers, driven by oil and/or gas as well as thermal disposal plants to burn liquid and gaseous waste fuels and residues. Including electrical power generation and process steam production (CHP-Plants)

Applications

- Oil and Gas Fired Steam generators
- Thermal Oxidizer
- Incinerators for liquid and gaseous fuels
- Hazardous Waste
- Salt liquid incineration

Highlight

wide experience in combustion of critical liquid and gaseous fuels with hazardous, corrosive and floating solid components



OSCHATZ POWER – REFERENCES „Liquid & Gaseous Fuels“



BASF, Malaysia, 2 x 100 MWth, 17 Mwel
Natural Gas



Dow Chemicals, Germany, 2 x 160 MWth
Natural Gas and Hydrogen



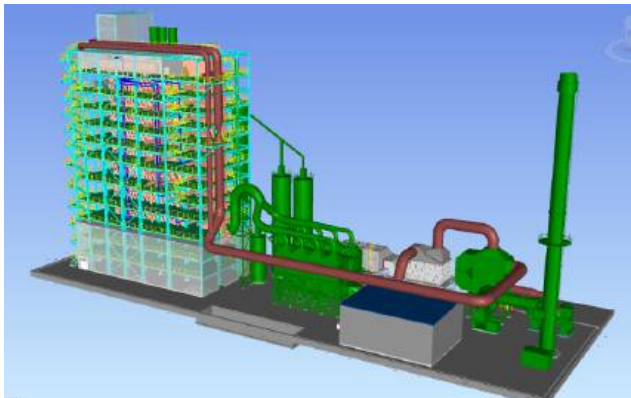
UPM, Germany, 30.5 t/a
Liquid Waste and Natural Gas



BASF, Ludwigshafen Germany, 33 – 66 t/h
Liquid Waste



INEOS, Marl, Germany, 31 t/h, **Liquid Waste**



Lyondell Basell, Netherlands, 105 t/h
Salt Wastewater, Natural Gas, Liquid Waste



BASF, Brazil, 98 t/h
Liquid and Gaseous Residues



CURRENTA, Germany, **Rejects**, 87 t/h
8 Off-Gas Streams from the chemical park



BASF, China, 150 t/h
Liquid and Gaseous Residues

OSCHATZ POWER – REFERENCES „Industr. Heat Recovery“



METALLURGY AND CHEMICAL INDUSTRY

Description

Waste gas cooling systems for the iron and steel industry and the non-ferrous industry

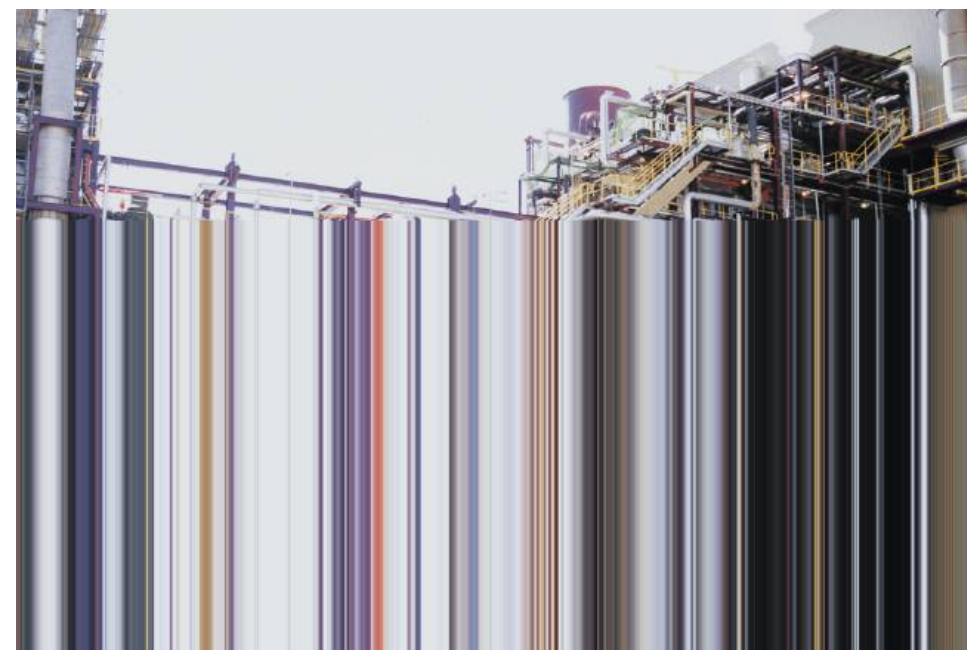
Challenging corrosive off gases with high dust loading.

Core components to cool process gases in nitric acid, sulfuric acid plants and other chemical processes.

Applications

- Oil and Gas Fired Steam generators
- Thermal Oxidizer
- Incinerators for liquid and gaseous fuels
- Hazardous Waste
- Salt liquid incineration
- Sulfuric acid plants
- Nitric acid, caprolactam and hydroxylamine plants

Highlight > 200 cooling hoods supplied for the steel industry, extensive experience in all non-ferrous processes. World market leader with more than 200 installed systems for Nitric Acid plants



OSCHATZ POWER – REFERENCES „Industr. Heat Recovery“



OSCHATZ

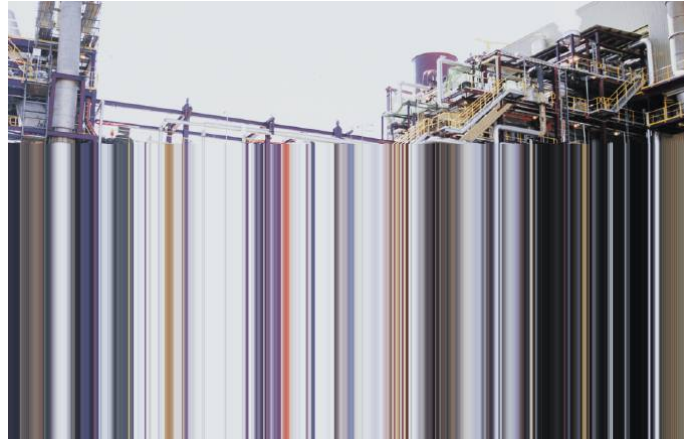
Member of  Deurotech Group



Yunnan Copper, China, 45 t/h
Offgas rate 70.000 Nm³/h



Aurubis AG, Germany, 25.5 t/h
Offgas rate 40.000 Nm³/h



Western Mining Corporation, Australia, 60.5 t/a
Offgas rate 51.700 Nm³/h, Sulfation air rate 11.000 Nm³/h



Mount Isa Mines, Australia, 27 t/h
Offgas rate 38.880 Nm³/h



Aurubis AG, Germany, 65 t/h
Offgas rate 76.000 Nm³/h



Tata Steel, Europe, 20 – 75 t/h
Flue-Gas Quantity, 20.000 Nm³/h



Arcelor Mittal, Europe, 35 – 40 t/h
Off-Gas Quantity, max. 180.000 Nm³/h



Thyssen Krupp Steel, 239 t/h
Off-Gas Quantity, max. 173.500 Nm³/h



Jinan Iron & Steel Group, China, 39 t/h
Waste Gas Quantity, 115.000 Nm³/h

The potential of small RDF plants



Let's talk about waste

The potential of small RDF plants



Whatever we may procure



The potential of small RDF plants

It's only...

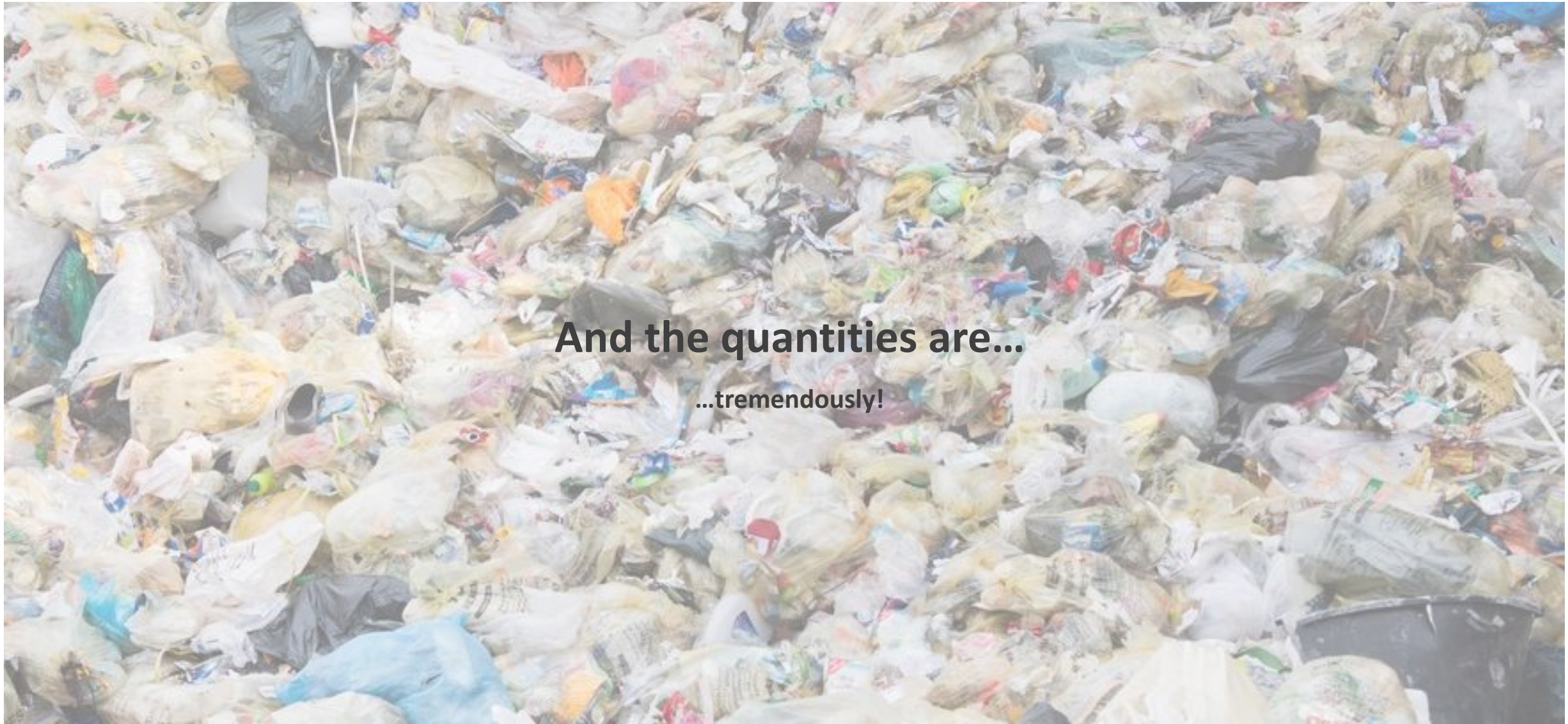


...a question of time

One day it will be waste

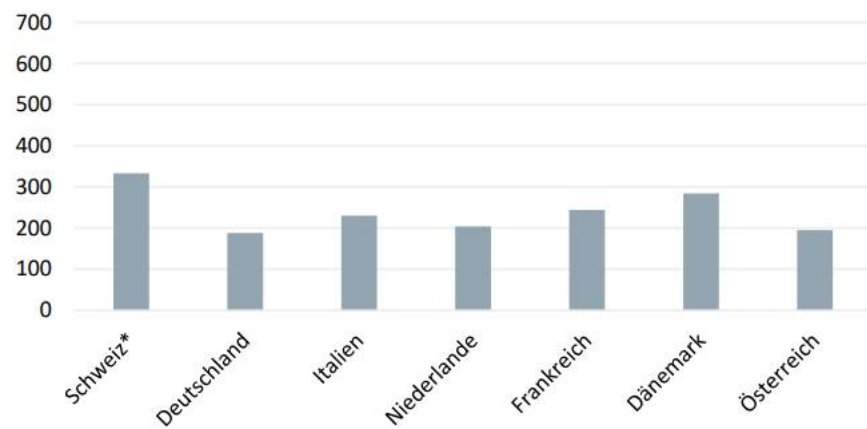
...for sure!

The potential of small RDF plants



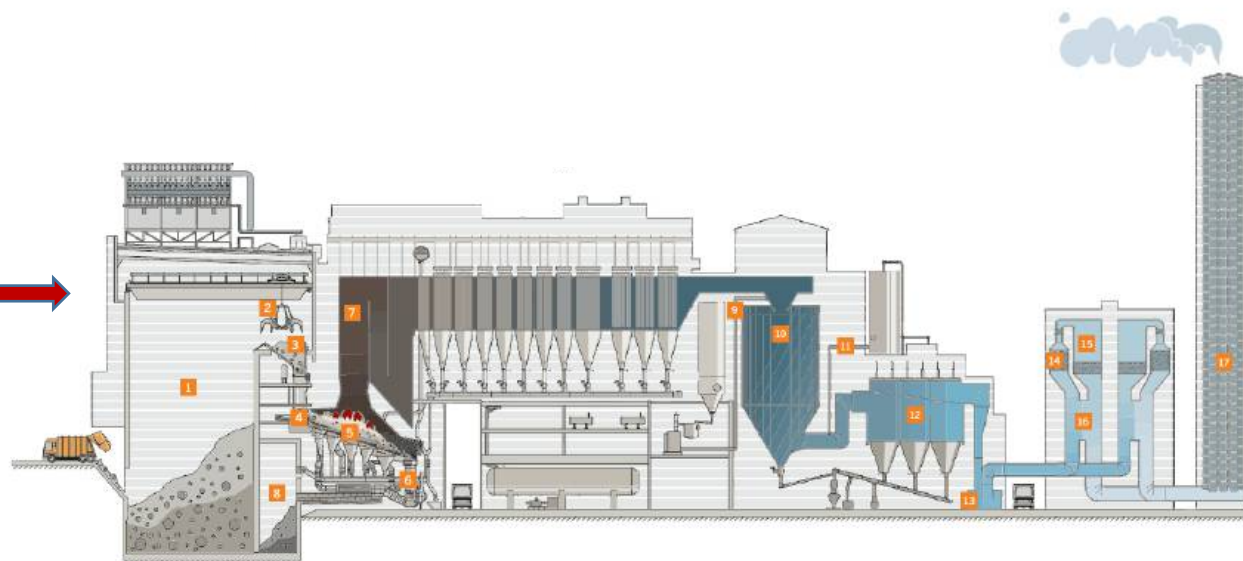
The potential of small RDF plants

Waste volume per person



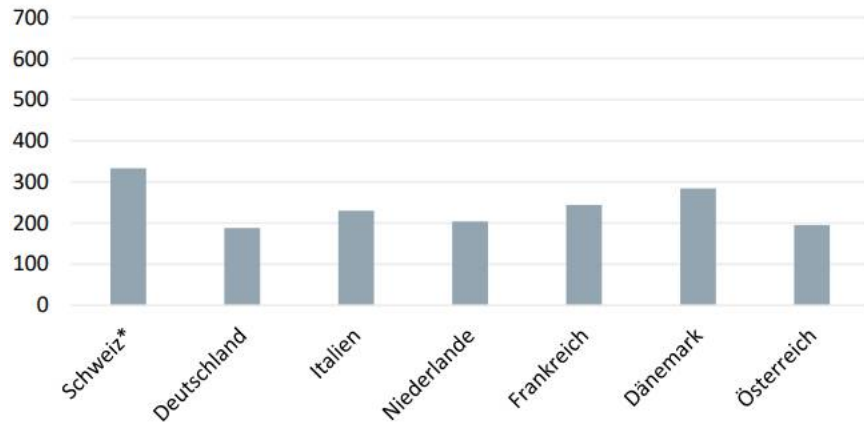
100 %

nd



The potential of small RDF plants

Waste volume per person



100 %

Selective collection and separation

Residual fraction 10 MJ/kg

33 %



The potential of small RDF plants

The growing problem of disposal

- The disposal of waste materials is becoming a massive cost factor, as landfill sites are limited.
- The export of waste is becoming more difficult or even prohibited.



The potential of small RDF plants

The growing problem of disposal

- The disposal of waste materials is becoming a massive cost factor, as landfill sites are limited.
- The export of waste is becoming more difficult or even prohibited.
- Residual fuels (RDF) are a broad term. High-calorific RDF fuels (**>13 MJ/kg**) are separated in the recycling process and **can be sold for a fee** - e.g. to cement factories.
- Low-caloric RDF fuels (**<13 MJ/kg**) are the final output of the recycling process. We call it “organic rich rest-fraction”, others may say “poor RDF”. Somebody **has to pay a gate-fee** to have it disposed – in waste incineration plants.





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