



WASTE TO ENERGY

PRESENTATION

GENIUS SOLUTIONS FOR INDUSTRIAL PROJECTS

Deha Tech Group and Hitachi Zosen Inova have broken new ground with the construction of Istanbul's first waste-to-energy project



www.dehatech.com



ABOUT DEHA TECH

Deha Tech is an International acting EPC (Engineering, Procurement and Construction) Company committed to obtain the highest standard of client satisfaction and providing long-term business relations with its clients. Since 2009 we're proud to have completed more than 100 projects and work every day to be a global partner with the promise of excellence.

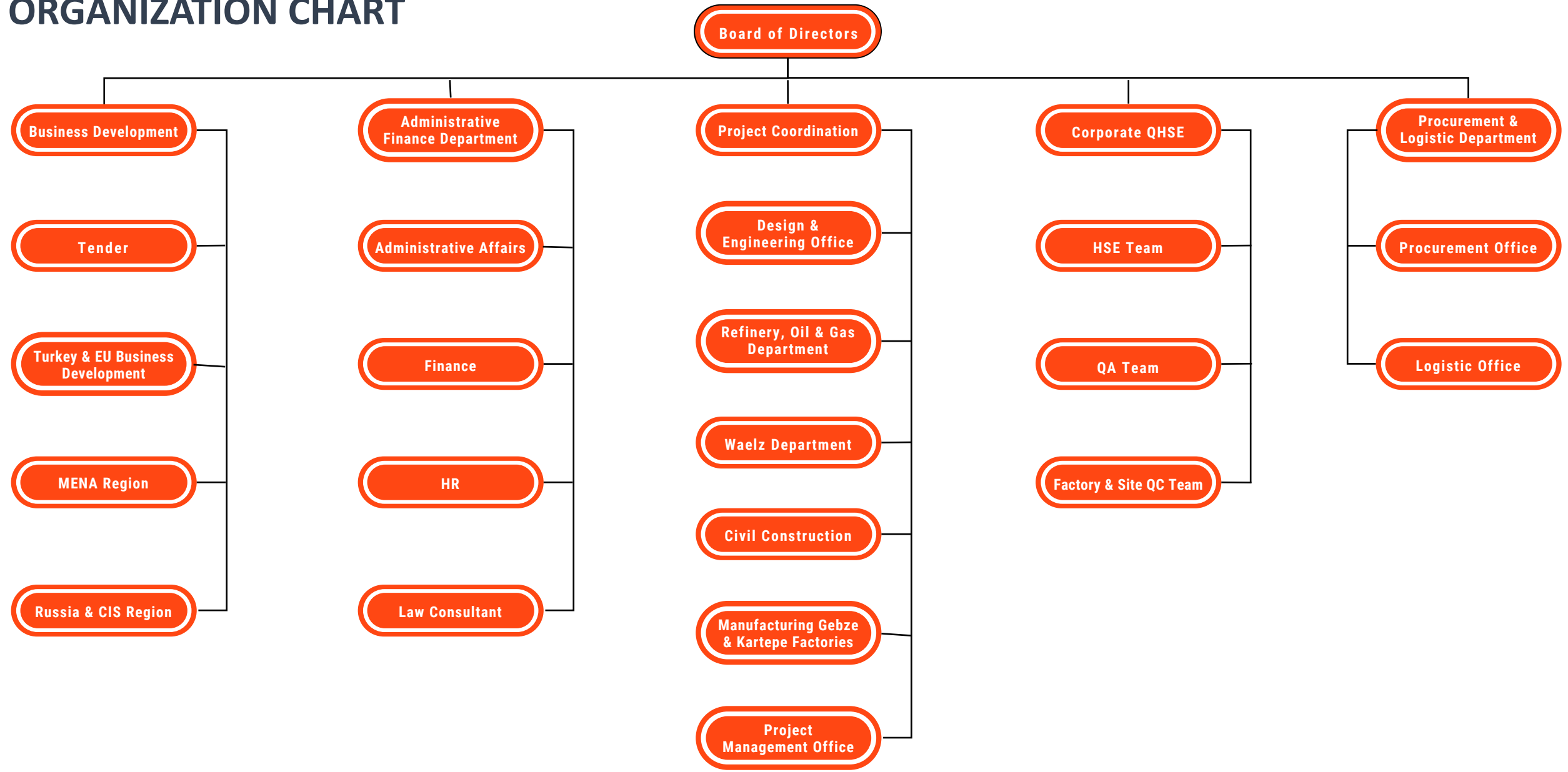
We offer services in the fields of design & engineering, procurement & logistic, fabrication, construction, and commissioning for various industries

Deha Tech is always improving its know-how, rich human resources and capacity. Making use of its values and capabilities today, Deha Tech has turned into a leading international EPC contractor.

On behalf of the company's board of directors, executives, employees, and subsidiaries, we would like to thank all our clients, partners, business allies to rely on us and support our business all along.



ORGANIZATION CHART



QUALITY POLICY

Deha Tech minimizes accidents by preventing the possibility of an accident at its source during all of its activities and makes an effort to prevent occupational diseases.

Deha Tech provides consultancy and participation to OHS activities with the awareness that all subcontractors, visitors and employees are responsible for their own safety in order to achieve the targets for occupational health and safety of all employees.

Seeing as the most important priority of applicable Occupational Health & Safety Legislation and to comply with the terms of Membership Organizations, Hazard & Risk assessment, identifying existing hazards and risks and to provide possible protection, activities and products are brought into an integral commitment, work environment and occupational Health & Continuous improvement in safety practices adopted as policy.

Deha Tech provides customer satisfaction with Quality, Price and On-time Delivery. Quality is the first principle of DEHA TECH. Our Quality System is certified in under the requirements of EN ISO 9001 standard.



ENVIRONMENTAL POLICY

Deha Tech works in an environmentally and friendly way without harming the environment with its works and manufacturing methods in its sector and activity fields.

Deha Tech is aware of its responsibilities regarding the efficient use of the limited resources of the environment and the earth we live in.

We adopt to be respectful to the environment in its activities and comply with the legal regulations regarding the environment.



Rights / Responsibility / Aim

As Deha Tech, we believe and follow all that social responsibility projects are part of the criteria of sustainability.

SOCIAL RESPONSIBILITY

As part of its sustainability approach, Deha Tech has planned its studies on **Education**, Art, Nature and **Environment**, Employment, of Women and Youth, Animal Rights and will share it in the near future



ITU Races sponsored by Deha Tech

WE'RE PROUD OF OUR SAFETY, INTEGRITY, TEAMWORK AND EXCELLENCE COMMITMENT

SUSTAINABILITY



The importance of every drop in water management



Collection and classification of waste at source at solid waste management



The contribution of shared decision-making, training and participation in our processes to our productivity principle



Our belief in the contribution of women and youth



We give priority to education with the awareness that there are no limits in personal development.



ITU Races sponsored by Deha Tech

Social Approach



Environment



Management

OCCUPATIONAL HEALTH AND SAFETY

Our priority is to maintain the health and safety of our employees and public, to minimise the environmental impact associated with our activities.

Working at Deha Tech means becoming a part of energetic team committed to obtain objectives in international conditions.

We ensure that Deha Tech Group Companies have effective occupational health and safety systems to generate customer confidence and protecting employees.



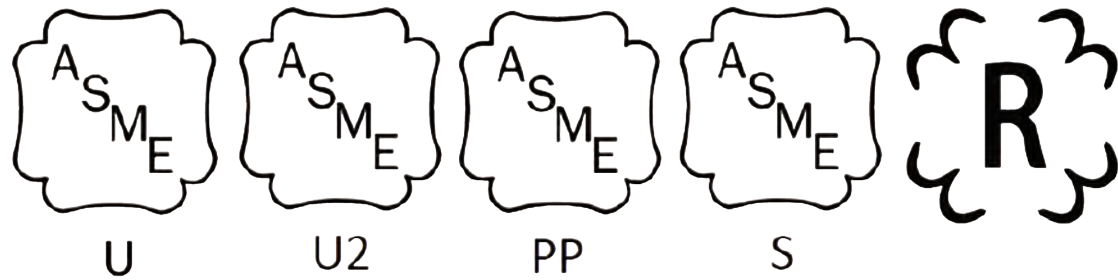
SAFETY FIRST



We ensure that organizations have effective occupational health and safety systems in place to protect employees

- ★ Think Safe
- ★ Act Safe
- ★ Stay Safe

OUR CERTIFICATES



EXC - 4 CERTIFICATED



BUSINESS PARTNERS



LIST OF DEHA TECH ENERGY FROM WASTE PROJECTS

COUNTRY	PROJECT NAME	SCOPE	CLIENT	SERVICE	STATUS	YEAR
England	Riverside 2	6 Units Ram Type Bottom Ash Extractor	Hitachi Zosen Inova	Fabrication	On Going	2024
England	Riverside 1	Furnace Door, Grate Service Bridge	Hitachi Zosen Inova	Fabrication	On Going	2024
England	Rivenhall IWMF	Boiler Non Pressure Parts, Hoopers- H-pass	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Rivenhall IWMF	FGT Plate Work Bent Fabrication	Hitachi Zosen Inova	Fabrication	On Going	2024
England	Rivenhall IWMF	Furnace Door, Grate Service Bridge	Hitachi Zosen Inova	Manufacture	On Going	2023
England	Westfield Energy Recovery	Plate Work Bent-Common Engineering, Procurement, Fabrication	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Westfield Energy Recovery	Plate Work Bent-Common Engineering, Procurement, Fabrication	Hitachi Zosen Inova	Fabrication	On Going	2023
England	North London Heat and Power Project	Furnace Door and Grate Service Bridge Fabrication, Engineering, Procurement	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Energy from Waste Plants	Ram Type Bottom Ash Extractor and Silos Furnace Doors Fabrication, Engineering, Procurement	Hitachi Zosen Inova	Fabrication	Completed	2022
Australia	Rockingham Energy from Waste Plant	Duct Engineering, Procurement, Fabrication	Hitachi Zosen Inova	Fabrication	Completed	2022
England	Slough Multifuel, Energy from Waste Plant	Furnace Door, Grate Service Bridge and Mounting Aid to Service Bridge Fabrication incl. Engineering, Procurement, Corrosion Protection, Functional Test, Packing & Labeling,	Hitachi Zosen Inova	Fabrication	Completed	2022
England	Slough Multifuel, Energy from Waste Plant	Bottom Ash Chute Line 1 & 2 Procurement, Engineering, Fabrication,	Hitachi Zosen Inova	Fabrication	Completed	2022
England	IVRY II Energy from Waste Plant	Fabrication, Engineering, Procurement Boiler Acc. Maintenance Console	Hitachi Zosen Inova	Fabrication	Completed	2022
Turkey	Istanbul Energy From Waste Power Plant	Fabrication, Engineering, Procurement, SA Nozzle Modification	Hitachi Zosen Inova	Fabrication	Completed	2022

LIST OF DEHA TECH ENERGY FROM WASTE PROJECTS

COUNTRY	PROJECT NAME	SCOPE	CLIENT	SERVICE	STATUS	YEAR
Switzerland	SNCR Nozzles for EfW Spares	Fabrication, Procurement	Hitachi Zosen Inova	Fabrication	On Going	2023
Turkey	Istanbul Energy From Waste Power Plant	Waste Bunker Water Discharge Casing Engineering, Procurement, Fabrication	Hitachi Zosen Inova	Fabrication	On Going	2023
England	North London Heat and Power Project	Bottom Ash Chute	Hitachi Zosen Inova	Fabrication	On Going	2023
England	North London Heat and Power Project	Grate riddlings Plate Works	Hitachi Zosen Inova	Fabrication	On Going	2023
England	North London Heat and Power Project	Feed Hopper	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Westfield Energy Recoery	Furnace Doors & Grate Service Bridge	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Skelton Grange Energy From Waste Plant	Boiler Non-pressure Parts	Hitachi Zosen Inova	Fabrication	On Going	2025
Turkey	Istanbul Energy From Waste Power Plant	Boiler Bypass Duct for Grate	Hitachi Zosen Inova	Fabrication	On Going	2022
England	Westfield Energy Recoery	Ram Type Bottom Ash Extractor Slide Gate	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Skelton Grange Energy From Waste Plant	Furnace Door Grate Service Bridge	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Slough Multifuel, Energy from Waste Plant	CaOH ₂ Silo, Residue Silo, PAC Silo	Hitachi Zosen Inova	Fabrication	On Going	2024
U.A.E	Dubai, UAE Energy From Waste Project	Furnace Door, Grate Service Bridge, Mobile Air Canon	Hitachi Zosen Inova	Engineering, Procurement Manufacturing	On Going	2022
Switzerland	Kebag Enova Emmensptiz Energy From Waste Plant	Manufacturing of Boiler Non-Pressure Parts	Hitachi Zosen Inova	Procurement Manufacturing	On Going	2022
England	Slough Multifuel, Energy from Waste Plant	Feed Hopper, Grate Riddlings Plate Work, Bottom Ash Chute	Hitachi Zosen Inova	Fabrication	On Going	2022

LIST OF DEHA TECH ENERGY FROM WASTE PROJECTS

COUNTRY	PROJECT NAME	SCOPE	CLIENT	SERVICE	STATUS	YEAR
Switzerland	SNCR Nozzles for EfW Spares	Fabrication, Procurement	Hitachi Zosen Inova	Fabrication	On Going	2023
Turkey	Istanbul Energy From Waste Power Plant	Waste Bunker Water Discharge Casing Engineering, Procurement, Fabrication	Hitachi Zosen Inova	Fabrication	On Going	2023
England	North London Heat and Power Project	Bottom Ash Chute	Hitachi Zosen Inova	Fabrication	On Going	2023
England	North London Heat and Power Project	Grate riddlings Plate Works	Hitachi Zosen Inova	Fabrication	On Going	2023
England	North London Heat and Power Project	Feed Hopper	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Westfield Energy Recoery	Furnace Doors & Grate Service Bridge	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Skelton Grange Energy From Waste Plant	Boiler Non-pressure Parts	Hitachi Zosen Inova	Fabrication	On Going	2025
Turkey	Istanbul Energy From Waste Power Plant	Boiler Bypass Duct for Grate	Hitachi Zosen Inova	Fabrication	On Going	2022
England	Westfield Energy Recoery	Ram Type Bottom Ash Extractor Slide Gate	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Skelton Grange Energy From Waste Plant	Furnace Door Grate Service Bridge	Hitachi Zosen Inova	Fabrication	On Going	2023
England	Slough Multifuel, Energy from Waste Plant	CaOH2 Silo, Residue Silo, PAC Silo	Hitachi Zosen Inova	Fabrication	On Going	2024
U.A.E	Dubai, UAE Energy From Waste Project	Furnace Door, Grate Service Bridge, Mobile Air Canon	Hitachi Zosen Inova	Engineering, Procurement Manufacturing	On Going	2022
Switzerland	Kebag Enova Emmensptiz Energy From Waste Plant	Manufacturing of Boiler Non-Pressure Parts	Hitachi Zosen Inova	Procurement Manufacturing	On Going	2022
England	Slough Multifuel, Energy from Waste Plant	Feed Hopper, Grate Riddlings Plate Work, Bottom Ash Chute	Hitachi Zosen Inova	Fabrication	On Going	2022

LIST OF DEHA TECH ENERGY FROM WASTE PROJECTS

COUNTRY	PROJECT NAME	SCOPE	CLIENT	SERVICE	STATUS	YEAR
England	Rookery Energy from Waste Power Plant	Fabrication of Furnace Door and Grate Service Bridge	Hitachi Zosen Inova	Fabrication	Completed	2020
France	IVRY II Energy from Waste Power Plant	Fabrication of Furnace Door And Grate Service Bridge	Hitachi Zosen Inova	Fabrication	Completed	2023
France	IVRY II Energy from Waste Power Plant	Fabrication Of 2 Nos. Feed Hopper	Hitachi Zosen Inova	Fabrication	Completed	2020
France	IVRY II Energy from Waste Power Plant	Supply and Fabrication of Boiler Non-Pressure Part	Hitachi Zosen Inova	Fabrication	Completed	2020
France	IVRY II Energy from Waste Power Plant	Supply and Fabrication of Combustion Air Duct	Hitachi Zosen Inova	Fabrication	Completed	2020
France	IVRY II Energy from Waste Power Plant	Bottom Ash Chute & Grate Riddling removal works	Hitachi Zosen Inova	Fabrication	Completed	2020
Russia	Moscow Energy from Waste Plant	Supply Of 6 Nos. Ram Type Bottom Ash Extractors	Hitachi Zosen Inova	Fabrication	Completed	2021
Russia	Moscow 2 Energy from Waste Plant	Supply Of 6 Nos. Ram Type Bottom Ash Extractors	Hitachi Zosen Inova	Fabrication	Completed	2021
Russia	Moscow 1 Energy from Waste Plant	Supply Of 6 Nos. Ram Type Bottom Ash Extractors	Hitachi Zosen Inova	Fabrication	Completed	2021
France	IVRY II Energy from Waste Power Plant	Supply and Manufacturing of 4 Nos Bottom Ash Extractor, 4 Nos Slide Gate	Hitachi Zosen Inova	Fabrication	Completed	2020
Germany	Bottom Ash Extractor	Bottom Ash Extractor Fabrication	Hitachi Zosen Inova	Fabrication	Completed	2020
England	Rookery Energy from Waste Power Plant	Additive Ca(OH) ₂ (lime) Silo, Silo(PAC), CaO Silo, Residue Silo	Hitachi Zosen Inova	Fabrication	Completed	2020
England	Rookery Energy from Waste Power Plant	FEED Hopper, Bottom Ash Extractor	Hitachi Zosen Inova	Fabrication	Completed	2019
Turkey	Istanbul Energy From Waste Power Plant	FEED Hopper, Bottom Ash Chute, Grate Riddling Boiler Non Pressure Parts, Silos	Hitachi Zosen Inova	Fabrication	Completed	2022

ENERGY FROM WASTE PLANT, ISTANBUL / TURKEY

Project Name Energy from Waste Power Plant

Place İstanbul / Turkey

Customer Hitachi Zosen Inova

Subcontractor Deha Tech

Service Fabrication, Engineering, Procurement,
SA Nozzle Modification

Scope FEED Hopper
Bottom Ash Chute,
Grate Riddling
Boiler Non Pressure Parts
Silos
Boiler Bypass Duct for Grate

Project Start Date Jun 2018 **Finish Date** May 2022



Waste to Energy: Istanbul's Contribution to Reducing Global CO₂ Emissions

ENERGY FROM WASTE PROJECT, ISTANBUL / TURKEY

Istanbul Waste to Energy Plant Recovery

Type	Extraction Condensing Turbine
Electric Power	77 MW at 100%
Annual Capacity	1,000,000 t/a
Type of Waste	Municipal Solid Waste

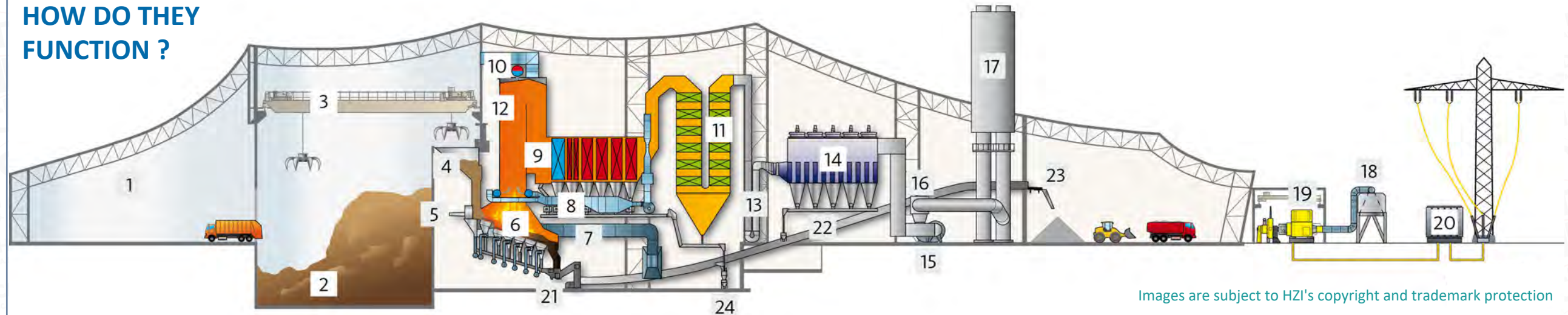
With A Capacity Of 1 Mio T/A This Is The Largest Turnkey Project Ever Awarded In Europe



Deha Tech Group and Hitachi Zosen Inova have broken new ground with the construction of Istanbul's first waste-to-energy project

TYPICAL WASTE TO ENERGY PLANT SCHEME

HOW DO THEY FUNCTION ?



Images are subject to HZI's copyright and trademark protection

Waste Receiving and Storage

- 1 Tipping hall
- 2 Waste bunker
- 3 Waste crane

Combustion and Boiler

- 4 Feed hopper
- 5 Ram feeder
- 6 HZI grate
- 7 Primary air system
- 8 Secondary air system
- 9 Five-pass boiler
- 10 Boiler drum
- 11 Economiser

Flue Gas Treatment

- 12 SNCR
- 13 Xerosorp® Reactor
- 14 Fabric filter
- 15 Induced draught fan
- 16 Silencer
- 17 Stack

Energy Recovery

- 18 Air cooled condenser
- 19 Turbine
- 20 Transformer

Residue Handling and Treatment

- 21 Bottom ash extractor
- 22 Bottom ash conveying
- 23 Bottom ash discharge
- 24 Fly ash discharge

Most of the EfW plants can be considered as mass burn facilities.

They are often very large plants, as this is a process which works best on large scale. The aim is to achieve high rate of efficiency with capturing the energy with a low volume of by-products. There are many systems with varying complexities and technologies, but they all work on the same principles.

When waste arrives at the facility, it is first stored in large bunkers, and then transferred from the bunkers to a chute leading to a moving grate in the furnace, where it is burned at over 850 °C for approximately 2 seconds, to make sure all of the waste is burned completely. The heat from the furnace heats water in a boiler, creating steam that turns a turbine to drive a generator that makes electricity. The electricity then enters the grid. In Europe, some plants combine electricity generation

ENERGY FROM WASTE PLANT, ISTANBUL / TURKEY

Feed Hoppers, Bottom Ash Chutes, Grate Riddlings, Silos, Boiler Non-Pressure Parts Fabricated by Deha Tech



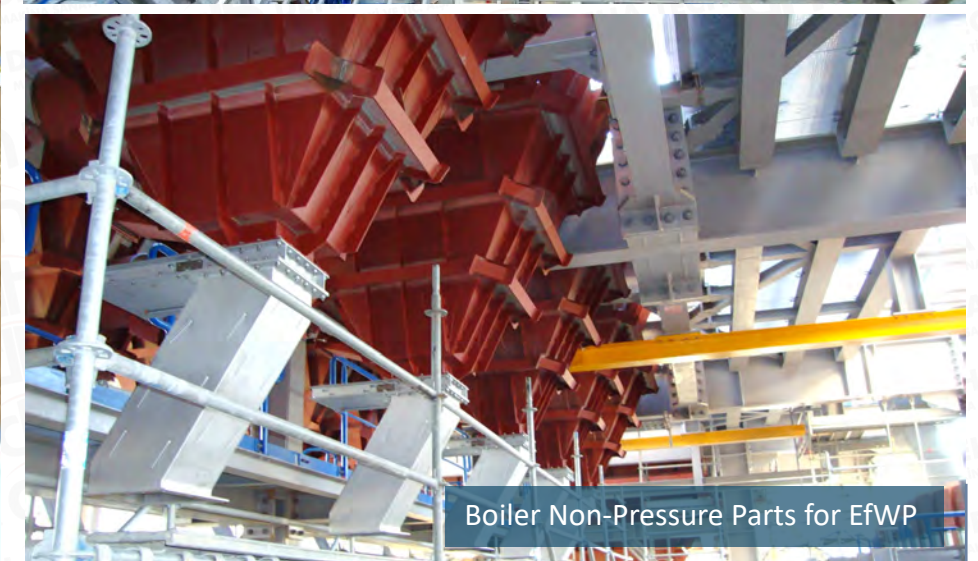
ENERGY FROM WASTE PLANT, ISTANBUL / TURKEY



Location : North – West of Istanbul, 10 km from Black Sea



Boiler Non-Pressure Parts for EfWP

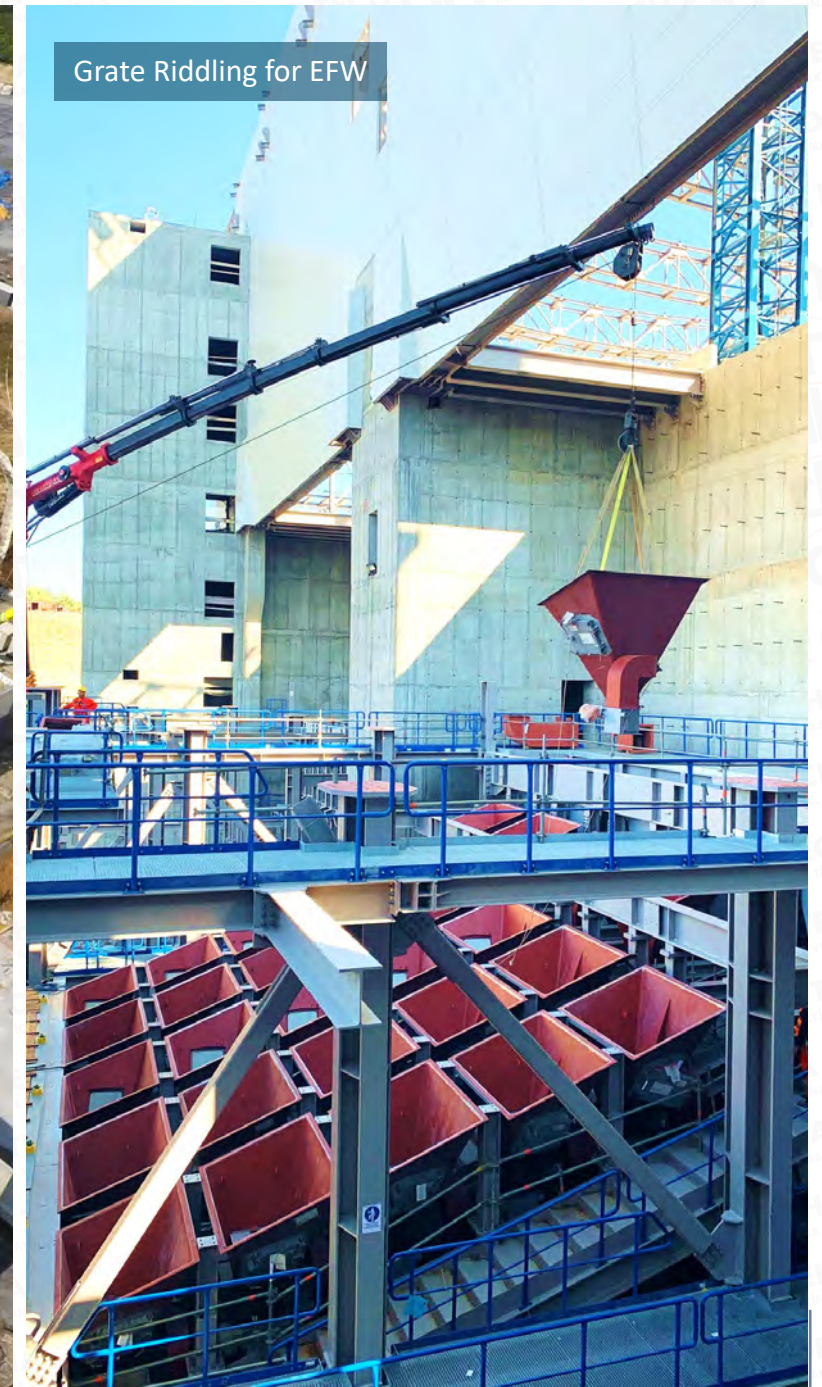


Boiler Non-Pressure Parts for EfWP

ENERGY FROM WASTE PLANT, ISTANBUL / TURKEY



With A Capacity Of 1 Mio T/A This Is The Largest Turnkey Project Ever Awarded In Europe



Grate Riddling for EFW

ENERGY FROM WASTE PLANT, DUBAI / UAE

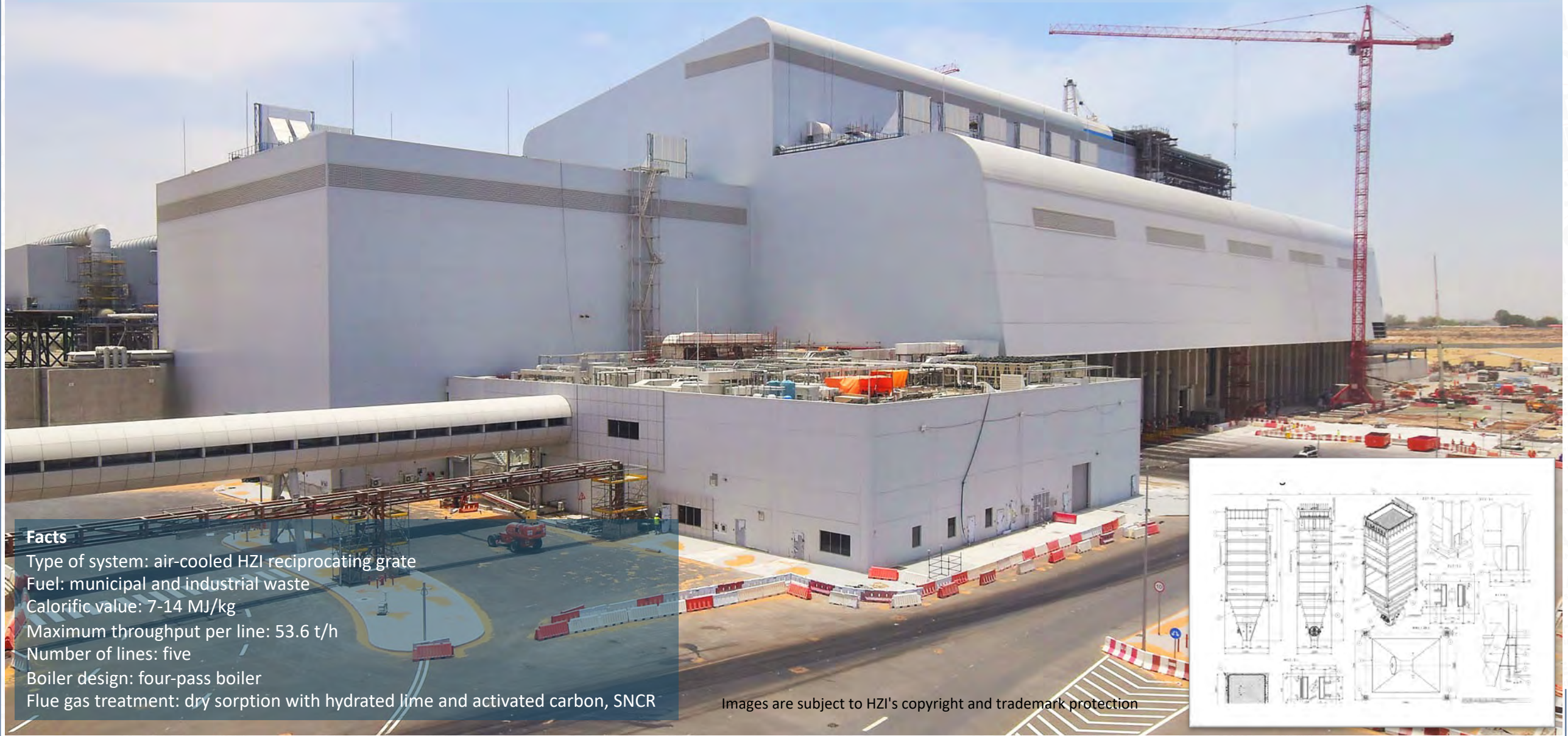
Project Name	Energy from Waste Power Plant		
Place	Dubai / UAE		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Material and Manufacturing, Engineering & Documentation, Corrosion Protection, Seaworthy Packaging - Delivery FAS		
Scope	Furnace Door Grate Service Bridge Mobile Air Canon , Lot Plate Work Bent Fabrication FGT		
Project Start Date	Jun 2018	Finish Date	May 2022



Images are subject to HZI's copyright and trademark protection

ENERGY FROM WASTE PLANT, DUBAI / UAE

The world's largest Waste to Energy (WtE) plant is currently under construction in Dubai and **Deha Tech** has successfully completed the Materials and Manufacturing, Engineering and Documentation, Corrosion Protection, Seaworthy Packaging and Delivery FAS.



Facts

- Type of system: air-cooled HZI reciprocating grate
- Fuel: municipal and industrial waste
- Calorific value: 7-14 MJ/kg
- Maximum throughput per line: 53.6 t/h
- Number of lines: five
- Boiler design: four-pass boiler
- Flue gas treatment: dry sorption with hydrated lime and activated carbon, SNCR

Images are subject to HZI's copyright and trademark protection



Fabric Filters Manufacturing



Fabric Filter Manufacturing



Fabric Filter

ENERGY FROM WASTE PLANT, DUBAI / UAE



Fabric Filters Manufacturing



Cranes Loading Fabric Filters for Shipment



Fabric Filters Packing Process



Fabric Filters Ready for Shipment



Fabric Filters Transport to Shipment



Loading Fabric Filter for Shipment



Loading Fabric Filter for Shipment

ENERGY FROM WASTE PLANT, DUBAI / UAE



Raw Gas Duct



Raw Gas Duct



Clean Gas Duct



Fabric Filters & Clean Gas Duct Erection



Fabric Filters & Clean Gas Duct Erection

BIOMASS POWER PLANT, BOLU / TURKEY

Project Name Biomass Power Plant

Place Bolu / Turkey

Customer Aallbork

Subcontractor Deha Tech

Service Fabrication

Scope Flue Gas Duct System
Ash Silo

Project Start Date Nov 2020

Finish Date Mar 2021



Bolu Biomass Power Plant



BIOMASS POWER PLANT, BOLU / TURKEY



General View of Bolu Biomass Power Plant Construction

BIOMASS POWER PLANT, BOLU / TURKEY



Flue Gas Duct System Bolu Biomass Power Plant



Ash Silo Bolu Biomass Power Plant



Bolu Biomass Power Plant Construction

BIOMASS POWER PLANT, BOLU / TURKEY



BIOMASS POWER PLANT, BOLU / TURKEY



BIOMASS POWER PLANT, BOLU / TURKEY



Bolu Biomass Plant Process Equipment



Bolu Ash Silo



Bolu Biomass Plant Steel Structure

ENERGY FROM WASTE PLANT, WESTFIELD / UK

Project Name	Westfield Energy Recovery EfW Plant		
Place	Westfield / UK		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Fabrication		
Scope	Furnace Doors & Grate Service Bridge Ram Type Bottom Ash Extractor Slide Gate Plate Work Bent-Common Engineering, Procurement, Fabrication		
Project Start Date	Nov 2022	Finish Date	Jun 2023



Images are subject to HZI's copyright and trademark protection

Westfield UK EfW Project

Plate Work Bent, Fabrication

ENERGY FROM WASTE PLANT, WESTFIELD / UK

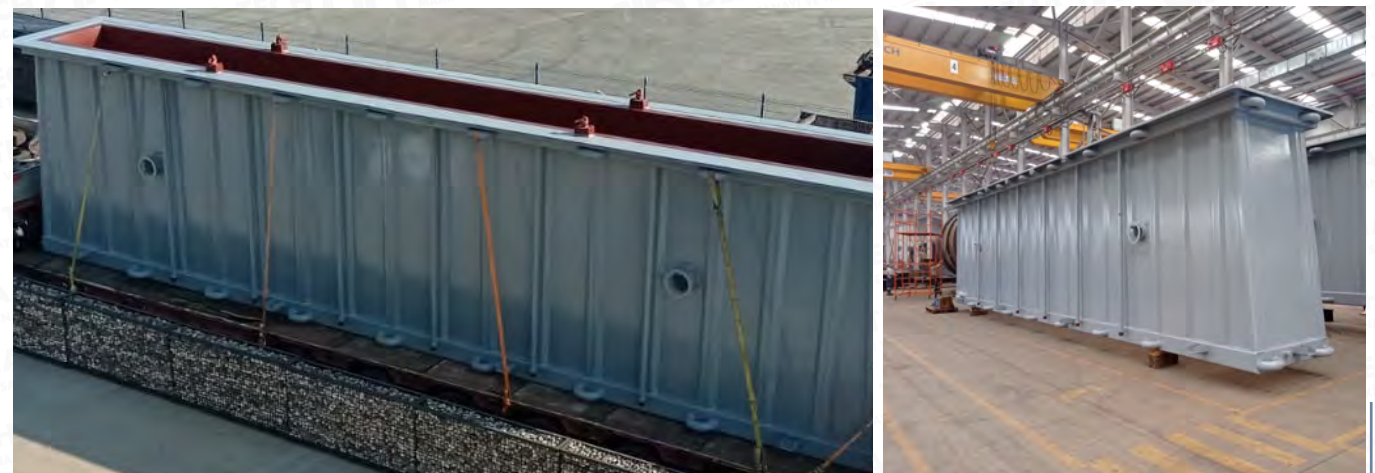
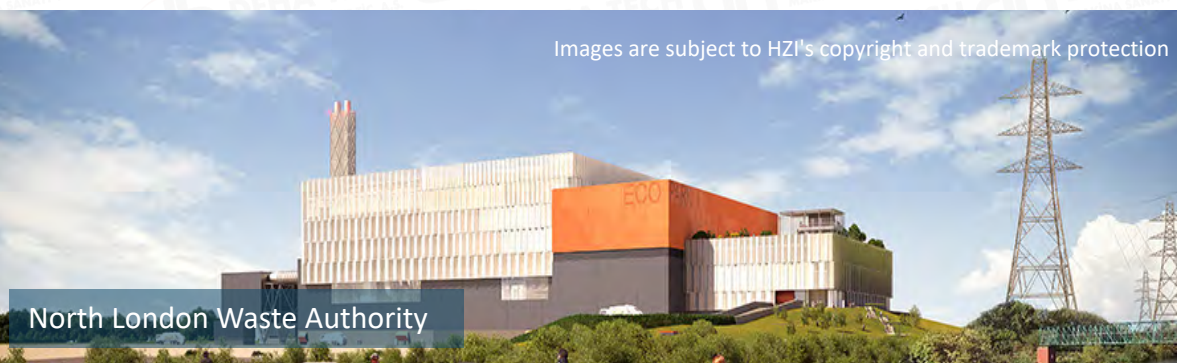


Plate Work, Fabrication

ENERGY FROM WASTE PLANT, LONDON / UK

Project Name	Energy from Waste Power Plant		
Place	London / UK		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Fabrication		
Scope	Furnace Door And Service Bridge, Feed Hopper, Grate Riddling, Grate Riddling, Bottom Ash Chute, Boiler Sheet Metal Work		
Project Start Date	Nov 2022	Finish Date	Jun 2025

The facility will generate 23MW of electricity by processing up to 700,000 tonnes of non-recyclable residual waste each year. The new ERF facility will prevent black-bin-bag waste from ending up in landfill, where it generates methane, a greenhouse gas which has a warming impact 80 times greater than CO₂. The new ERF will also save the equivalent of 215,000 tonnes of CO₂ each year – the equivalent of taking 110,000 cars off the roads.





Bottom Ash Chute



Grate Riddling



Grate Riddling

ENERGY FROM WASTE PLANT, EMMENSPIZ / SWITZERLAND

Project Name	Emmenspitz Energy from Waste Plant		
Place	Emmenspitz / Switzerland		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Procurement, Manufacturing, Fabrication		
Scope	Manufacturing of Boiler Non-Pressure Parts, Supply of Furnace Door and Grate Service		
Project Start Date	Nov 2021	Finish Date	Jun 2023

Capacity of around 221.000 t/a treatment capacity for municipal and commercial waste. This will generate 53,7 MW power.



Images are subject to HZI's copyright and trademark protection



Boiler Non-Pressure Parts for EfW

ENERGY FROM WASTE PLANT, EMMENSPITZ / SWITZERLAND



Furnace Door



ENERGY FROM WASTE PLANT, SLOUGH / UK

Project Name Energy from Waste Power Plant

Place Slough / UK

Customer Hitachi Zosen Inova

Subcontractor Deha Tech

Service Fabrication

Scope
CaOH₂ Silo
Residue Silo
PAC Silo

Project Start Date Nov 2021 **Finish Date** Jun 2024



ENERGY FROM WASTE PLANT, BAMBERG / GERMANY

Project Name Air-cooled Condenser for Turbine Exhaust Steam

Place Bamberg / Germany

Customer Clyde Bergeman Termotec

Subcontractor Deha Tech

Service Fabrication

Scope

- The Air-Cooled Condenser System Will be Used in The Waste to Energy Plant in Bamberg
- 900 Ton Structural Steel Erection
- Primary Bundle
- 2 Axial Fan
- Steam Duct and Steam Manifold
- Evacuation System

Total Man Hours 13.125 mhr

Peak Time Worker 30 Direct Employee

Average Worker 25 Direct Employee

Project Start Date Mar 2013

Finish Date May 2014



Prefabrication and Erection Cladding

ENERGY FROM WASTE PLANT, BAMBERG / GERMANY



Structural Steel Erection

Prefabrication and Erection Cladding

ENERGY FROM WASTE PLANT, MOSCOW / RUSSIA

Project Name	Energy from Waste Power Plant		
Place	Moscow / Russia		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Fabrication		
Scope	Supply of 24 nos Ram Type Bottom Ash Extractors		
Project Start Date	Dec 2019	Finish Date	May 2027



Ram Type Bottom Ash Extractor for EfW Plant



Ram Type Bottom Ash Extractor for EfW Plant

ENERGY FROM WASTE PLANT, IVRY / FRANCE

Project Name	Energy from Waste Power Plant
Place	Ivry / France
Customer	Hitachi Zosen Inova
Subcontractor	Deha Tech
Service	Fabrication, Engineering, Procurement
Scope	Fabrication of 2 nos. Feed Hopper, Supply and Fabrication of Boiler Non-Pressure Part, Supply and Fabrication of Combustion Air Duct, Bottom Ash Chute & Grate Riddling Removal Works, Supply and Manufacturing of 4 Nos Bottom Ash Extractor, 4 Nos Slide Gate, Fabrication of Furnace Door & Grate Service Bridge, Boiler Acc. Maintenance Console.
Project Start Date	Dec 2019
Project Finish Date	Dec 2022



ENERGY FROM WASTE PLANT, ROCKINGHAM / AUSTRALIA

Project Name Energy from Waste Power Plant

Place Rockingham / Australia

Customer Hitachi Zosen Inova

Subcontractor Deha Tech

Service Fabrication

Scope Ram Type Bottom Ash Extractor,
Furnace Door Grate Service Bridge,
Feed Hopper,
Grate Riddling Plate Works,
Bottom Ash Chute,
Combustion Air Ducts

Project Start Date Jun 2020 **Finish Date** Dec 2021

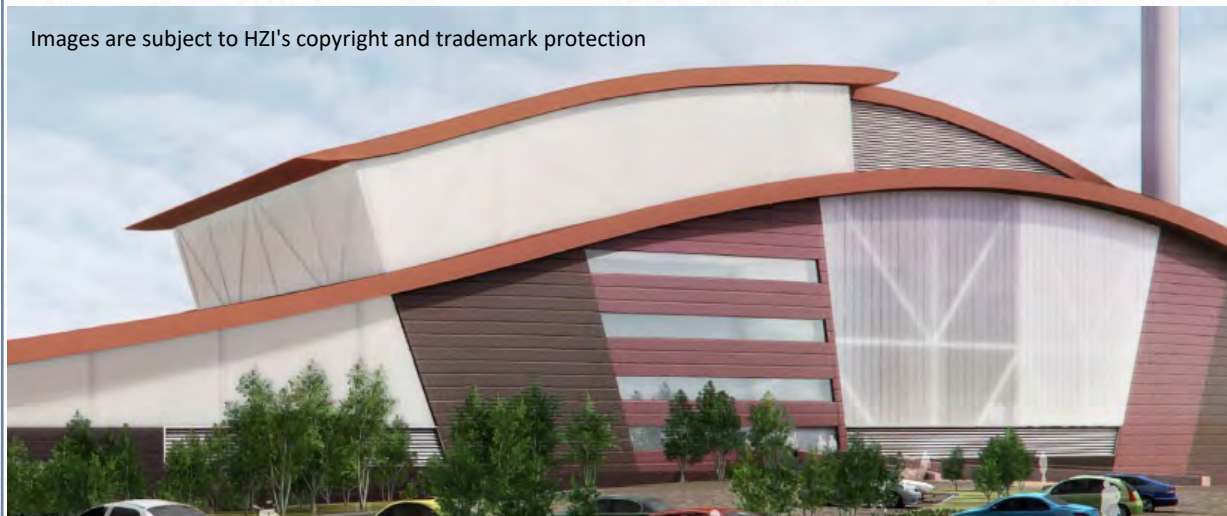


Grate Riddling Hoppers

ENERGY FROM WASTE PLANT, NEWHURST / UK

Project Name	Energy from Waste Power Plant		
Place	Newhurst / UK		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Fabrication		
Scope	Ram Type Bottom Ash Extractor, Combustion Air Ducts, Supply of 1Nos of Mobile Air Cannon, Furnace Door Grate Service Bridge, Engineering, Manufacturing works of Silos		
Project Start Date	Dec 2020	Finish Date	Dec 2021

Images are subject to HZI's copyright and trademark protection



Ram Type Bottom Ash Extractor for EfW Plant

ENERGY FROM WASTE PLANT, RIVENHALL / UK

Project Name Energy from Waste Power Plant

Place Rivenhall / UK

Customer Hitachi Zosen Inova

Subcontractor Deha Tech

Service Fabrication, Manufacturing

Scope Furnace Door Grate Service Bridge,
FGT Plate Work Bent Fabrication,
Boiler Non Pressure Parts,
Hopper – H – Pass,
Hopper – V – Eco,
Flue Gas Ducts Fabrication

Project Start Date May 2023

Finish Date Sep 2024



Images are subject to HZI's copyright and trademark protection



Boiler Non-Pressure Parts for EfW Plant



ENERGY FROM WASTE PLANT, ROOKERY / UK

Project Name	Energy from Waste Power Plant		
Place	Rookery / UK		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Fabrication		
Scope	Feed Hoppers, Bottom Ash Extractor, Additive Ca(OH) ₂ (lime) Silo, Silo(PAC), CaO Silo, Residue Silo, Furnace Door, Grate service Bridge		
Project Start Date	Oct 2019	Finish Date	May 2020



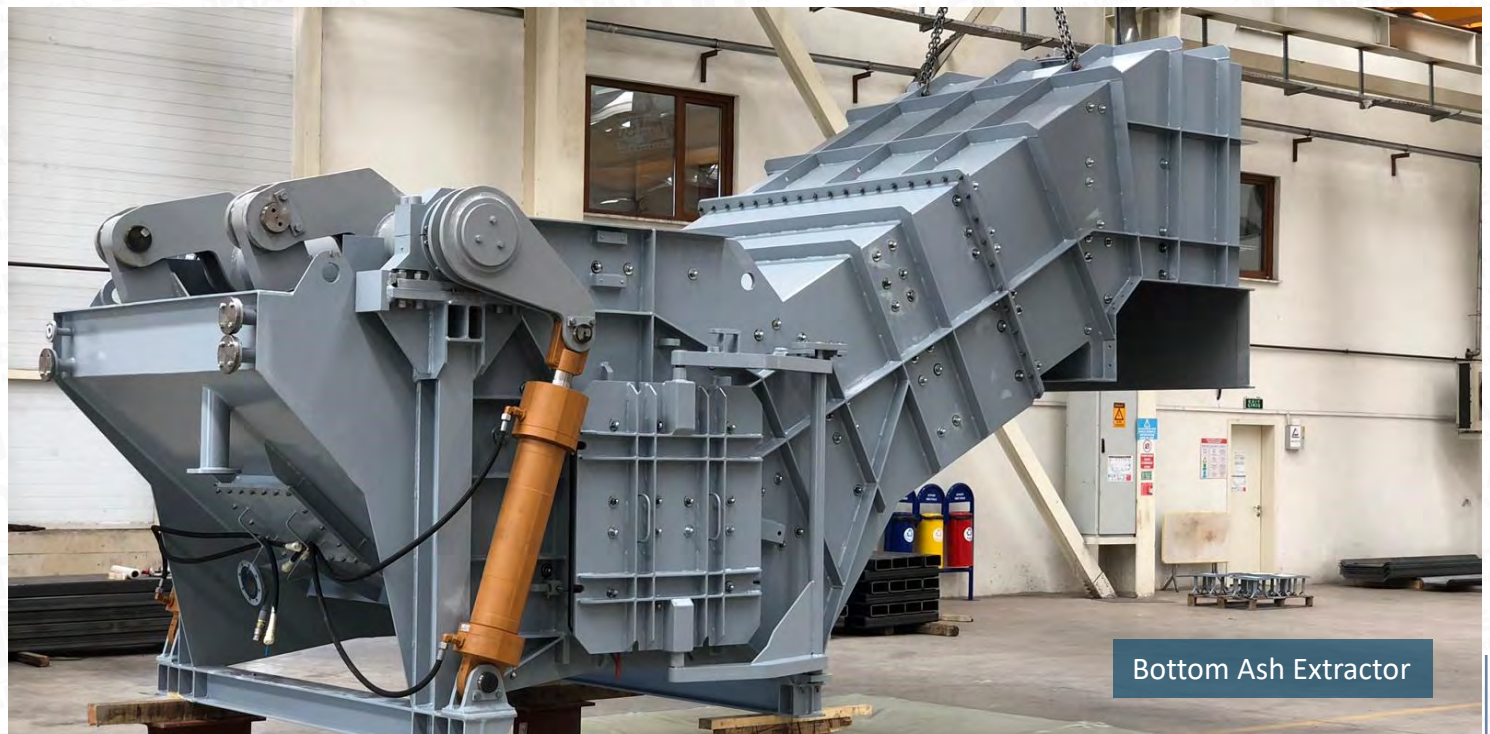
ENERGY FROM WASTE PLANT, SKELTON / UK

Project Name	Energy from Waste Power Plant		
Place	Skelton / UK		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Fabrication		
Scope	Furnace Door Grate Service Bridge, Boiler non Pressure Parts		
Project Start Date	Jun 2022	Finish Date	July 2025



ENERGY FROM WASTE PLANT, RIVERSIDE / UK

Project Name	Energy from Waste Power Plant		
Place	Riverside / UK		
Customer	Hitachi Zosen Inova		
Subcontractor	Deha Tech		
Service	Fabrication		
Scope	6 Units Ram Type Bottom Ash Extractors, Furnace Door Grate Service Bridge		
Project Start Date	Aug 2023	Finish Date	Apr 2024



ENERGY FROM WASTE PLANT, PLYMOUTH / UK

Project Name Air-cooled Condenser System for Thermal Recycling P.

Place Plymouth / United Kingdom

Customer Clyde Bergeman Termotec

Subcontractor Deha Tech

Service Fabrication

Scope The Air-Cooled Condenser System Will be Used in
The New Thermal Recycling Plant in Plymouth
350 Ton Structural Steel Erection
5 Axial Fan
Steam duct and steam manifold
Condensate system
Evacuation System

Total Man Hours 27.500 Mhr

Peak Time Worker 55 Direct Employee

Average Worker 30 Direct Employee

Project Start Date May 2013

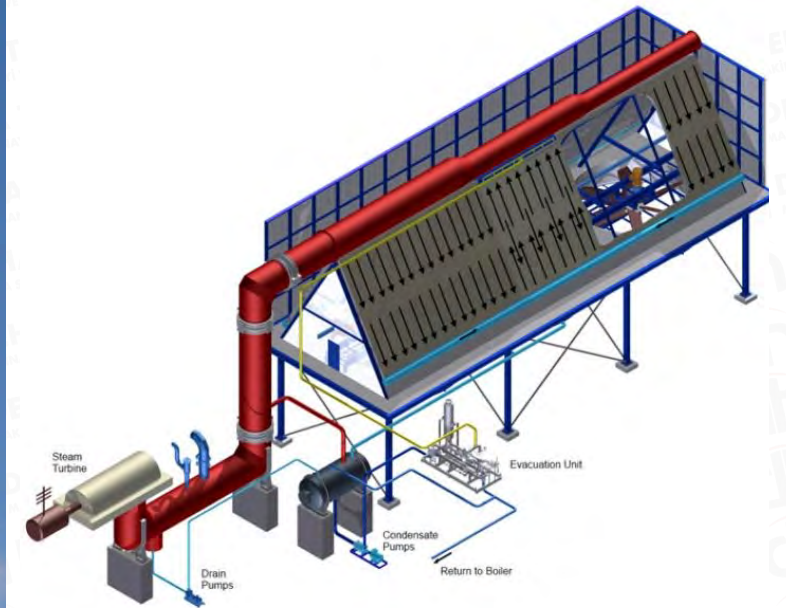
Finish Date Sep 2014



ENERGY FROM WASTE PLANT, PLYMOUTH / UK



Air-cooled Condenser System for Thermal Recycling Plant



Structural Steel Erection

ENERGY FROM WASTE PLANT, PLYMOUTH / UK



Air-cooled Condenser System for Thermal Recycling Plant



Prefabrication and Erection Cladding

ENERGY FROM WASTE PLANT, HAGEN / GERMANY

Project Name Air-Cooled Condenser for Turbine Exhaust System

Place Hagen / Germany

Customer Clyde Bergeman Termotec

Subcontractor Deha Tech

Service Fabrication

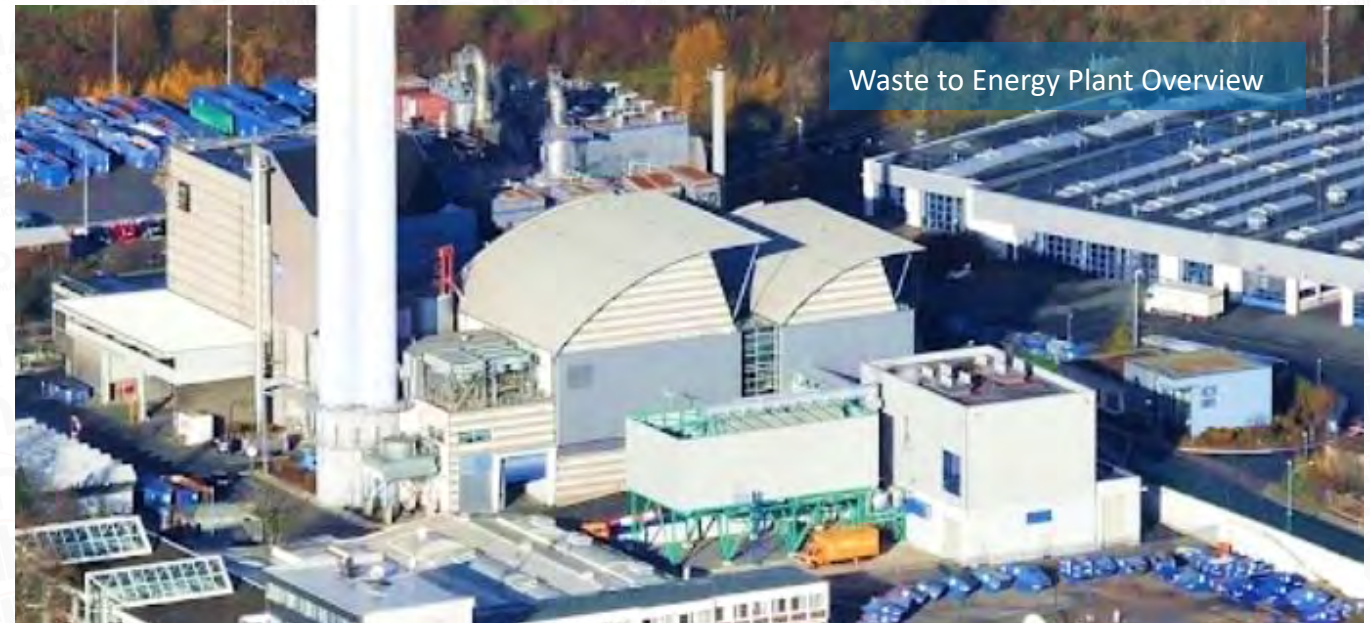
Scope The Air-Cooled Condenser System Will be Used in The Waste to Energy Plant in Hagen
100 Ton Structural Steel Erection
5 Axial Fan
Steam duct and steam manifold
Condensate system
Evacuation System

Total Man Hours 10.625 mhr

Peak Time Worker 30 Direct Employee

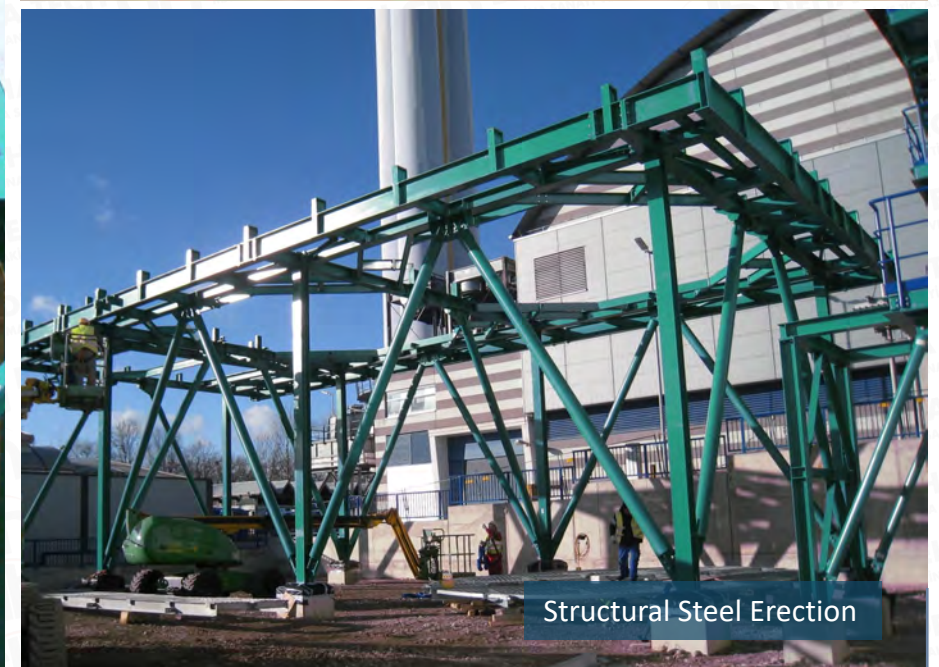
Average Worker 25 Direct Employee

Project Start Date May 2013 **Finish Date** Sep 2014



ENERGY FROM WASTE PLANT, HAGEN / GERMANY

Structural Steel Erection



Structural Steel Erection

DeSO_x AND DeNO_x SYSTEMS

www.dehatech.com



AKSA ENERGY POWER PLANT, CYPRUS



Akxa De-Sox Tower & Pump Station



Akxa De-Sox Tower



Akxa De-Sox Tower

AKSA ENERGY POWER PLANT, CYPRUS



Aksa De-Sox Tower & Pump Station



Aksa De-Sox Tower



Aksa De-Sox Tower

AKSA ENERGY POWER PLANT, CYPRUS



Akxa De-Sox Tower



Akxa De-Sox Tower & Pump Station



Akxa De-Sox Tower

FLUIDIZED BED BOILER – TEST FACILITY AND RESERCH, TUBITAK



Mechanical Manufacturing and Erection Works

Boiler Unit

A large group of employees, mostly men wearing yellow hard hats and dark work uniforms with reflective stripes, are posed in several rows in front of a modern building. The building has large glass windows and a prominent logo consisting of a stylized 'dh' with an orange arc above it, followed by the text 'DEHA TECH' in large, bold, grey letters. Some employees in the front row are wearing white hard hats and high-visibility yellow safety vests. The scene is set outdoors during the day.

dh DEHA TECH

MANUFACTURING PLANTS

www.dehatech.com

KARTEPE FACTORY 1 PROFILE

Location	Kartepe	Status	Active
Open Area	18.000 m ²	Closed Area	10.000 m ²
Production Capacity	4.800 t	Personnel	150
Main Equipment	<p>1500 mm x 300 mm Hydraulic Press 300 t HPK 100 Profile and Pipe Rolling Machine MIG / MAG Welding Machines TIG Welding Machines Aluminium Welding Machines Submerged Arc Welding Machines Sleeve Welding Machine Electric Welding Machine Screw Lathe Weighing Machine 150 t Band Saw Cutting Machine, D 1000 mm Radial Drill + Threading, Hole D 50 mm 3 x 4 Rolls Hydraulic Plate Bending Machine Up to 80 mm x 3000 mm Bending Capacity Up to 12 mm x 3000 mm Bending Capacity Up to 60 mm x 3000 mm Bending Capacity</p>		
Crane Capacity	<p>8 x 30 t Overhead Cranes x (h) 9.5 m 1 x 20 t Portal Crane x (h) 9.5 m 2 x 25 t Portal Cranes x (h) 9.5 m 1 x 30 t Portal Crane x (h) 9.5 m 1 x 15 t Portal Crane x (h) 9.5 m</p>		



KARTEPE FACTORY 2 PROFILE

Location	Kartepe
Status	Active
Open Area	2.500 m ²
Closed Area	2.500 m ²
Production Capacity	5.000 t
Personnel	40
Main Equipment	3 m x 12 m CNC Plasma + Oksi (Angle Cutting) 2,5 m x 12 m CNC Plasma (Angle Cutting) 12 m Plasma Pipe Cutting Machine Band Saw Cutting Machine Radial Drill + Threading, Hole D 50 mm 7100*600 mm Hydraulic Bending 700 t 1020*150 mm Hydraulic Bending 150 t 4000*440 mm Hydraulic Bending 440 t Screw Lathe Sand Blasting Cabinet & Paint Area CNC Milling Machine Universal Milling Machine Turning Lathe CNC Turning Machine
Crane Capacity	4 x 10 t Crane x (h) 7.3 m



GEBZE FACTORY PROFILE

Location	Gebze
Status	Active
Open Area	1.000 m ²
Closed Area	3.000 m ²
Production Capacity	2.200 t
Personnel	65
Main Equipment	3 m x 12 m CNC Plasma + Oksi (Angle Cutting) Radial Drill + Threading, Hole D 50 mm Band Saw Cutting Machine Screw Lathe 2 x Submerged Arc Welding Machines MIG / MAG Welding Machines TIG Welding Machine Electric Welding Machine 4 Roll 40 mm x 3000 mm Bending Machine Up to 30 mm x 3000 mm Bending Capacity
Crane Capacity	1 x 30 t Overhead Crane x (h) 8 m 2 x 20 t Overhead Crane x (h) 8 m 1 x 10 t Portal Crane x (h) 8 m



HAYDARPASA PORT PROFILE

Location	Haydarpaşa Port
Status	Active
Open Area	50.000 m ²
Closed Area	1.000 m ²
Production Capacity	4.500 Tons
Personnel	230



KARTEPE FACTORY 1 GENERAL VIEW

150 Ton Weighbridge (24m x 3m)

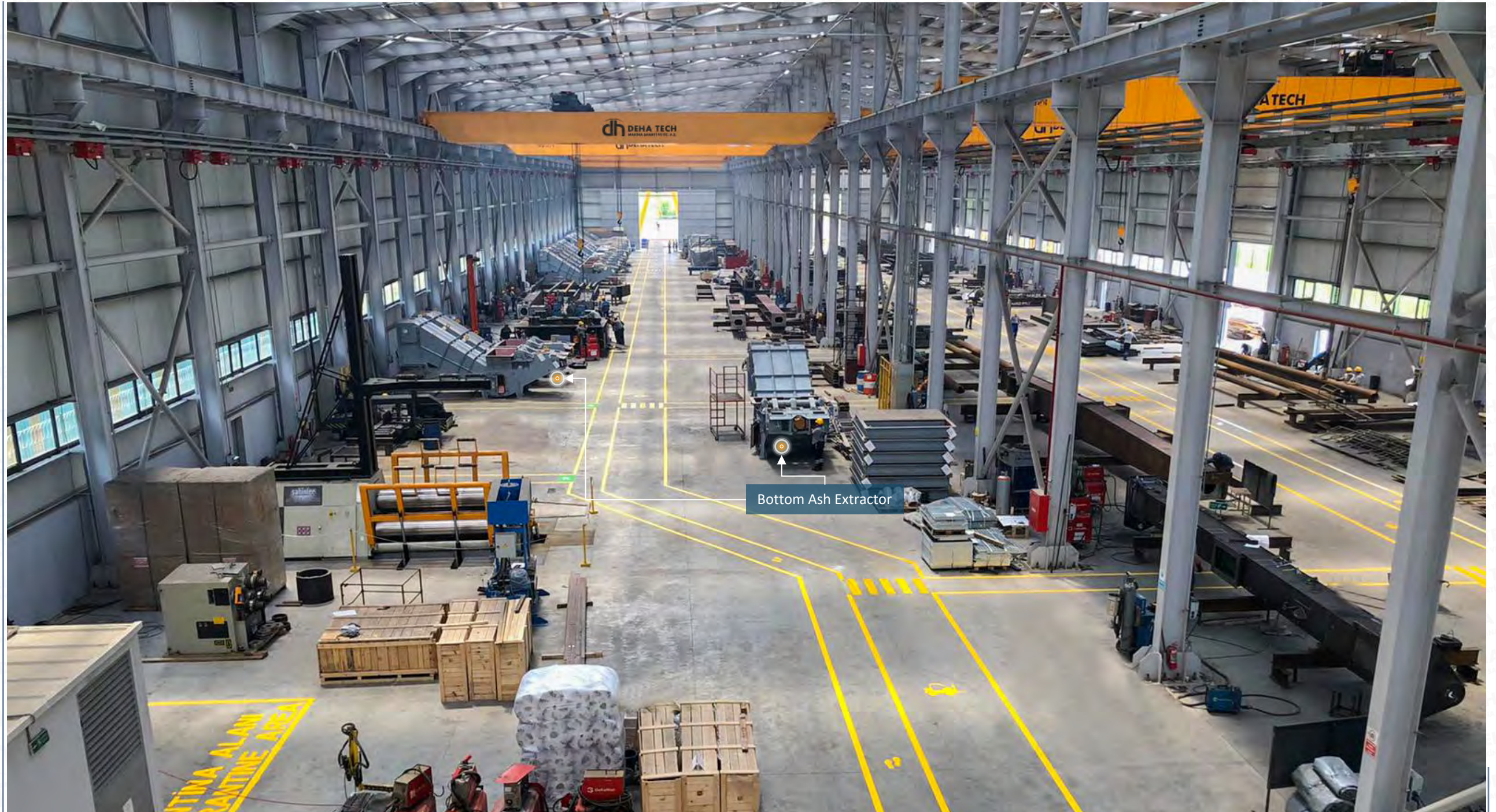
20 Ton Gantry Crane

25 Ton Gantry Cranes

30 + 15 Ton Gantry Crane

Deha Tech continues to provide the highest quality services worldwide at full speed, with a total of 2000 employees, 4 factories and 1 port in a 59000 sqm production area.

DEHA TECH KARTEPE FACTORY INTERIOR VIEW



Bottom Ash Extractor

DEHA TECH KARTEPE FACTORY GENERAL VIEW



DEHA TECH KARTEPE FACTORY 2

DEHA TECH KARTEPE FACTORY 1

- Fast Response
- Technology Driven Projects
- Sustainable Profitability and Financial Stability



Genius Solutions For Industrial Projects



www.dehatech.com

Gebze Factory

Barış, Koşuyolu Cd. No:23, Pk: 41400
Gebze/Kocaeli

Kartepe Factory 1

Arslanbey Mahallesi, Yeşilevler Sokak,
No:5, Pk:41285, Kartepe / KOCAELİ / TR

Kartepe Factory 2

Arslanbey OSB Mahallesi, 3. Sokak,
No:12, Pk:41285, Kartepe / KOCAELİ / TR

Headquarter

Müeyyedzade, 28, Kemeraltı St.,
34425 Beyoğlu/İstanbul

Contact Number

+90212 252 48 00

E-mail

info@dehatech.com