

WAE LZ (ZINC RECOVERY) TECHNOLOGY

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.





CEMENT & MINING INDUSTRY



FUEL, OIL & GAS INDUSTRY



ENERGY SECTOR



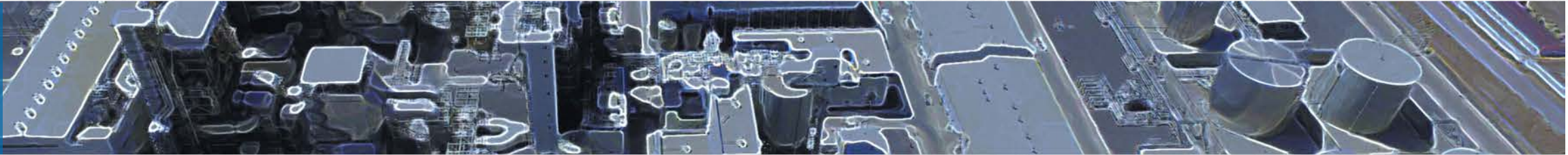
WALZ (ZINC RECOVERY) TECHNOLOGY



CONSTRUCTION & CIVIL WORKS



MAIN BUSINESS AREAS



CEMENT & MINING INDUSTRY

Clinker Production Plant, Gypsum Production Plant, Cement Grinding Plant, Coal Grinding Plant, Process and Non-Process Equipment, Waelz Plant, Zinc Plant



WAE LZ (ZINC RECOVERY) TECHNOLOGY

Process Design, Rotary Kiln, Settling Chamber, Product Collecting Filter, Gas Treatment Filter, Material Transportation and Electric & Automation



REFINERY, OIL AND GAS INDUSTRY

Liquid Fuel Storage Systems, LNG – LPG Facilities, Onshore/ Downstream, Topping Plant, Asphalt Production Plant, Air Separation Units.



ENERGY SECTOR

Thermal Power Plants, Renewable Power Plants, Electric Substation, High Voltage Transmission Line



CONSTRUCTION & CIVIL WORKS

Civil and Steel Construction, Industrial Buildings, Process and Non-Process Infrastructure and Superstructure

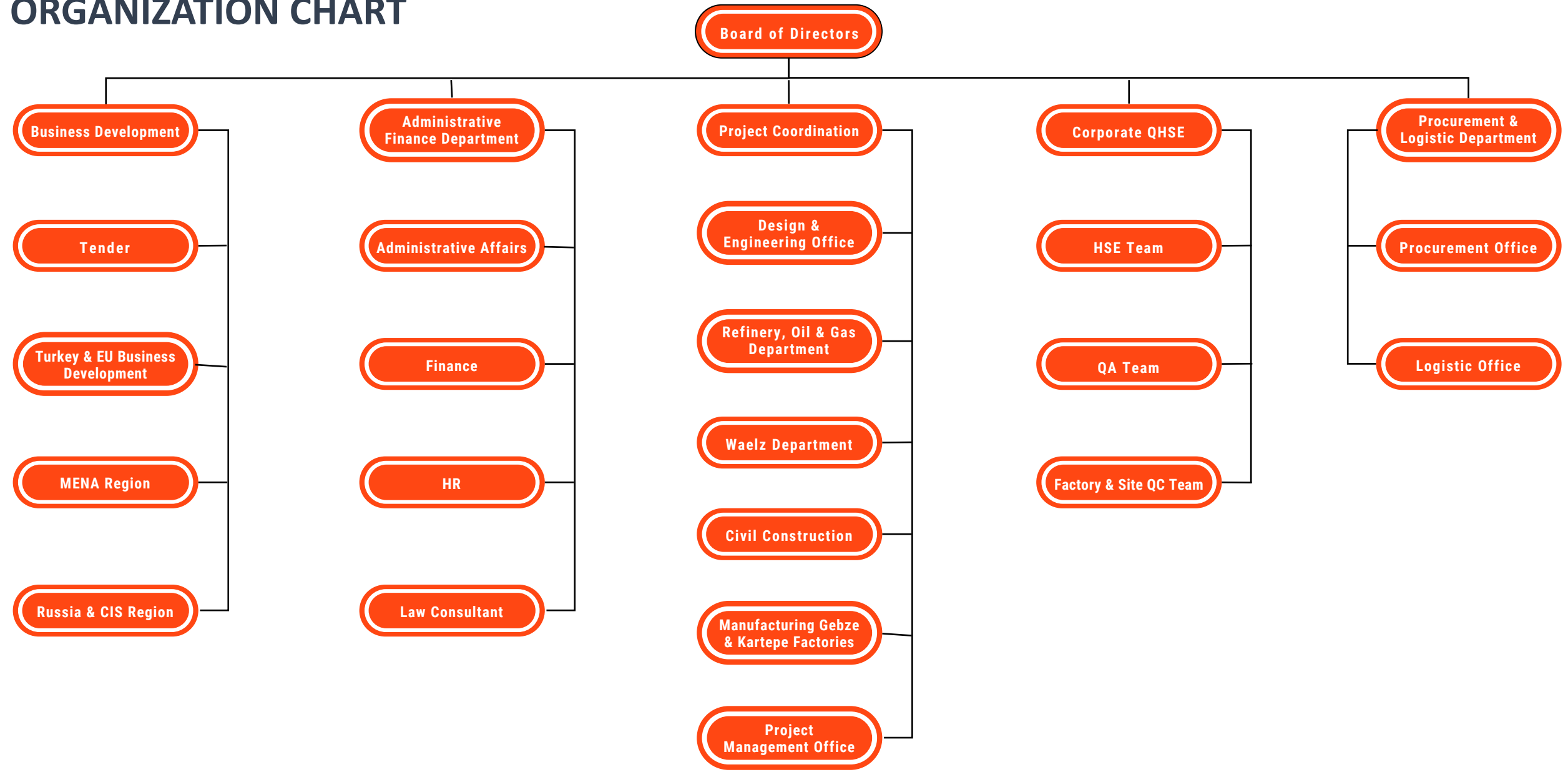


FABRICATION

Tanks, Pressure Vessels, Rotary Kiln and Dryer, Cement Plant Equipment, Steel Structure, Conveying and Material Handling Systems, Plate Works, Silo / Bunkers, Water/Wastewater Treatment Equipment, DeNOx/DeSOx Systems, Dedusting Filters and Systems.



ORGANIZATION CHART



COMPANY PROFILE

DEHA TECH AROUND THE WORLD

Central Office

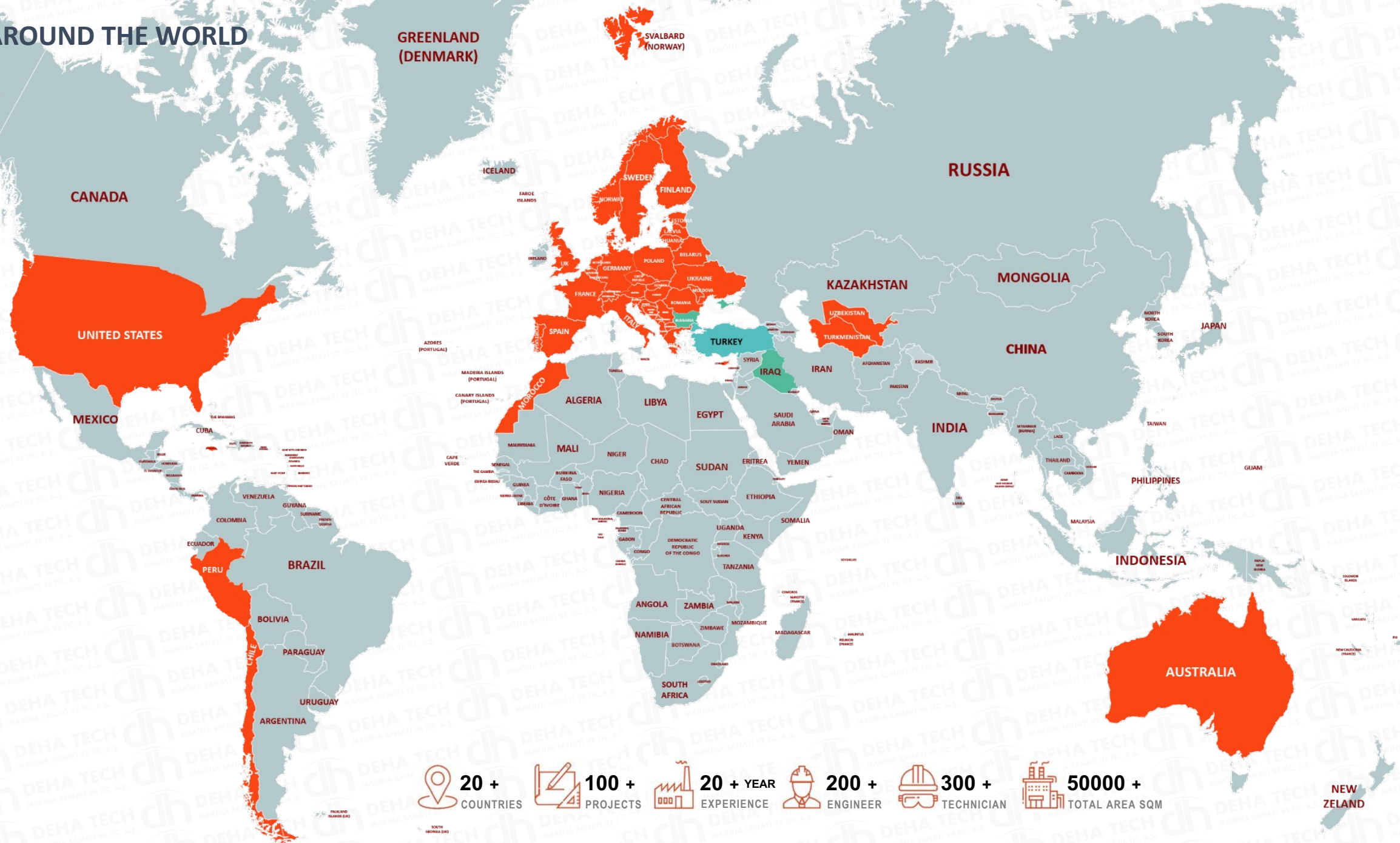
Turkey

Branch Offices

Bulgaria
Iraq
Uzbekistan

Projects

Turkey
Italy
Spain
Finland
Iraq
Bulgaria
United Kingdom
France
United States
Peru
Uzbekistan
Turkmenistan
Morocco
Cyprus
Jamaica
Switzerland
Australia
Chile
Norway



20 +
COUNTRIES

100 +
PROJECTS

20 + YEAR
EXPERIENCE

200 +
ENGINEER

300 +
TECHNICIAN

50000 +
TOTAL AREA SQM

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.



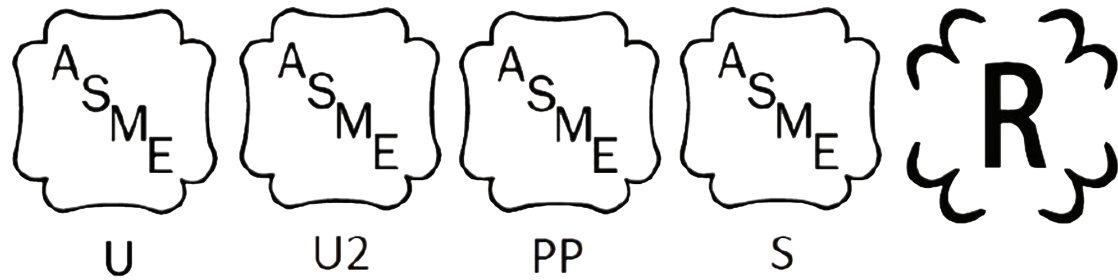
SAFETY FIRST



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



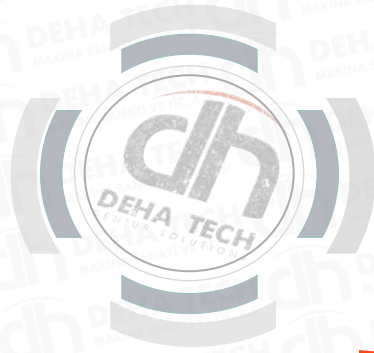
BUSINESS PARTNERS



WAEZ (ZINC RECOVERY) PLANTS

- ❖ **BULGARIA TURNKEY WAEZ FACILITY FOR PROCESSING OF ZINC BEARING MATERIALS, EPC BASIS**
- ❖ **BEFESA TURNKEY WAEZ OXIDE PLANT ROTARY KILN AND DUST SETTLING CHAMBER MANUFACTURING & ERECTION**
- ❖ **UZBEKISTAN NAVOI 5500 TPD CLINKER PRODUCTION LINE PROJECT**
- ❖ **MARZINC WAEZ OXIDE PLANT ROTARY KILN MANUFACTURING**
- ❖ **MZ BALAKOVO WAEZ FACILITY WITH CALCINATION UNIT, EPC BASIS**



WAEZ (ZINC RECOVERY) PLANT / BULGARIA

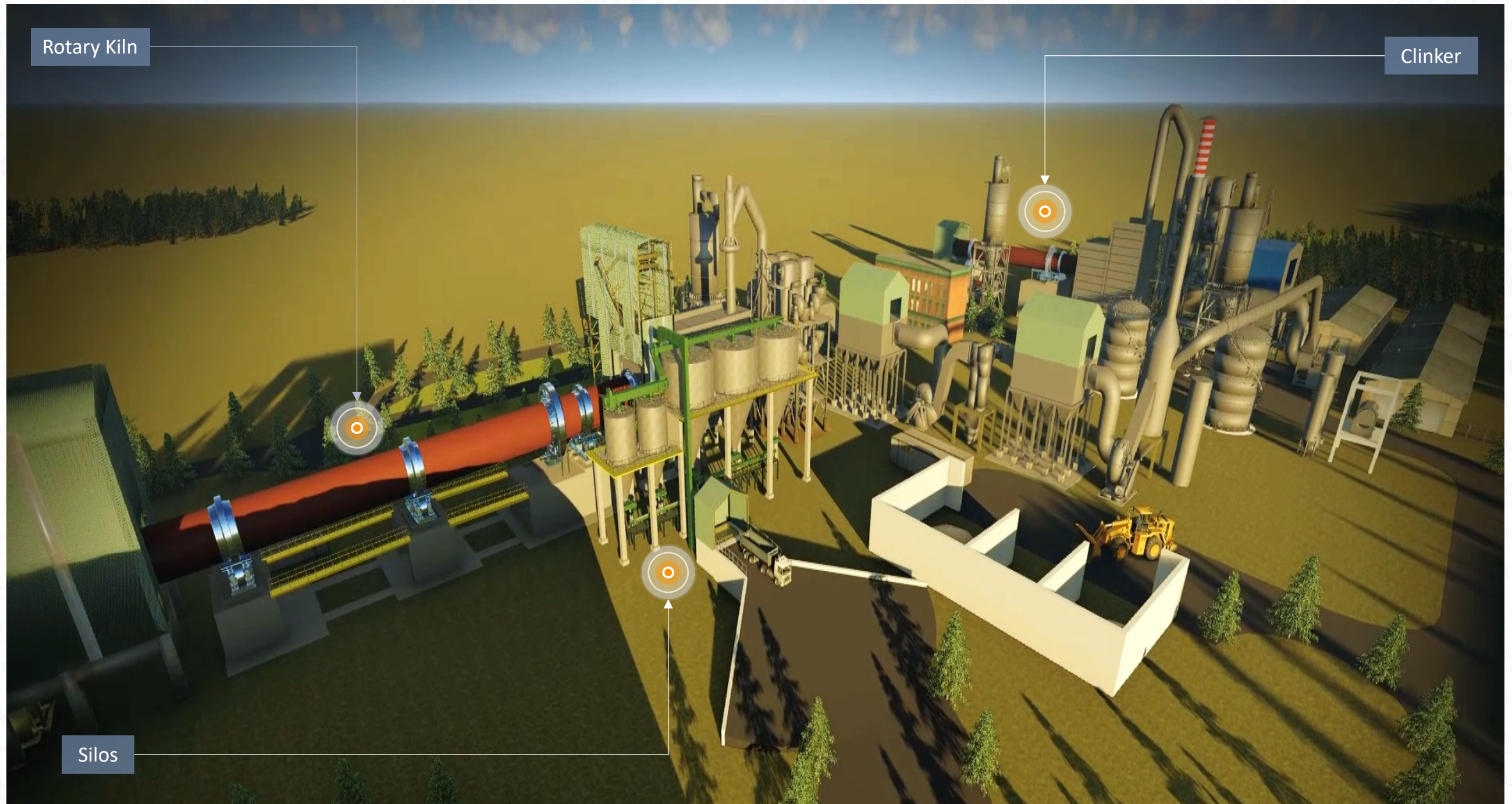
Deha Tech will complete erection and commissioning of a 170.000 TPA lead slag processing Waelz Plant in Kardjali/Bulgaria in 2021 as EPC basis. With the operation know-how and scientific researches, a special process of extractive metallurgy has been designed according to stored raw material.

Project Name	Waelz facility for processing of Zinc Bearing Materials
Location	Bulgaria
Project Start	09.03.2020 - Ongoing
Project Buildings	
Rotary Kiln Station	
Roller Station and Burner Building	
Feed Hopper Building	
Drum Cooler and Clinker Pit	
Settling Chamber and Stair Tower	
Raw Material Storage	
Silo Building	

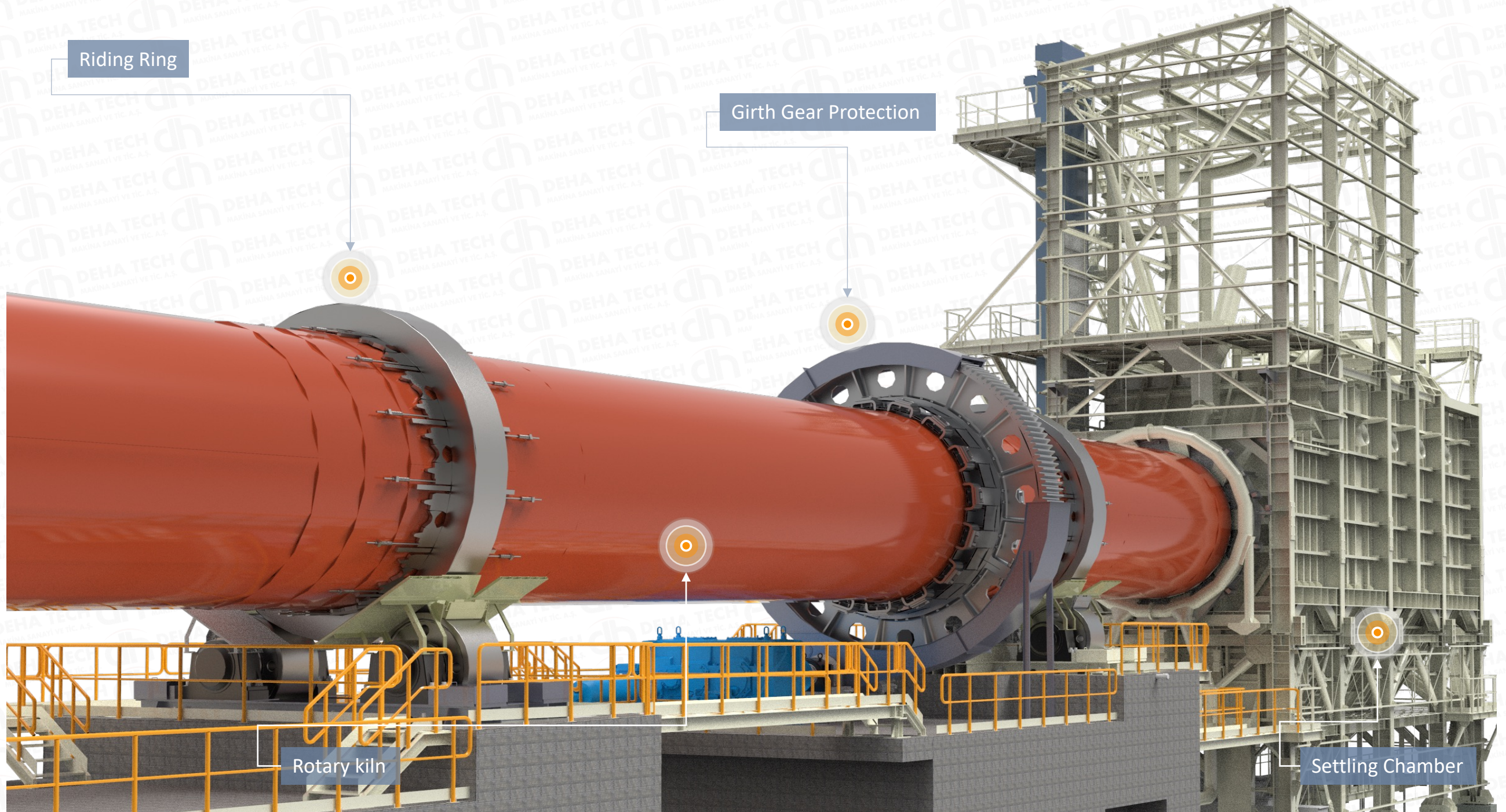


Burner Building

WAEZ (ZINC RECOVERY) PLANT / BULGARIA



WAEZ (ZINC RECOVERY) PLANT / BULGARIA



WAEZ (ZINC RECOVERY) PLANT / BULGARIA



WAEZ (ZINC RECOVERY) PLANT / BULGARIA



Kiln Shell



Rotary Kiln Girth Gear Assembly



Kiln Shell

WAEZ (ZINC RECOVERY) PLANT / BULGARIA



Rotary Kiln Assembly



Rotary Kiln Assembly



Rotary Kiln Assembly

WAEZ (ZINC RECOVERY) PLANT / BULGARIA



Clinker Pitt Walls



Clinker Pit Reinforcement of Foundation



Drum Cooler Foundation

WAEZ (ZINC RECOVERY) PLANT / BULGARIA



Erection of Scaffolding Needed to Pour The Slab



Supporting Steel Structure



Completed Reinforced Concrete Structure of Burner Building

WAEZ (ZINC RECOVERY) PLANT / BULGARIA



Frames and Rollers Installed on All Roller Stations



Settling Chamber and Stair Tower Complete

WAEZ (ZINC RECOVERY) PLANT / BULGARIA



Silo Building – View From The side



Roller stations 1, 2 and 3 – completed civil works

WAEZ (ZINC RECOVERY) PLANT / BULGARIA



Stages of Construction



Dust Settling Chamber Assembly



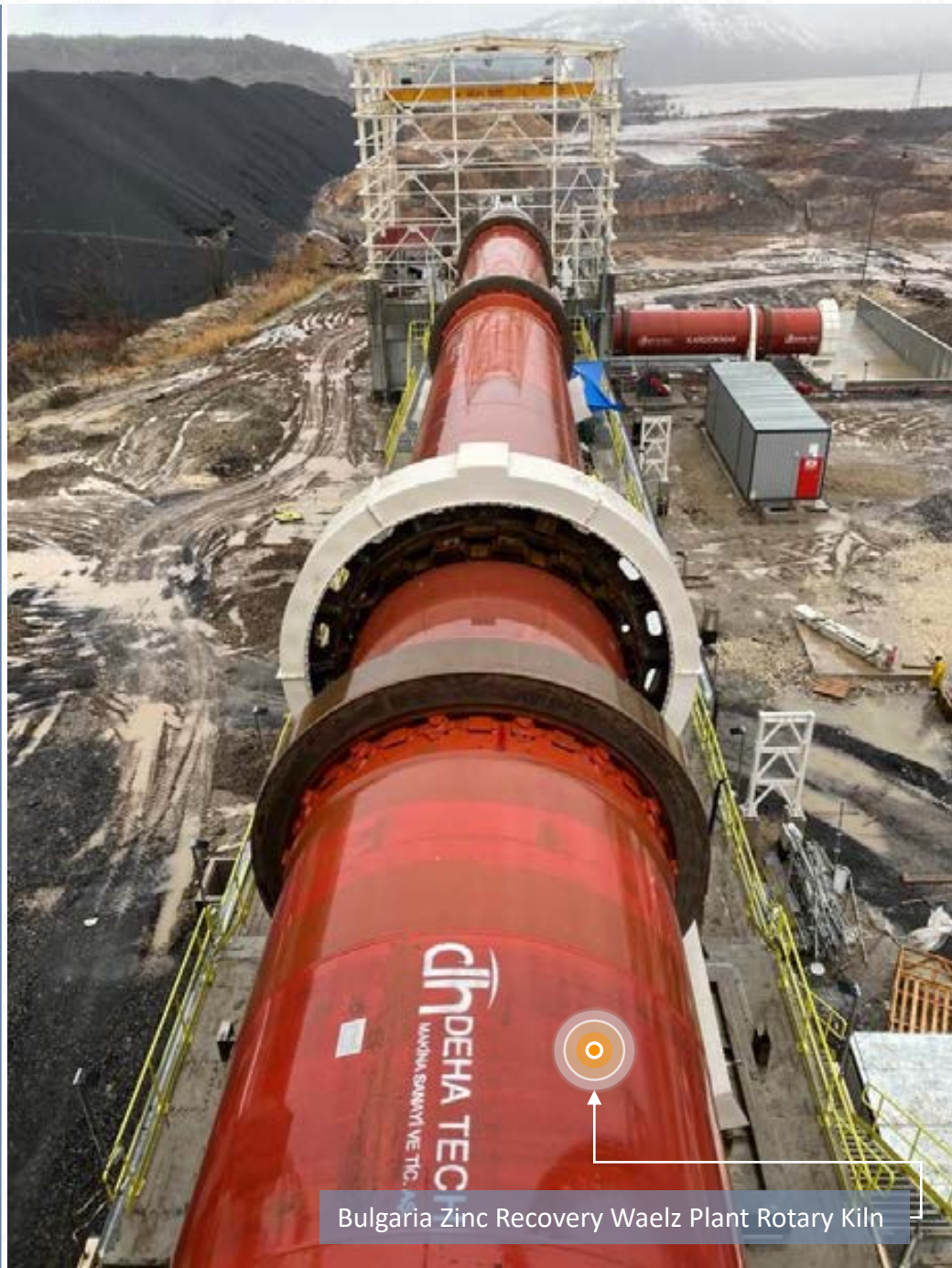
Feed Hoppers

WAEZL (ZINC RECOVERY) PLANT / BULGARIA

Zinc Recovery Waelz Plant Assembly



ZINC RECOVERY WAEZL PLANT / BULGARIA



Bulgaria Zinc Recovery Waelz Plant Rotary Kiln



Bulgaria Zinc Recovery Waelz Plant Rotary Kiln Girth Gear Assembly

WAEZL (ZINC RECOVERY) PLANT / BULGARIA



WAEZ (ZINC RECOVERY) PLANT / BULGARIA



Lead Slag Silo

Active Carbon Reactor

Conditioning Tower

ZINC RECOVERY WAE LZ PLANT / BULGARIA



Bulgaria Zinc Recovery Waelz Plant

5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN

Commissioning of the facility will be completed in 2022. Construction of the 4th technological line for the production of clinker

Project Name 5500 TPD Clinker Production Line Project

Location Navoi / Uzbekistan

Project Start 6.10.2020 - 23.02.2022

Project Buildings

Rotary Kiln Concrete Structure

Kiln Filter and Vertical Raw Mill Concrete Structure

Cooler and Cooler Filter Concrete Structure

Cement Silos Concrete Structure

Cooler Tower Foundation Structure

Preheater Tower Concrete Structure

Piling Works



ROATARY KILN & WAEELZ PLANT



5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN

Clinker Cooler Civil Works



Rotary Kiln Civil Works

5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN



Rotary Kiln - Preheater Tower



Rotary Kiln - Preheater Tower

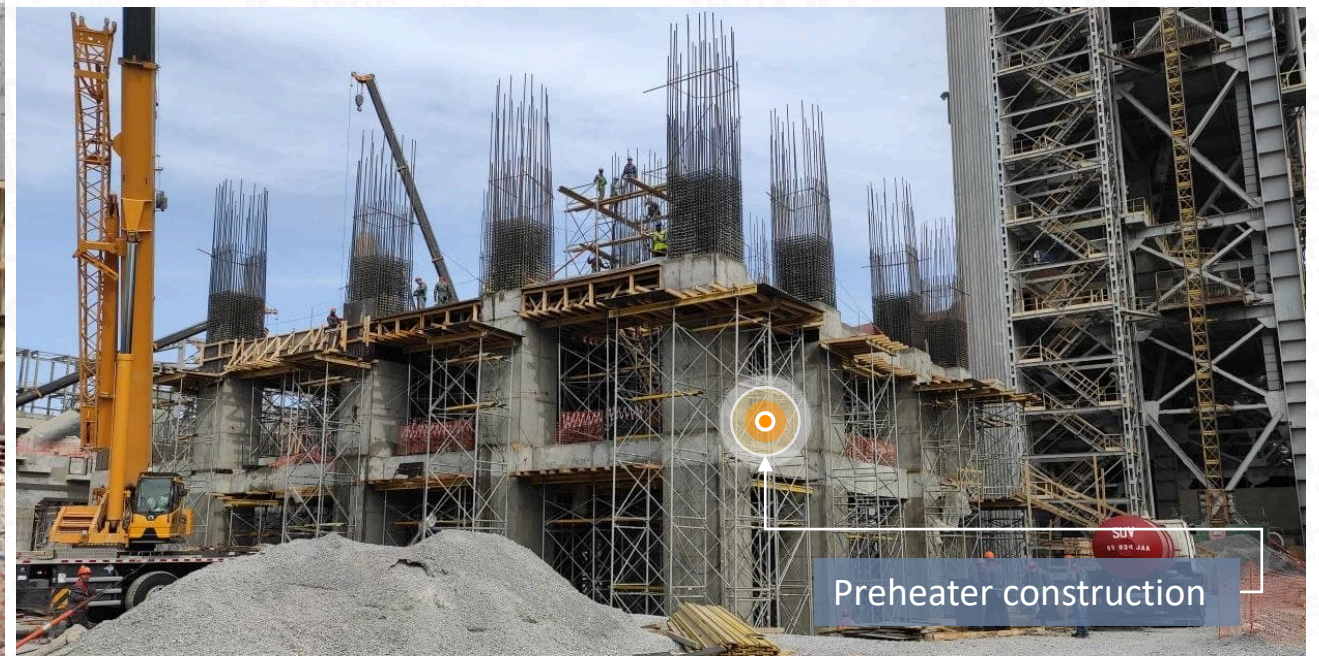
5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN



Civil Works Progress

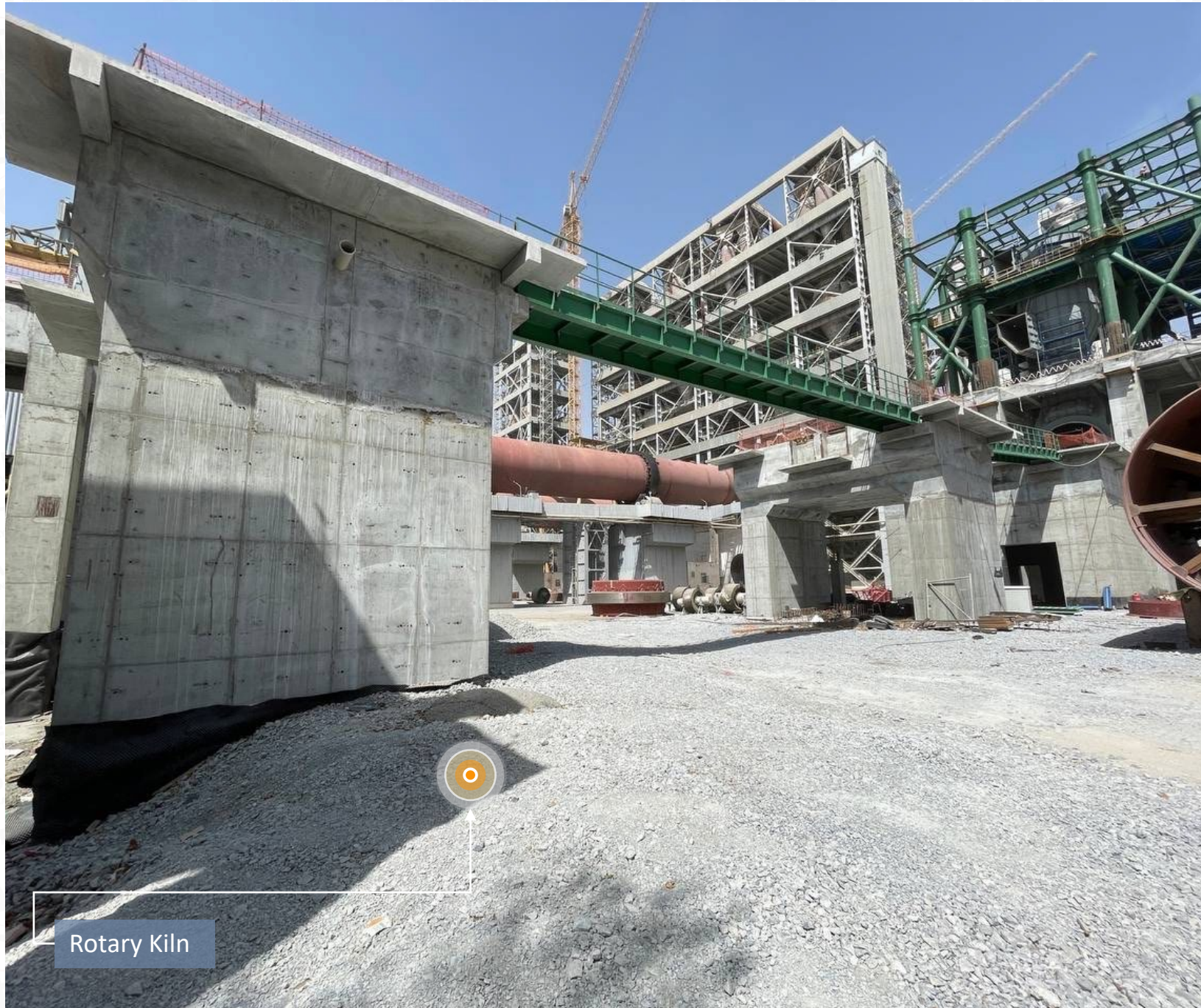


Civil Works Progress

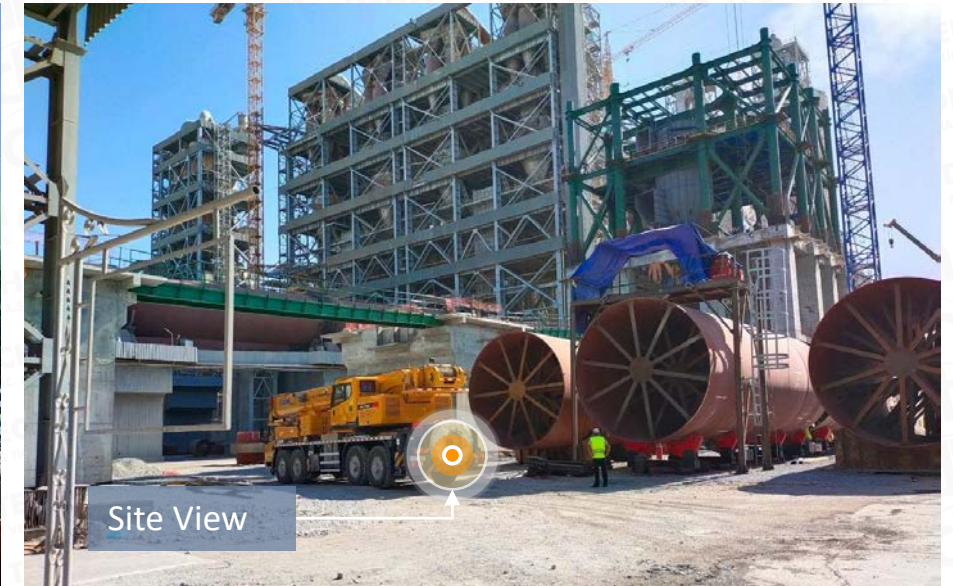


Preheater construction

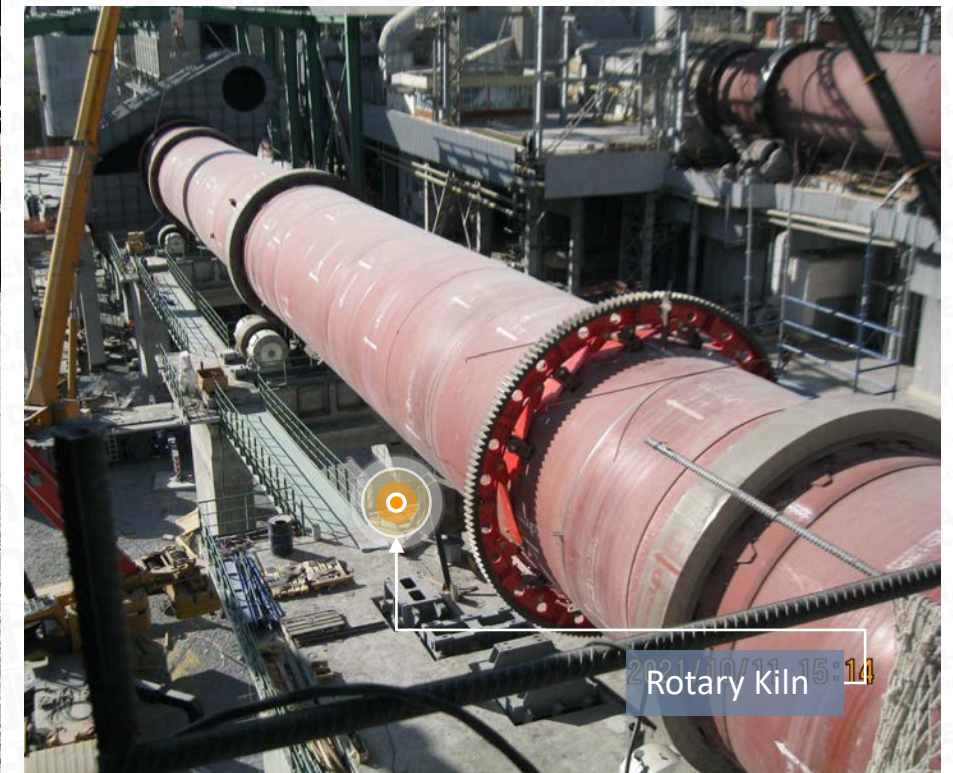
5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN



Rotary Kiln



Site View

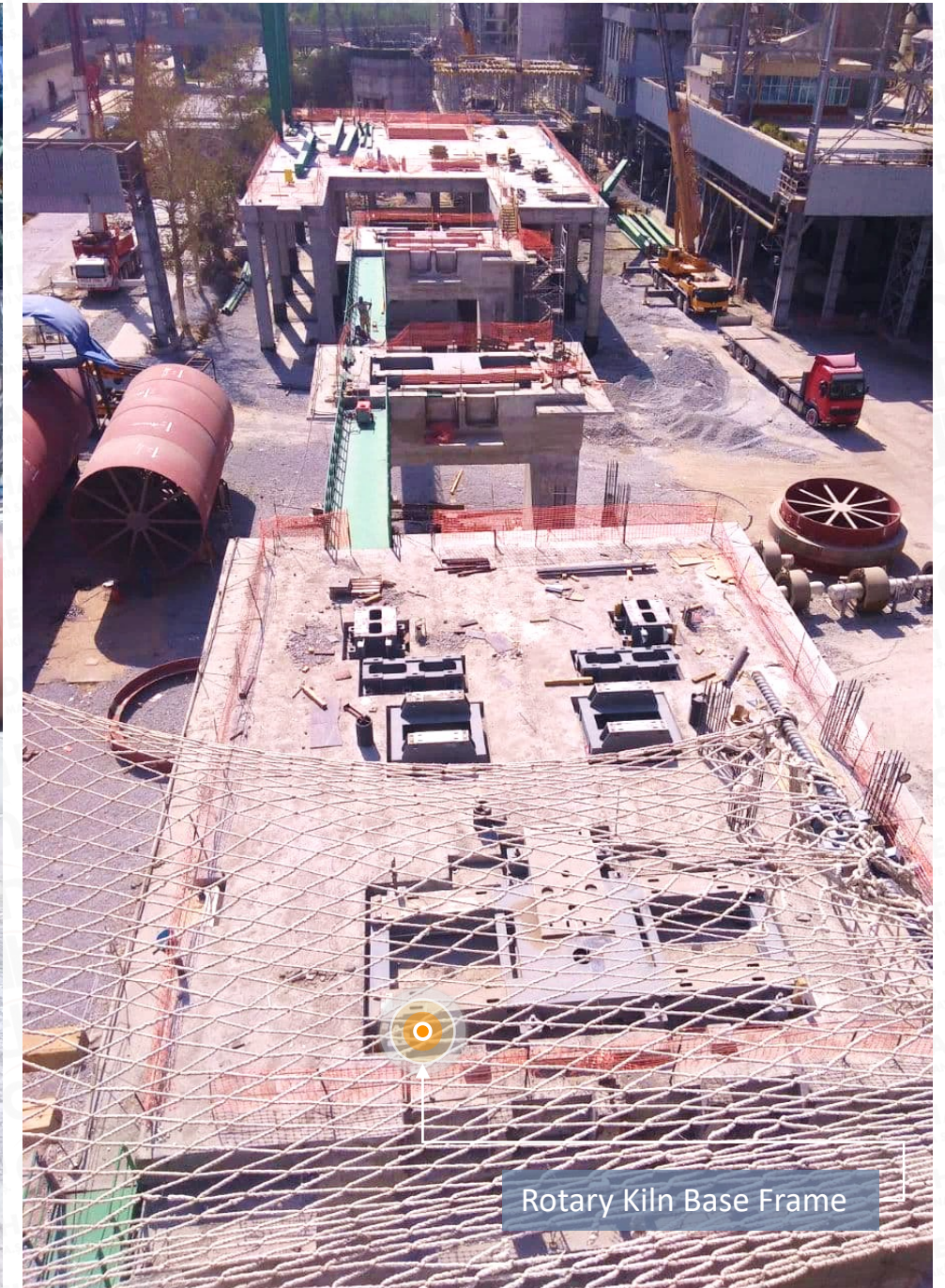


Rotary Kiln

5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN

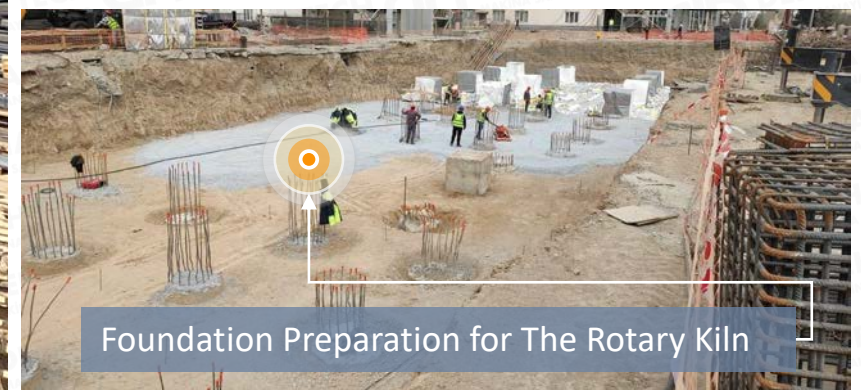
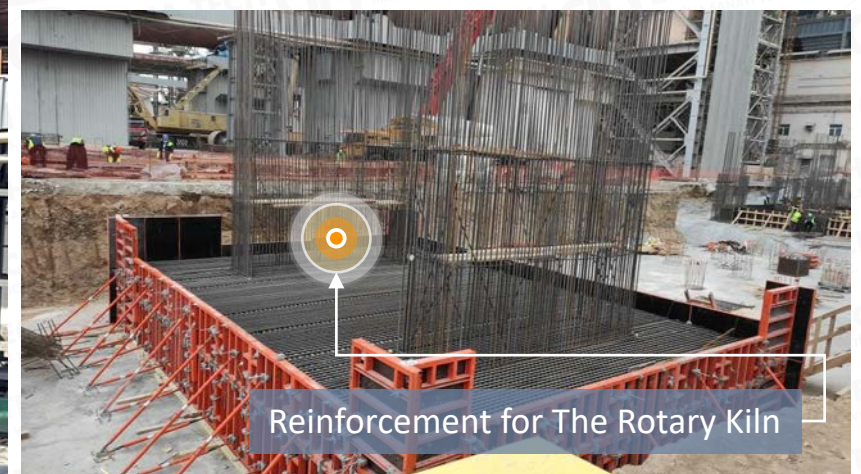
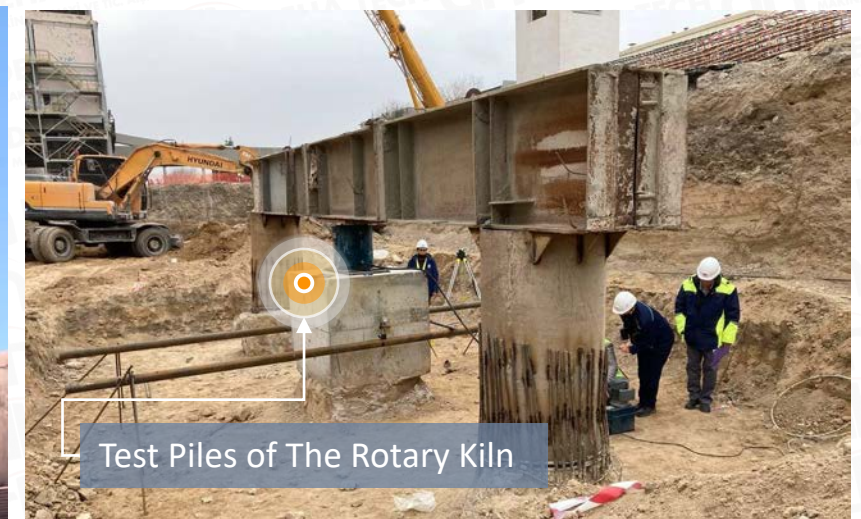
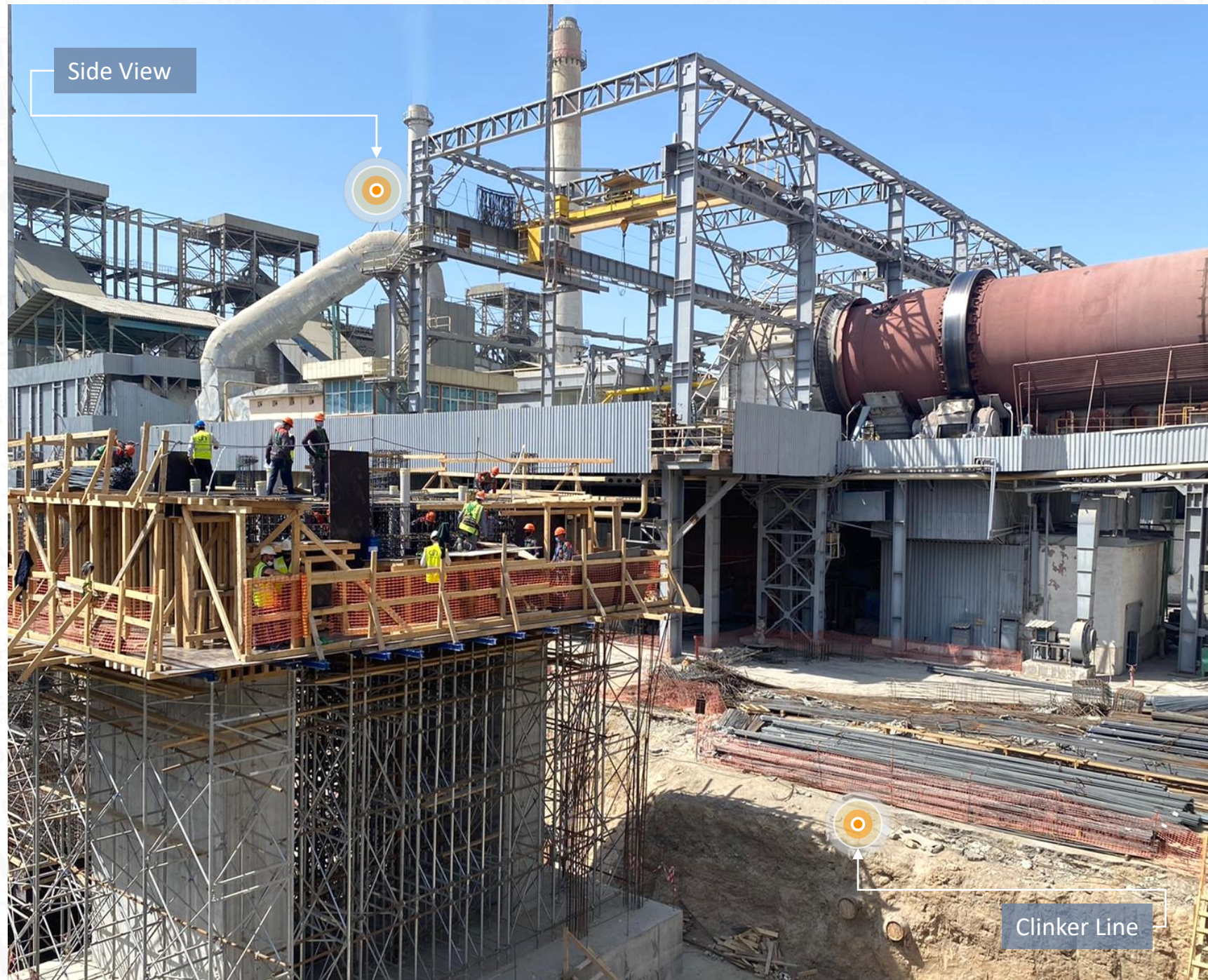


Rotary Kiln



Rotary Kiln Base Frame

5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN



5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN



Rotary Kiln

BEFESA WAEZL OXIDE PLANT

Befesa Turkey Waelz Oxide Plant Rotary Kiln & Dust Settling Chamber Manufacturing And Erection. The location of Befesa is Iskenderun/Turkey. Commissioning of the facility has been completed in 2019. Currently, the process of EAF dust is 110.000 TPA.

Scope of Works	
Project Name	Befesa Waelz Oxide Plant
Project Location	Iskenderun / Turkey
Client	Sartech
Project Start Date	2018
Project Finish Date	2019
Project Scope	Rotary Kiln and Dust Settling Chamber Design, Manufacturing And Construction



BEFESA WAE LZ OXIDE PLANT



BEFESA WAE LZ OXIDE PLANT



Befesa Waelz Oxide Plant Completed by Deha Tech

Site View

BEFESA WAE LZ OXIDE PLANT



Befesa Waelz Oxide Side View



Kiln Girth Gear Assembly

BEFESA WAEZL OXIDE PLANT



Kiln Assembly



Kiln Roller Assembly



Kiln Girth Gear Assembly

BEFESA WAE LZ OXIDE PLANT



Kiln Assembly



Kiln Tower Support

BEFESA WAE LZ OXIDE PLANT



Befesa Waelz Oxide Plant Completed by Deha Tech



Kiln Assembly



Kiln

BEFESA WAE LZ OXIDE PLANT



Befesa Waelz Oxide Plant Completed by Deha Tech



Site View

MARZINC WAEZ ZINC OXIDE PLANT ROTARY KILN MANUFACTURING

Marzinc Marmara Geri Kazanım A.Ş. is located in Karabük with 150.000 TPA EAF Dust processing capacity and has been in operation since 2013. Marzinc is known as one of the most environmental friendly metal recovery plant in Turkey.

Scope of Works	
Project Name	Befesa Waelz Oxide Plant
Project Location	İskenderun / Turkey
Client	Sartech
Project Start Date	2018
Project Finish Date	2019
Project Scope	Rotary Kiln and Dust Settling Chamber Design, Manufacturing And Construction



MARZINC WAEZ ZINC OXIDE PLANT ROTARY KILN MANUFACTURING



Zinc Oxide Plant Roller Station



Dust Settling Chamber



Kiln Shell

MARZINC WAEZ ZINC OXIDE PLANT ROTARY KILN MANUFACTURING



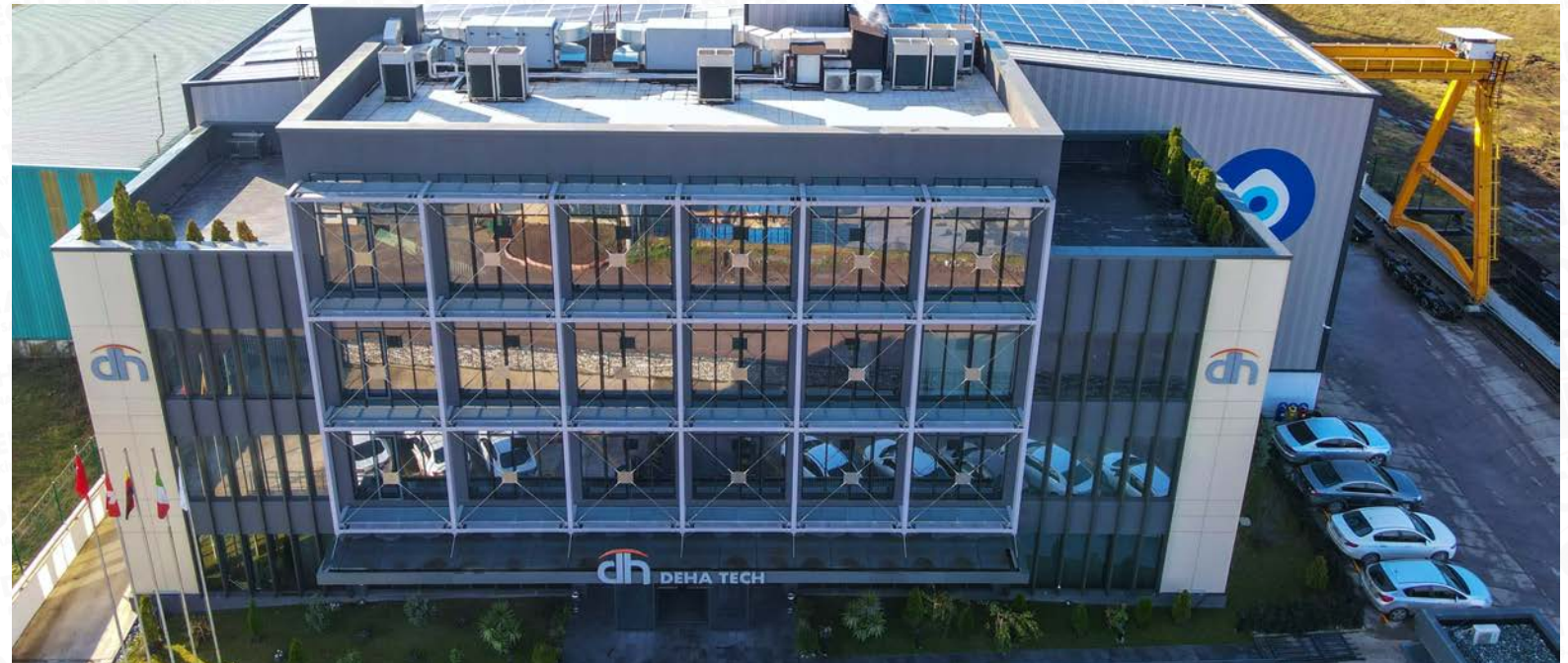
A large group of employees, mostly men wearing yellow hard hats and dark work uniforms with reflective stripes, are posed in several rows in front of a modern building. The building has large glass windows and a prominent logo consisting of the letters 'dh' in a stylized font with an orange arc above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

dh DEHA TECH

MANUFACTURING PLANTS

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)

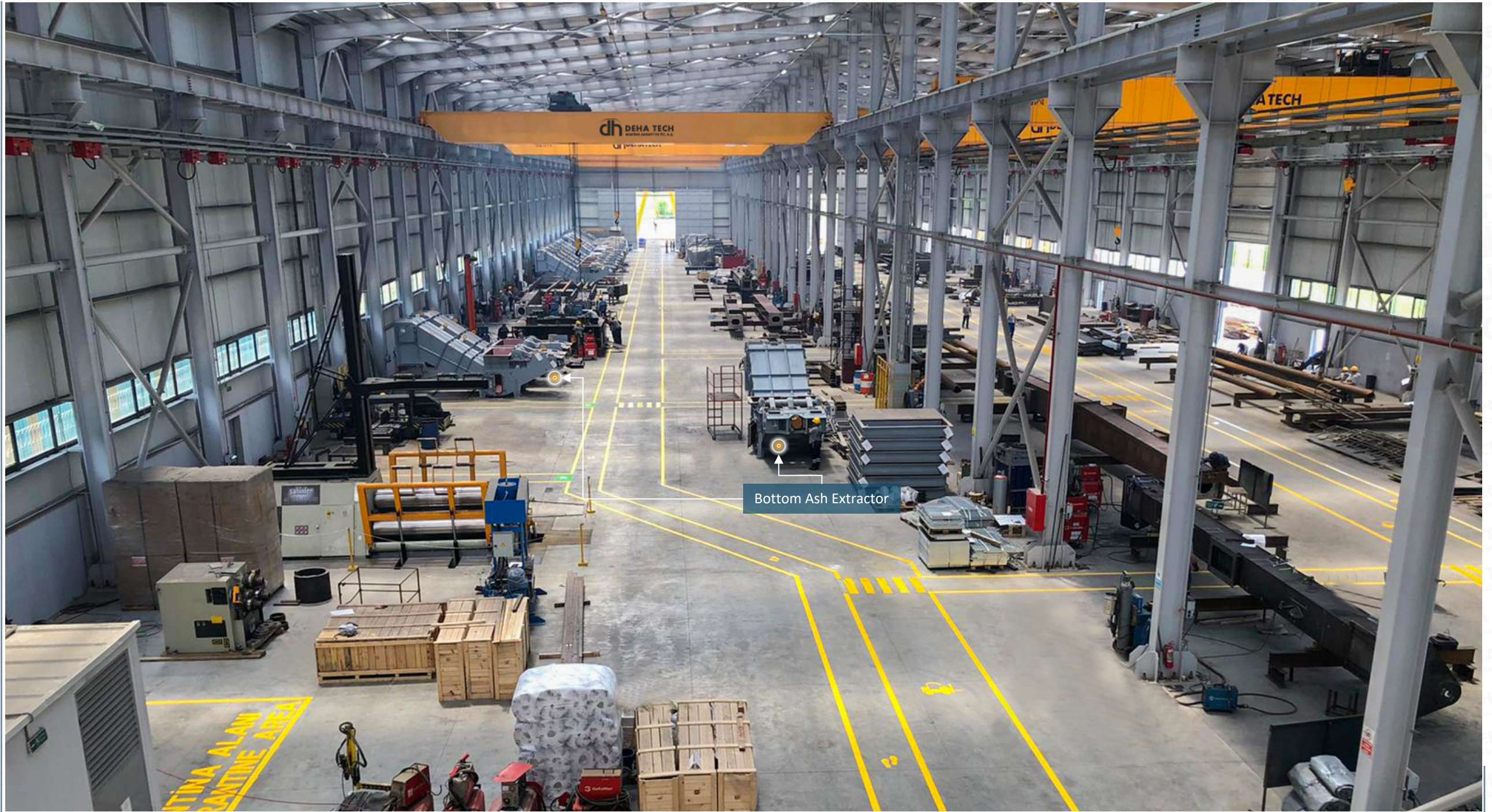
20 Ton Gantry Crane

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



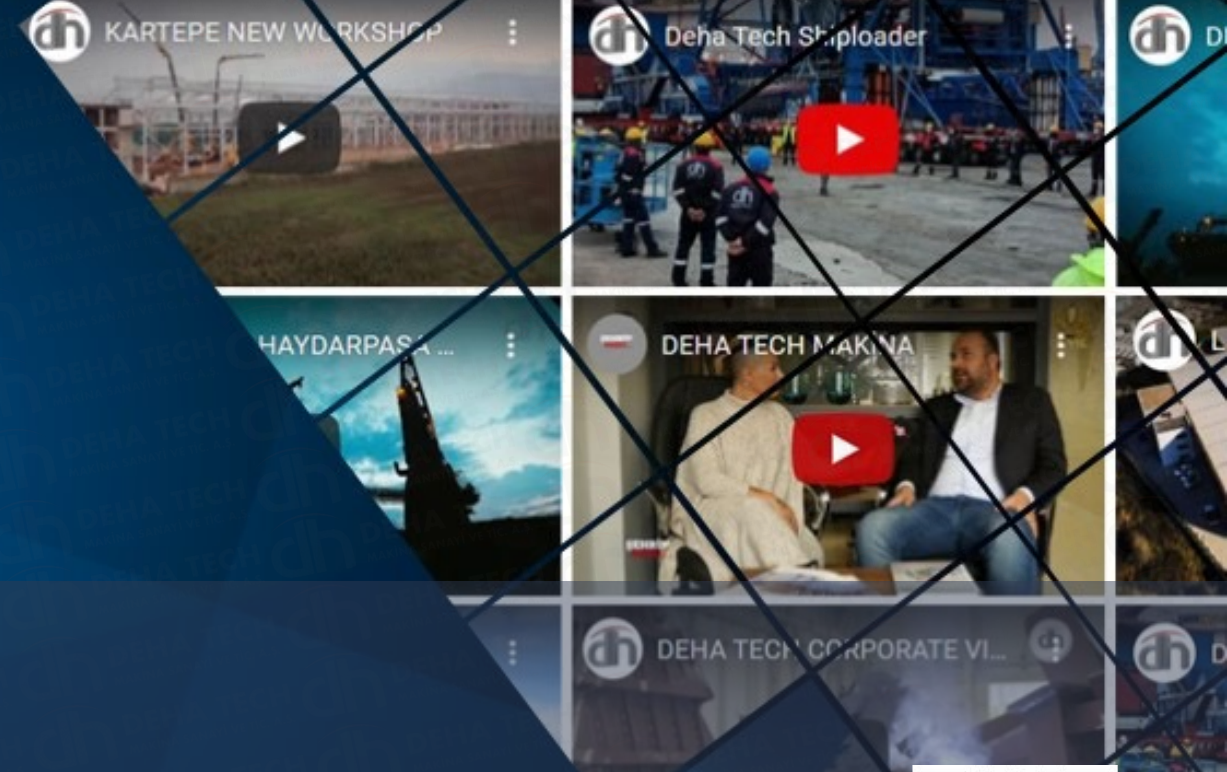
DEHA TECH KARTEPE FACTORY GENERAL VIEW



Fast Response
Technology Driven Projects
Sustainable Profitability and Financial Stability

DEHA TECH KARTEPE FACTORY 1

DEHA TECH`S CONTACT DETAILS



www.dehatech.com

▶ Deha Tech Headquarters

A : Kemeraltı Caddesi No:28, Pk:34425,
Müeyyetzade Mahallesi, Karaköy /
İSTANBUL / TR

W : info@dehatech.com

W : www.dehatech.com

T : +90 212 252 48 00

▶ Kartepe Factories

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

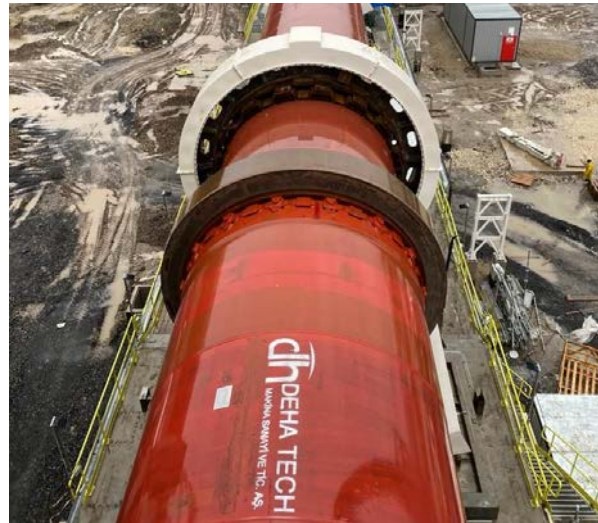
A : Arslanbey OSB Mahallesi, 3. Sokak,
No:12, Pk:41285, Kartepe / KOCAELİ / TR

▶ Gebze Factory

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



Genius Solutions For Industrial Projects



THANK YOU