COMPANY PRESENTATION

DEHA TECH

MAKİNA SANAYİ VE TİC. A.Ş.

www.dehatech.com

INDEX

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.

COMPANY PROFILE

DEHA TECH
GENIUS SOLUTIONS

CEMENT & MINING INDUSTRY

FUEL, OIL & GAS INDUSTRY

ENERGY SECTOR

WAELZ (ZINC RECOVERY) TECHNOLOGY

CONSTRUCTION & CIVIL WORKS

COMPANY PROFILE

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

WAELZ (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

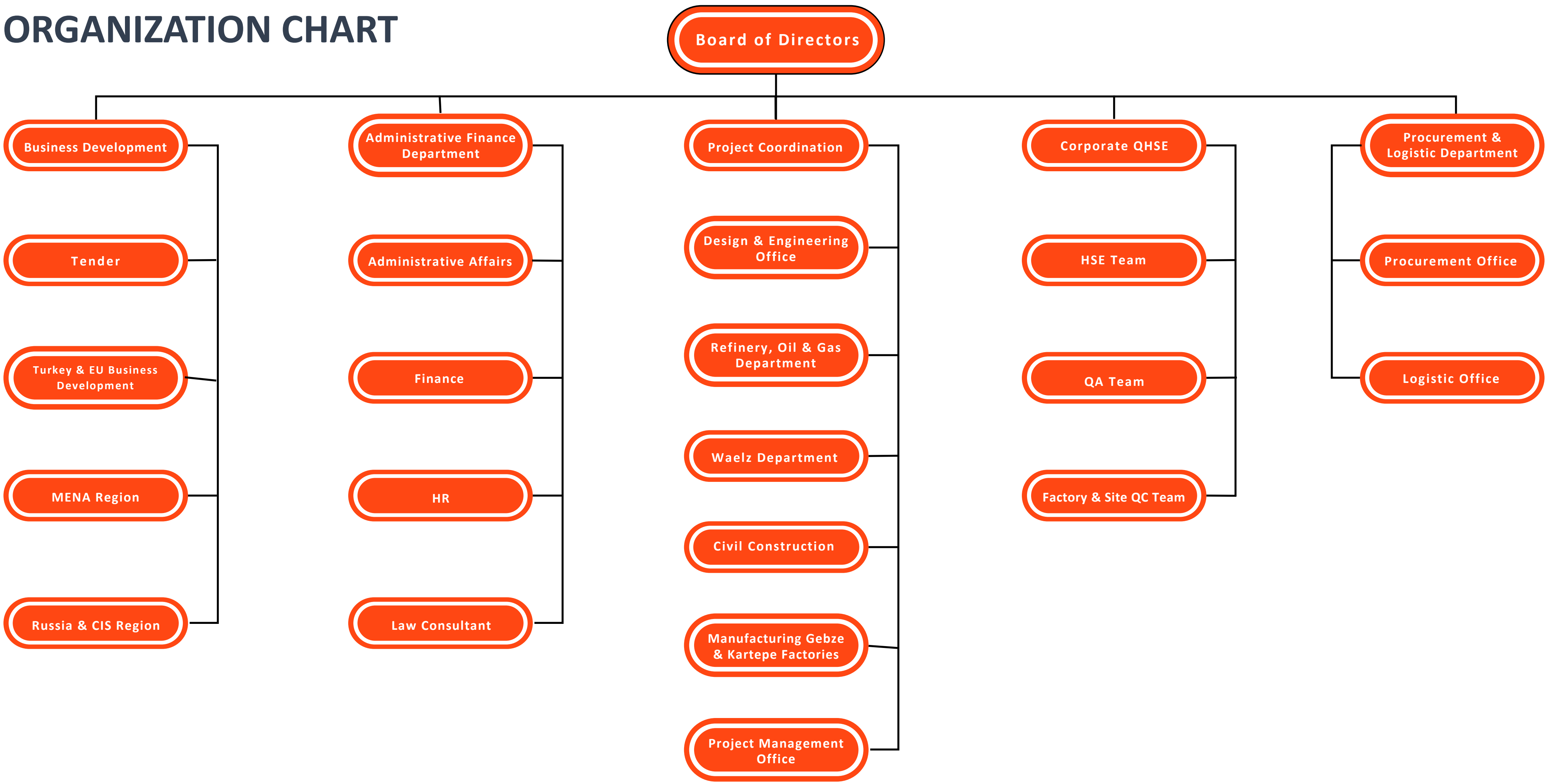
CONSTRUCTION & CIVIL WORKS

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

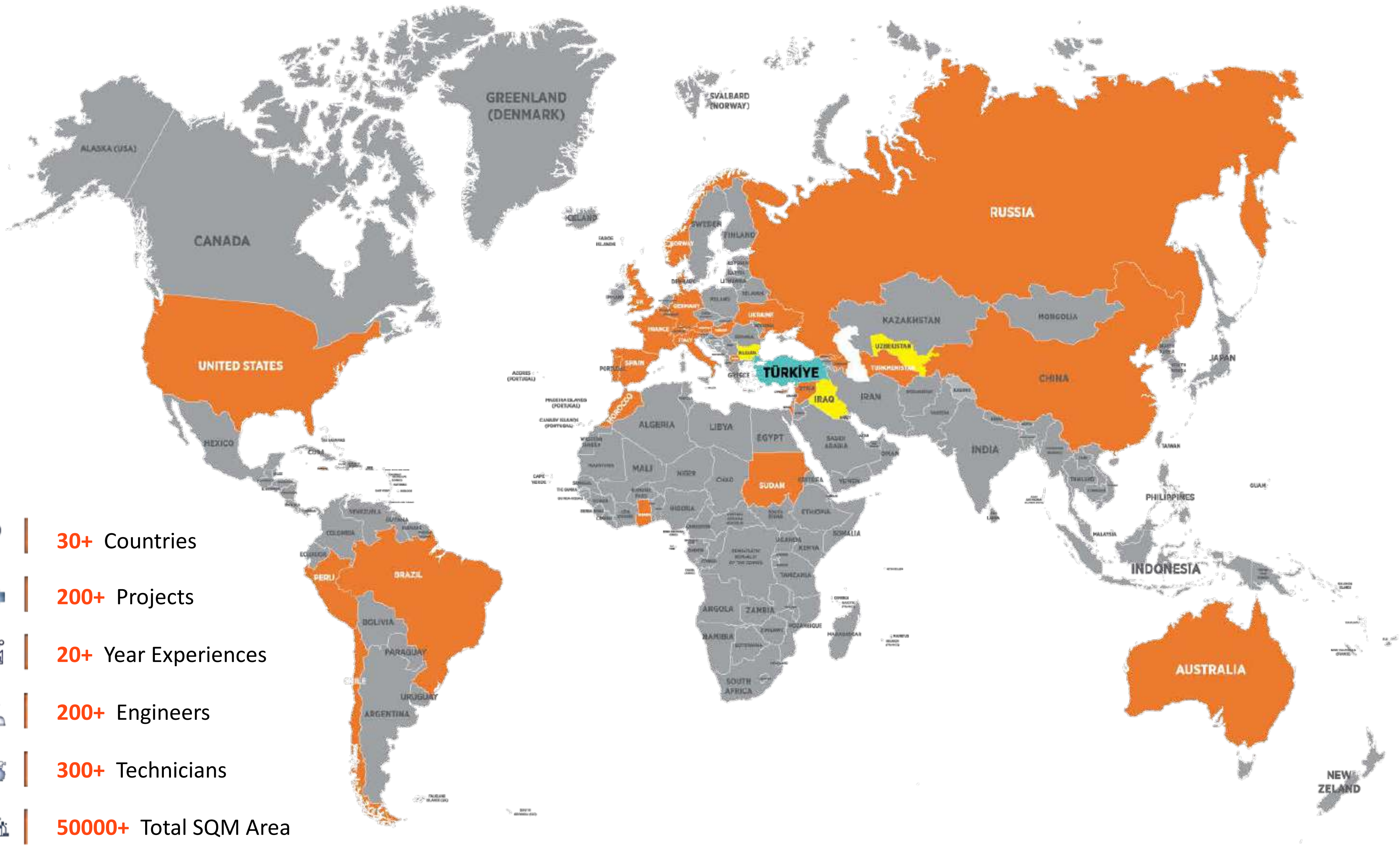
DEHA TECH

DEHA TECH AROUND THE WORLD

Central Office:
- Türkiye

Branch Offices:
- Bulgaria
- Iraq
- Uzbekistan

Projects:
- Russia
- United Kingdom
- France
- Germany
- United States
- Peru
- Turkmenistan
- Morocco
- Cyprus
- Jamaica
- Switzerland
- Australia
- Chile
- Norway
- China
- Ukraine
- Austria
- Italy
- Hungary
- Belgium
- Macedonia
- Spain
- Denmark
- Portugal
- Brazil
- Sudan
- Syria
- Azerbaijan
- Georgia
- Israel
- Ghana



30+ Countries

200+ Projects

20+ Year Experiences

200+ Engineers

300+ Technicians

50000+ Total SQM Area

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

COMPANY PROFILE

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.

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

ASME U

ASME U2

ASME PP

ASME S

R

CE

EN 1090 CERTIFICATE OF CONFORMITY PACKAGE certified

EXC - 4 CERTIFICATED

CERTIFIED ISO 3834 - 2 COMPANY

UKCA

CE

AD-2000 MERKBLATT HP 0

CERTIFIED PED 2014/68/EU COMPANY

CERTIFIED ISO 9001:2015 COMPANY

CERTIFIED ISO 14001:2015 COMPANY

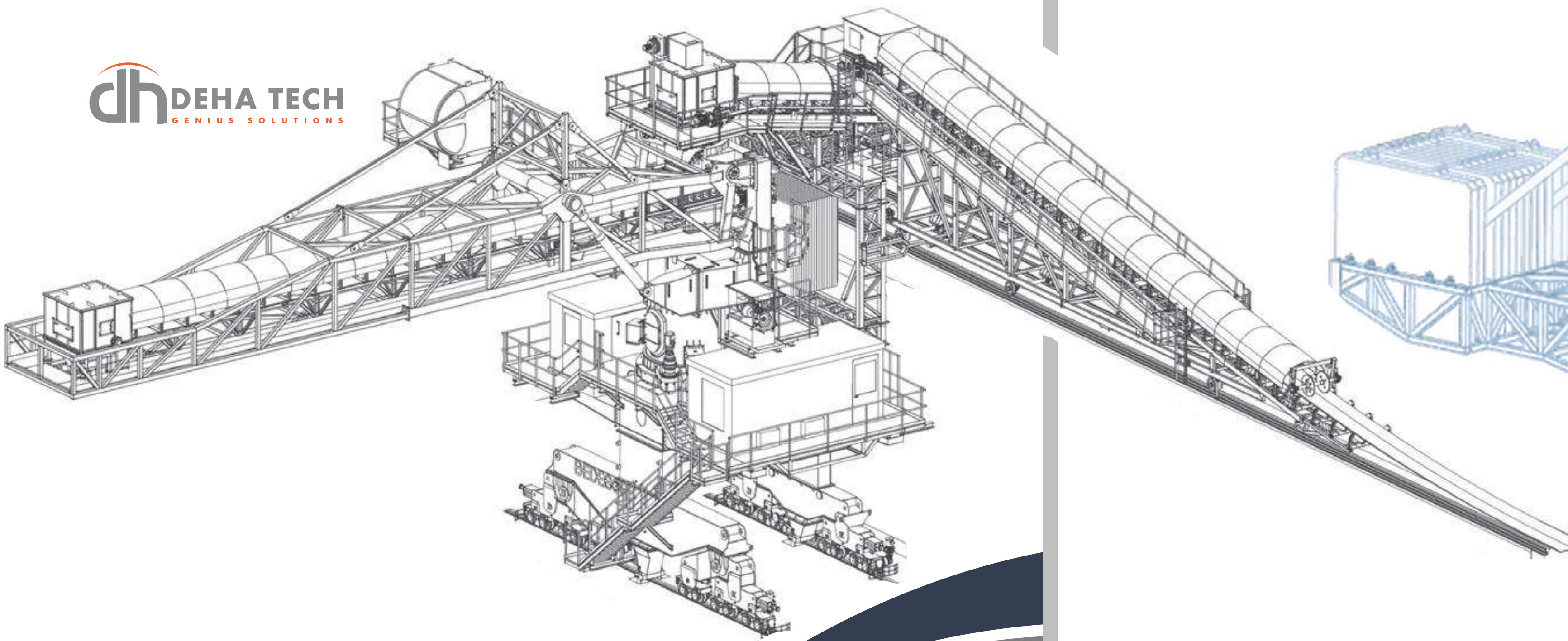
CERTIFIED ISO 45001:2018 COMPANY

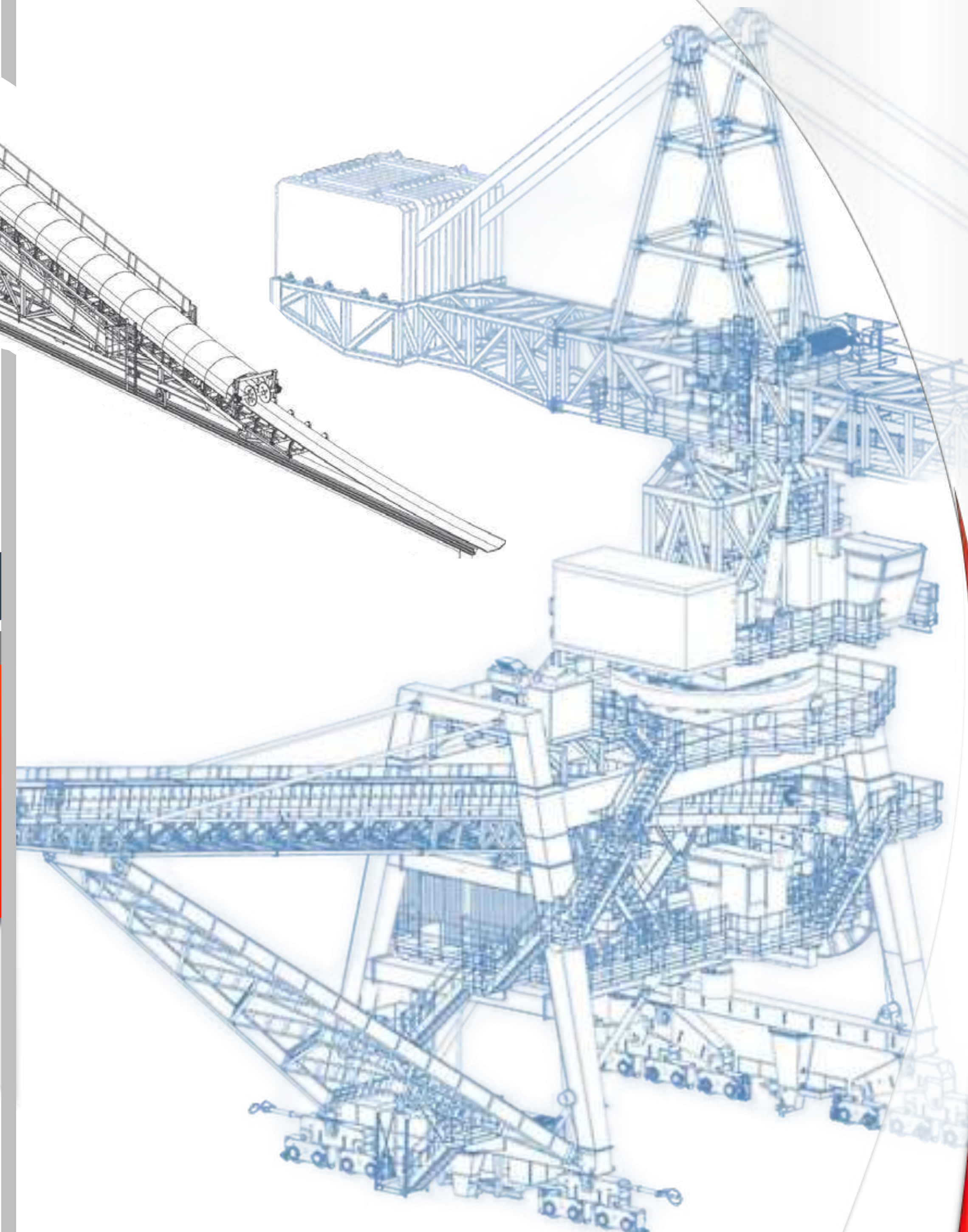
CERTIFIED ISO 27001:2022 COMPANY

BUSINESS PARTNERS

Imtech
Hitachi Zosen INOVA
SIEMENS
GE
ENERCON ENERGIE FÜR DIE WELT
dalkia GROUPE EDF
PARESA
TÜV AUSTRIA
BUREAU VERITAS
KARDÖKMAK KARDEMİR DOKÜM MAKİNE SAN. ve TİC. A.Ş.
CLYDE BERGEMANN

DEHA TECH
GENIUS SOLUTIONS





DESIGN & ENGINEERING

www.dehatech.com

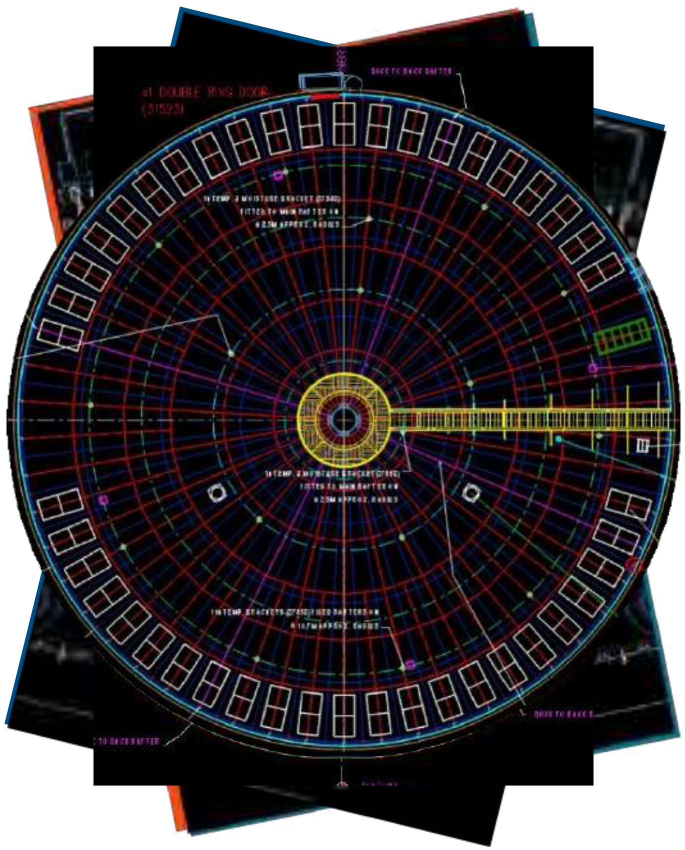
DESIGN & ENGINEERING SERVICES

DEHA TECH
GENIUS SOLUTIONS

We are ready to help you achieve your goals.
No matter the complexity of the challenge.

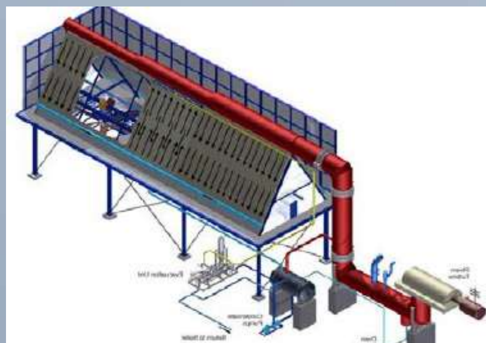
Our designers and engineers know how to design cost-effective products in terms of engineering and production.

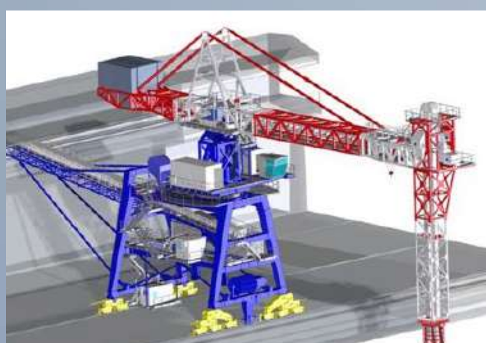
Design Tool Competence

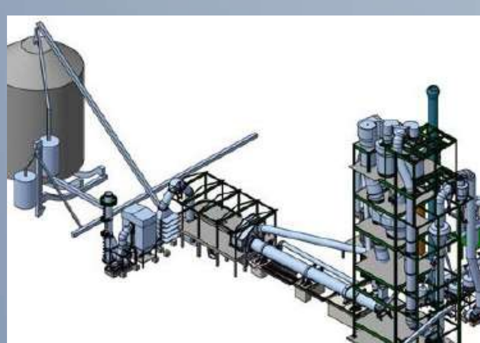


We Use Leading Design Software Programs
to Assist Our Work in Piping Designs

HTRI	**for**	Heat Transfer & Thermal Design Activities
Compress Codeware	**for**	Pressure Vessel & Heat Exchangers
Pv-Elite Integhraph	**for**	Pressure Vessel & Heat Exchangers
AutoPipe Vessel	**for**	Pressure Vessel & Heat Exchangers
Ametank Technosoft	**for**	Storage Tank Design
Caesar II (Integhraph)	**for**	Pipe Stress Activities
Ansys (Mechanical / Fluent)	**for**	Finite Element Analysis (FEA) & Fluid Dynamic Analysis (CFD)
Tekla & SAP2000	**for**	Steel Structure Calculation
Autodesk Inventor	**for**	3D Machine And Equipment Design Software
SolidWorks / Inventor	**for**	3D Machine And Equipment Design Software
AutoCAD Plant 3	**for**	P&ID, 3D Modelling And Piping Software For Plant Design
Navisworks	**for**	3D Design Simulation And Project Review Software
PRG Nozzle Pro.	**for**	Nozzle and local analysis (FEA)
PRG. Nozzle Pro.	**for**	Limcon V3 & IDEA Statica

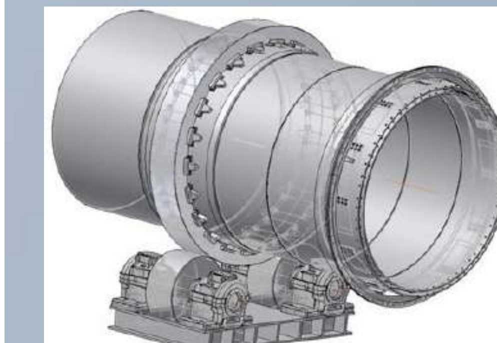


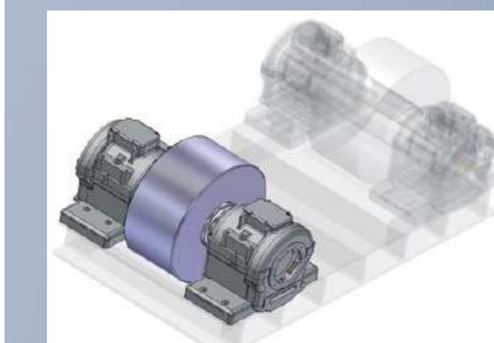


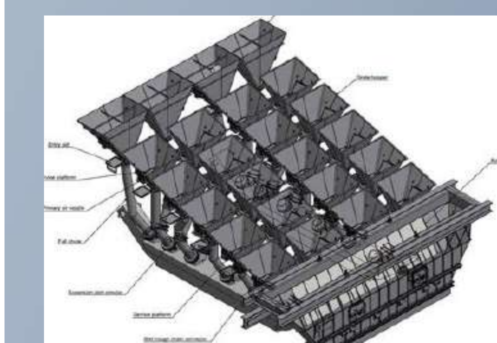


Deha Tech Calculation Tools

Pipe Flow Expert	Flow Rate and Pressure Drop Calculation (Hydraulics) Software
Profis Anchor	Anchor Design Calculation Software
Deha Tech Heat Exchanger Tool	Heat Exchanger Design Calculation Tool
Deha Tech Tank Tools	Tank Design Calculation Tool to API 650 Tank Heating, Insulation and Coil Sizing Calculation Tool Suction Heater Design Calculation Tool to TEMA Tank Venting Calculation Tool to API 2000 Tank Fire Fighting Calculation Tool to NFPA 11 / NFPA 15



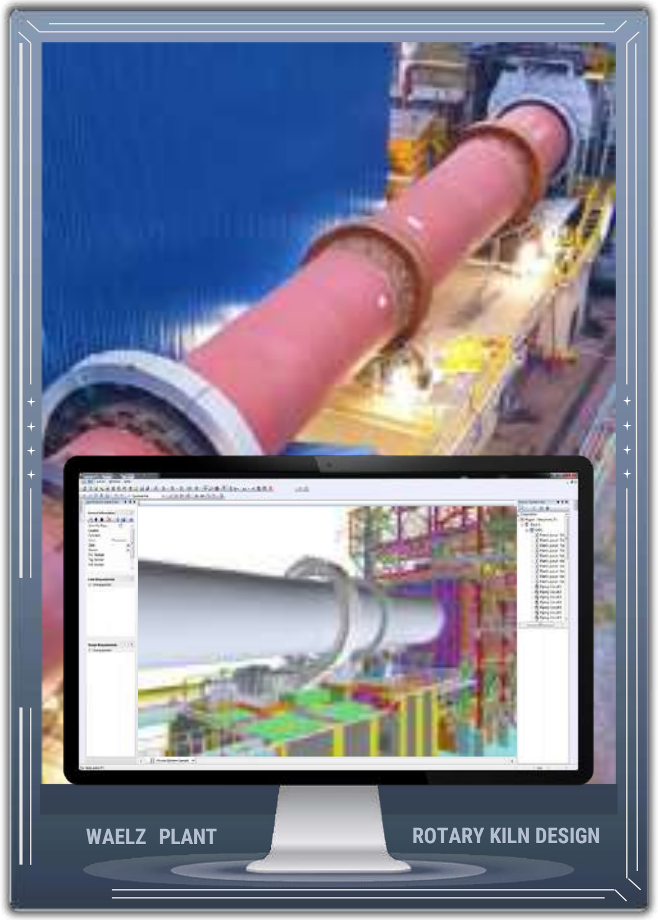


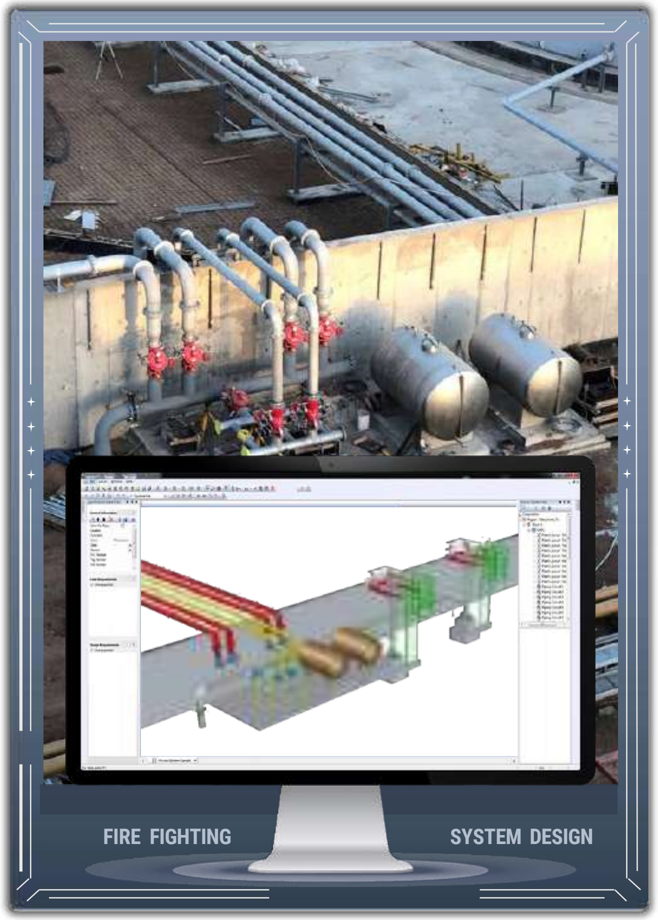


DESIGN & ENGINEERING SERVICES

DEHA TECH

AREAS OF OUR INDUSTRIAL HIGH COMPETENCY AND ENGINEERING DESIGN EXCELLENCY

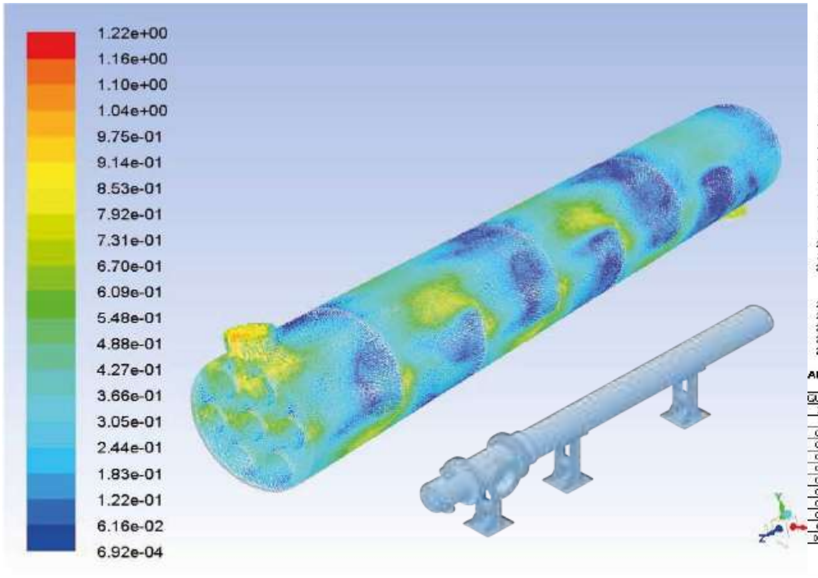




1. PROCESS ENGINEERING
2. PIPING AND PLANT LAYOUT ENGINEERING
3. MECHANICAL (ROTATIC AND STATIC EQUIPMENT) ENGINEERING
4. CIVIL STRUCTURAL AND ARCHITECTURAL
5. VALUE ENGINEERING
6. BASIC & DETAIL ENGINEERING (FEED and EPC)

DESIGN & ENGINEERING SERVICES

DEHA TECH
GENIUS SOLUTIONS

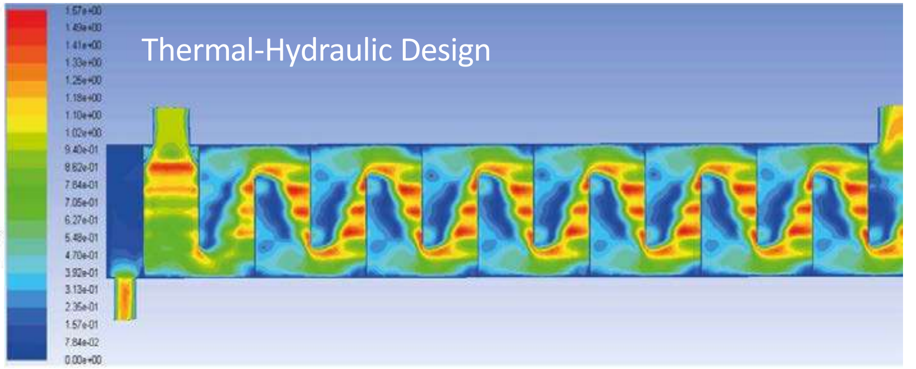


THERMAL & HEAT TRANSFER

1	STEAM / COND. FLO' (Gs) / (Gl)	INPUT	665.97	Kg/hr		
2	NO. OF FLOW TUBES		151			
3	FLOW PER TUBE		4			
4	HEAT DUTY		507	Kilowatt		
5	STEAM TEMP. Ts	INPUT	143.6	°C		
6	WALL TEMP Tw	INPUT	142.6	°C		
7	FILM TEMPERATURE	(Ts+Tw)/2	143.1	°C		
8	STEAM ENTHALPY (hfg)	INPUT	2733	kj/kg		
9	STEAM / COND. DEN (ds) / (dl)	INPUT	[illegible]	kg/m^3	977.3	kg/m^3
10	STEAM / COND. SP. H (ss) / (sl)	INPUT	2036	kj/kg°C	4.188	kj/kg°C
11	STEAM / COND. THER (ks) / (Kl)	INPUT	0.0288	W/m°C	0.665	W/m°C
12	CONDENSATE DYNA (mu)s / (mu)l	INPUT	1.30E-05	Pa.sec	4.01E-04	Pa.sec
13	STEAM / COND. KIN. V (vu)s / (vu)l	INPUT	6.35E-06	m^2/sec	4.1E-07	m^2/sec
14	STEAM / COND. MAS Gs / Gl	Mass Flow/Area	7	kg/s.m^2	7	kg/s.m^2
15	STEAM / COND. VELO Vs / Vl	Mass Vel. / Density	3.27	m/sec	0.007	m/sec
16	RE NUMBER, STEAM Res / Rm	SEE NOTE 1	7,635		5,830	
17	CONDENSATE REYN Rd				262	
18	FRICTION FACTOR f	MOODY CHART	0.03842			
19	PRANDTL NO. STEAM Pr / Pl	(mu)(cp)/(k)	1,002.738		2.52	
20	HEAT TRANSFER COI h	SEE NOTE 2	3,311	W/m^2°C	537	Btu/hr.ft^2°F
21	TUBE ID / X-SECTION AREA		14.83	mm	0.0002	m^2
22	TUBE OD		18.38	mm	0.72	inch

HYDRAULIC

23	NO. OF ELBOWS n	INPUT	2	
24	PIPE LENGTH PER TUI L	INPUT	6.94	(m)
25	PIPING PRESSURE DF Pp	DARCY FORMULA	0.0017	BARG.
26	FITTINGS DROP Pf	DARCY FORMULA	0.0004	BARG.
27	TOTAL PRESSURE DROP	Pp+Pf	0.0021	BARG.



ANALYSIS FOR HIGHER STEAM REYNOLDS NUMBERS

QUALITY OF STEAM			Rd	F2	F2	F2	Xtt	F(Xtt)	F2	LOCAL	LOCAL	
Xi	Xf	X mean								Nu	hz	hzx
1	0.9	0.95	13	6.46	#NUM!	16.46	0.0047	###	6.46	257.11	11,530	10,954
0.9	0.8	0.85	39	11.19	9.73	18.69	0.0139	14.11	11.19	128.93	5,782	4,915
0.8	0.7	0.75	66	14.45	13.88	19.73	0.0246	8.60	13.88	93.27	4,183	3,137
0.7	0.6	0.65	92	17.10	15.83	20.41	0.0378	6.00	15.83	73.15	3,281	2,132
0.6	0.5	0.55	118	19.39	17.08	20.92	0.0551	4.42	17.08	59.82	2,683	1,475
0.5	0.4	0.45	144	21.44	18.00	21.33	0.0791	3.33	18.00	49.04	2,199	990
0.4	0.3	0.35	171	23.30	18.73	21.67	0.1152	2.50	18.73	39.39	1,767	618
0.3	0.2	0.25	197	25.03	19.32	21.96	0.1774	1.82	19.32	30.16	1,353	338
0.2	0.1	0.15	223	26.65	19.83	22.21	0.3144	1.22	19.83	20.75	930	140
0.1	0.05	0.075	240	27.80	20.16	22.39	0.6332	0.77	20.16	23.34	1,047	79
0.05	0.01	0.03	254	28.47	20.35	22.48	1.5074	0.45	20.35	14.24	639	19
		5.055					h for Res < 35000		3,311		SUM	####
							h for Res > 35000		4,905		h mean	4,905

PRESS CONTROL J FOR SELECTION

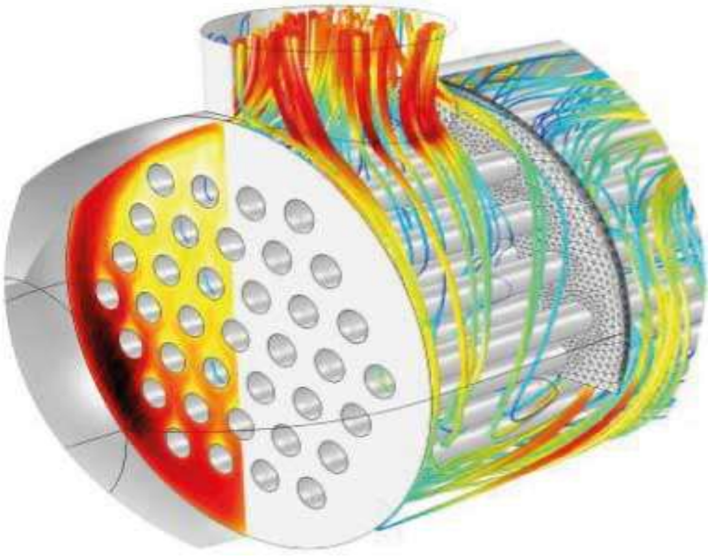
S NO.	DESCRIPTION	SYMBOL	UNIT	VALUE	FORMULA	REF.
1	SHELL ID	Z	inch	21.25	SELECTION	
2	NO. OF BAFFLES	N	#	6	INPUT	
3	LENGTH OF TUBES	L	m	3.20	INPUT	
4	BAFFLE SPACING	B	mm	457	(L) / [(N)+1] x 1000	
5	SHELL SIDE CROSSFLOW AREA	a	ft^2	0.664	Z x B x C / [Pt x 144]	4.
6	EQUIVALENT DIAMETER	Ze	inch ft.	0.71 0.06	4x(1/2.Pt x 0.86.Pt-1/2.@PI.OD^2/4) / 1/2.@PI.OD	5.

Heat Exchanger

Tube-bundle

Channels

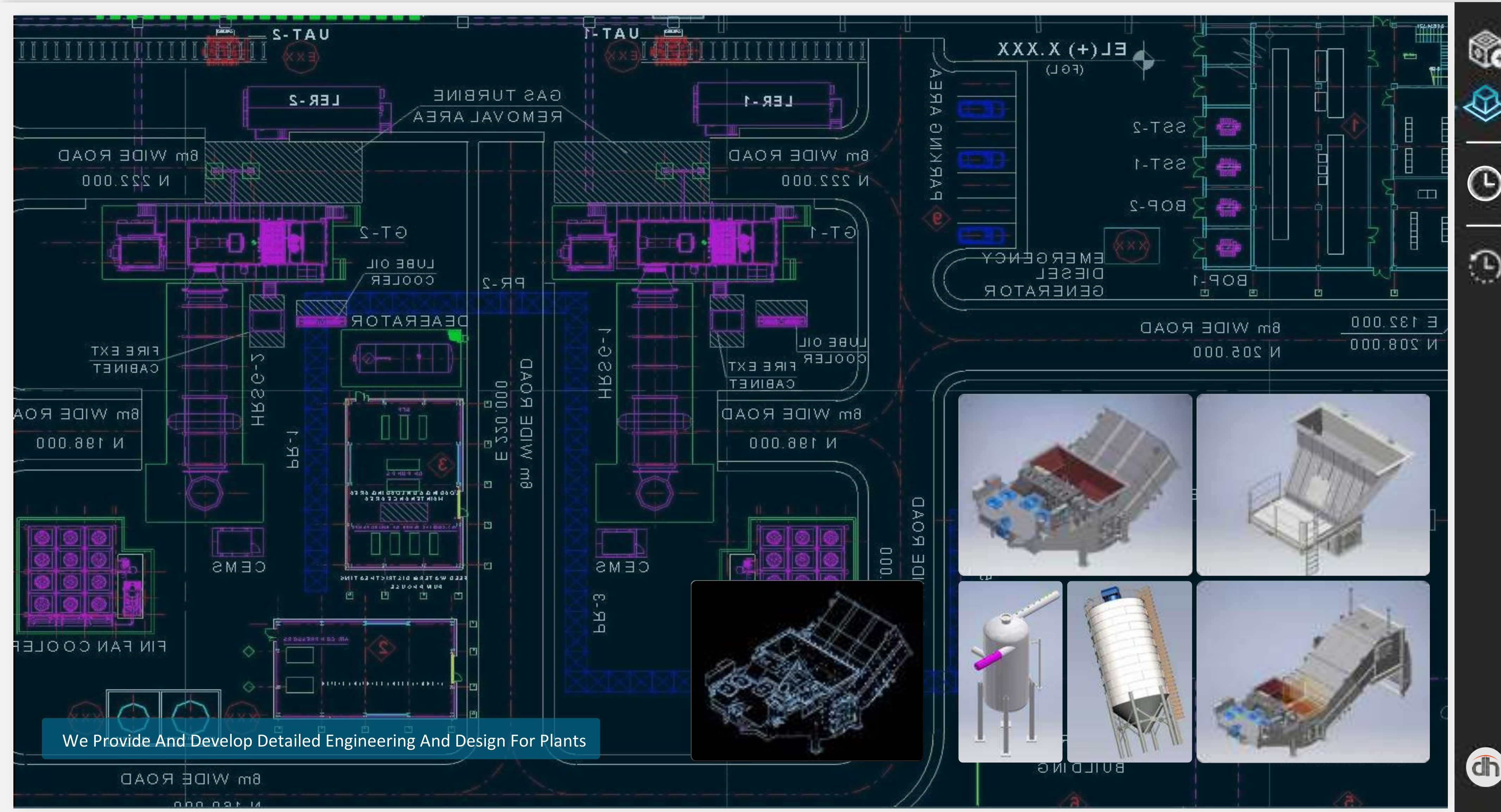
Tube Sheet & Baffles



CDF SIMULATION AND OPTIMIZATION OF SHELL AND TUBE HEAT EXCHANGER

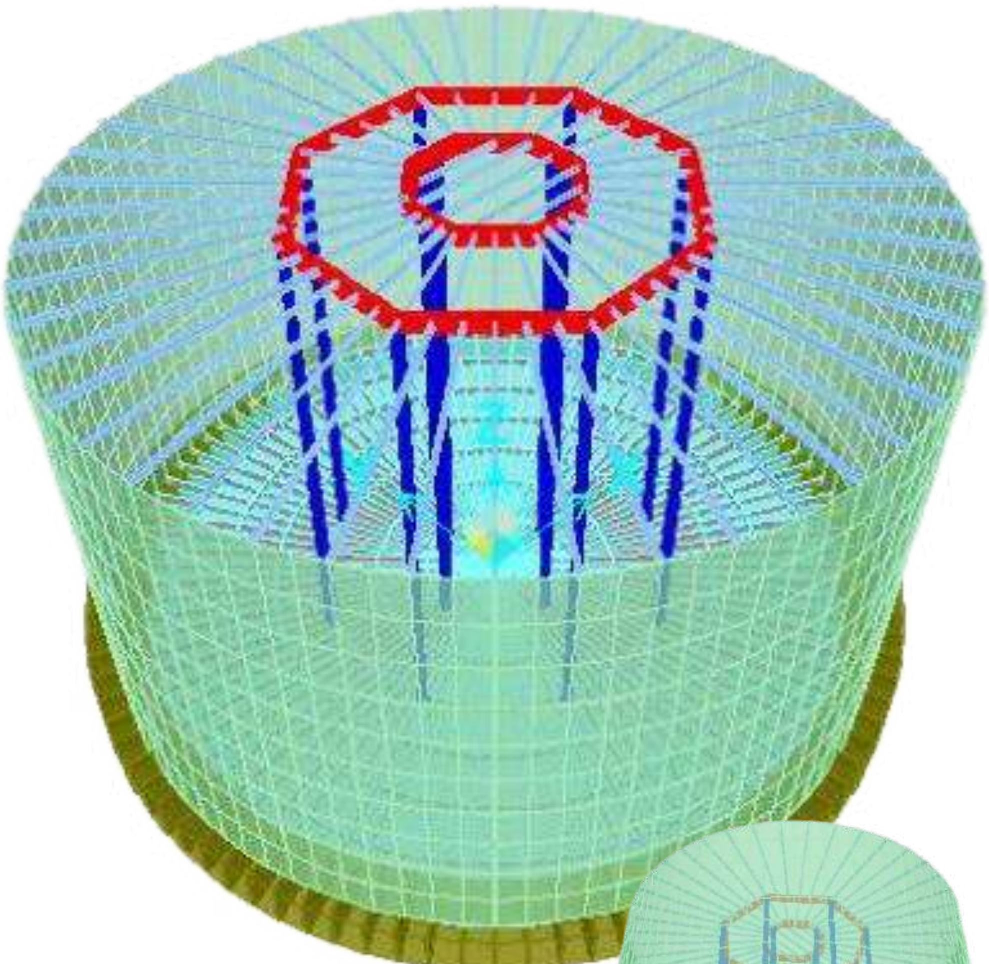
DESIGN & ENGINEERING SERVICES

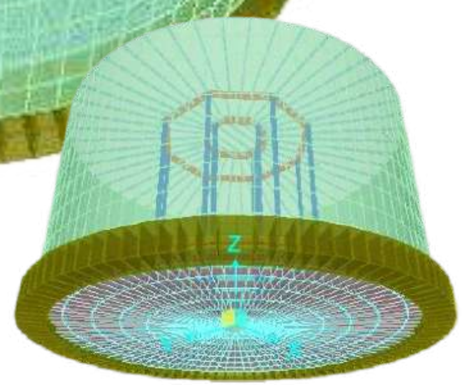
DEHA TECH
GENIUS SOLUTIONS

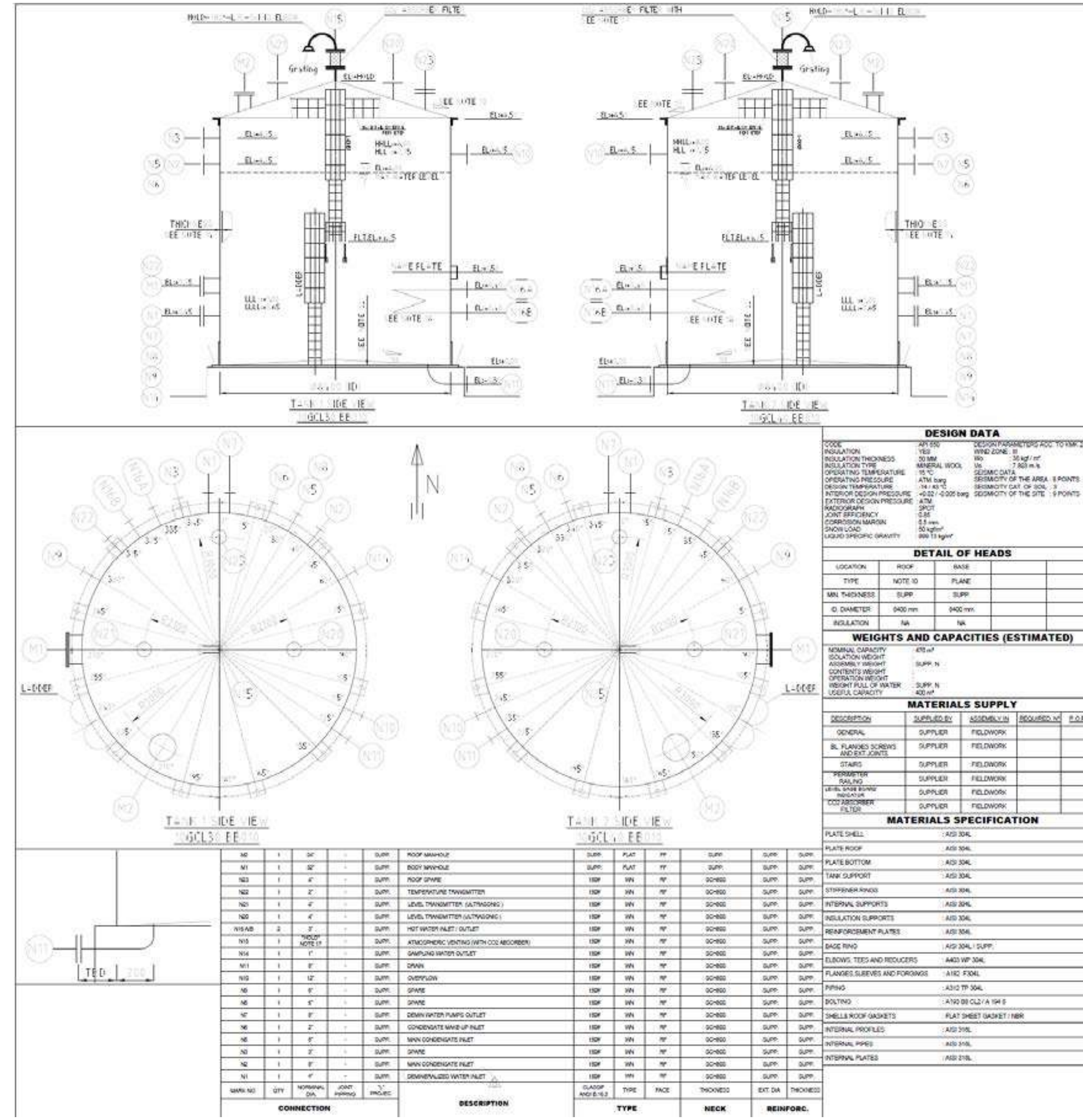


We Provide And Develop Detailed Engineering And Design For Plants

DESIGN & ENGINEERING SERVICES



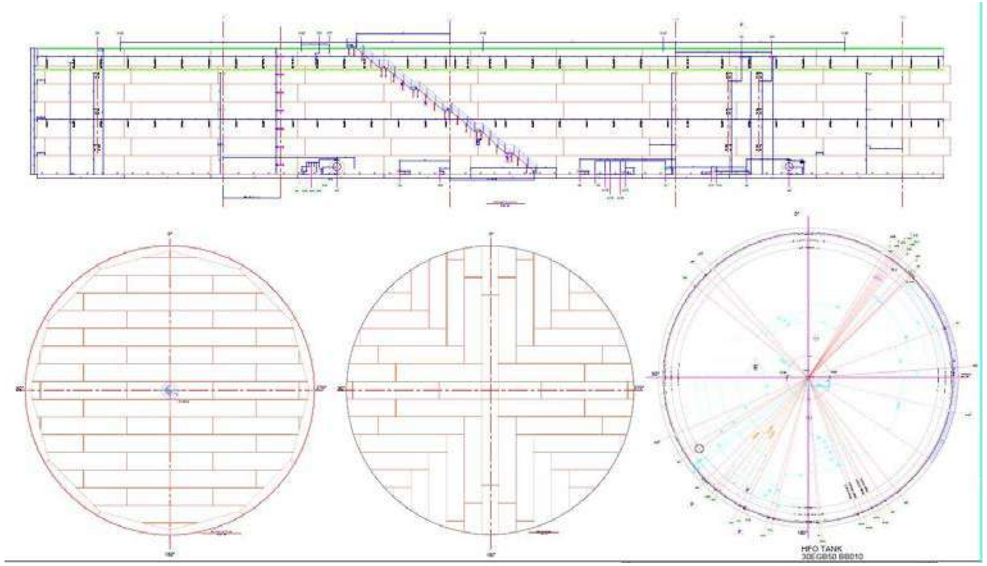




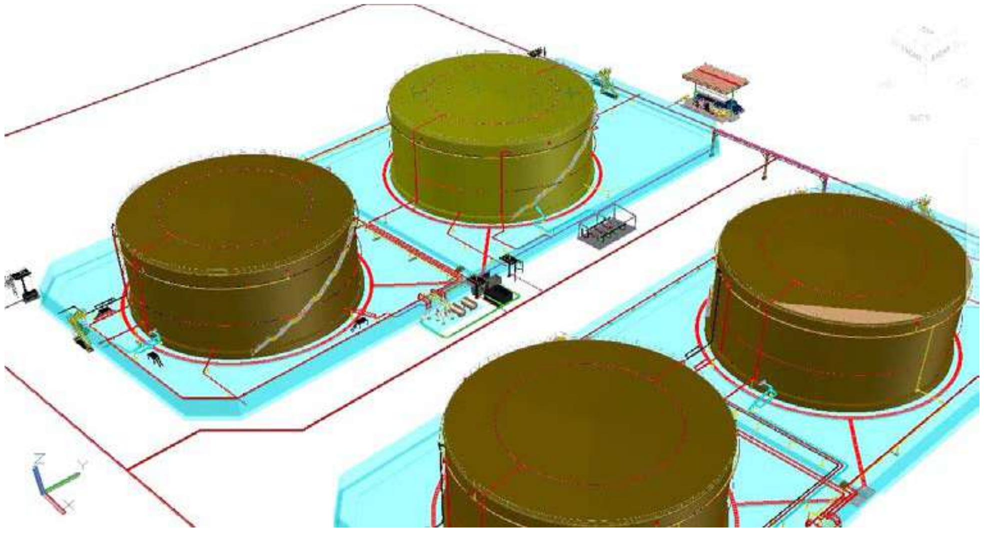
CALCULATION OF THE TANK

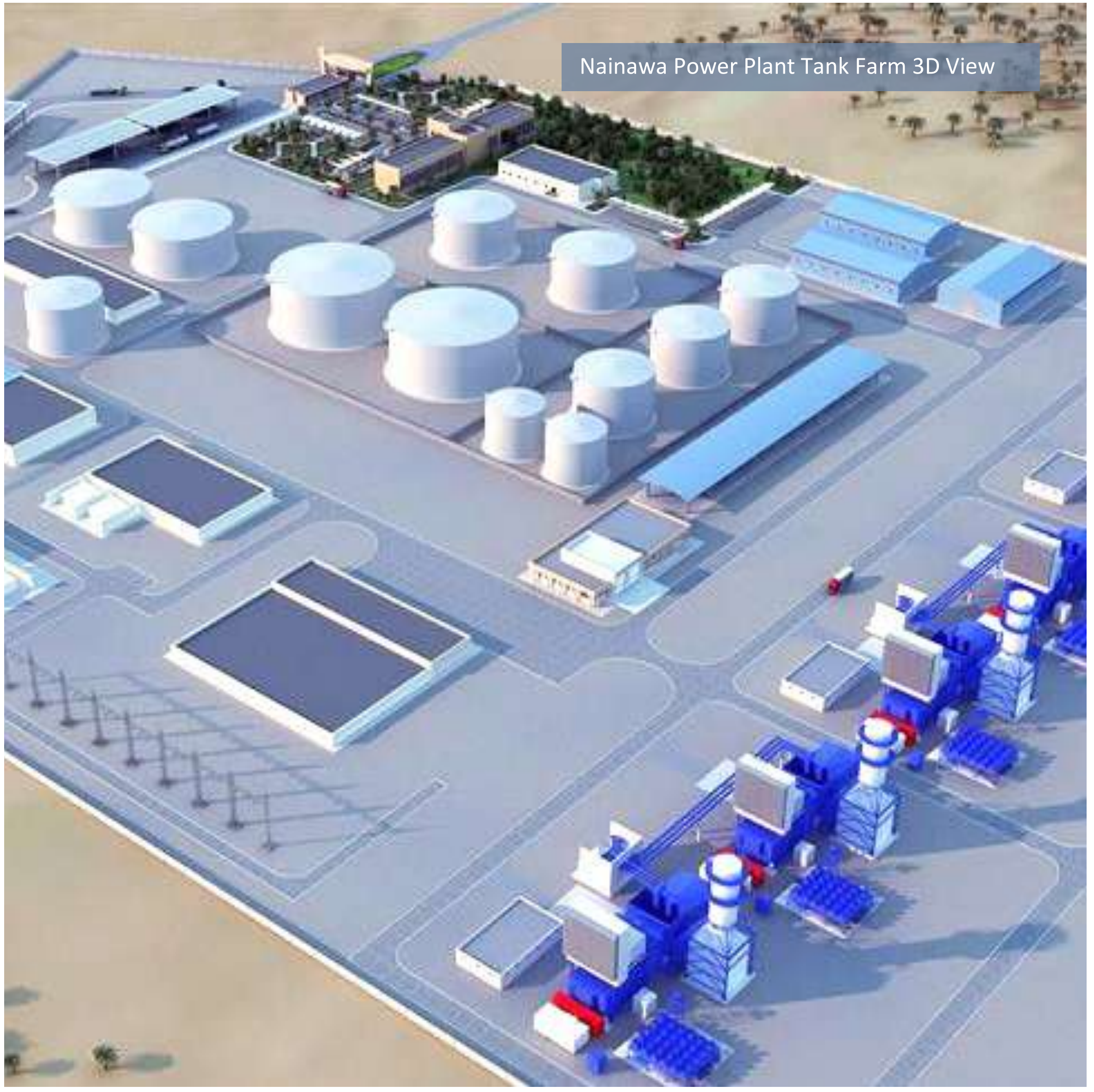
In soil modelling, springs that are determined by the modules of subgrade reaction will be used.

DESIGN & ENGINEERING SERVICES



TANK FARM DESIGN





DESIGN & ENGINEERING SERVICES

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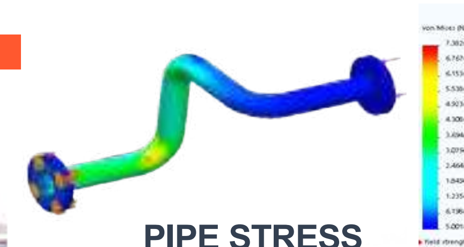
MANUFACTURING OF METERING SKIDS

Scope

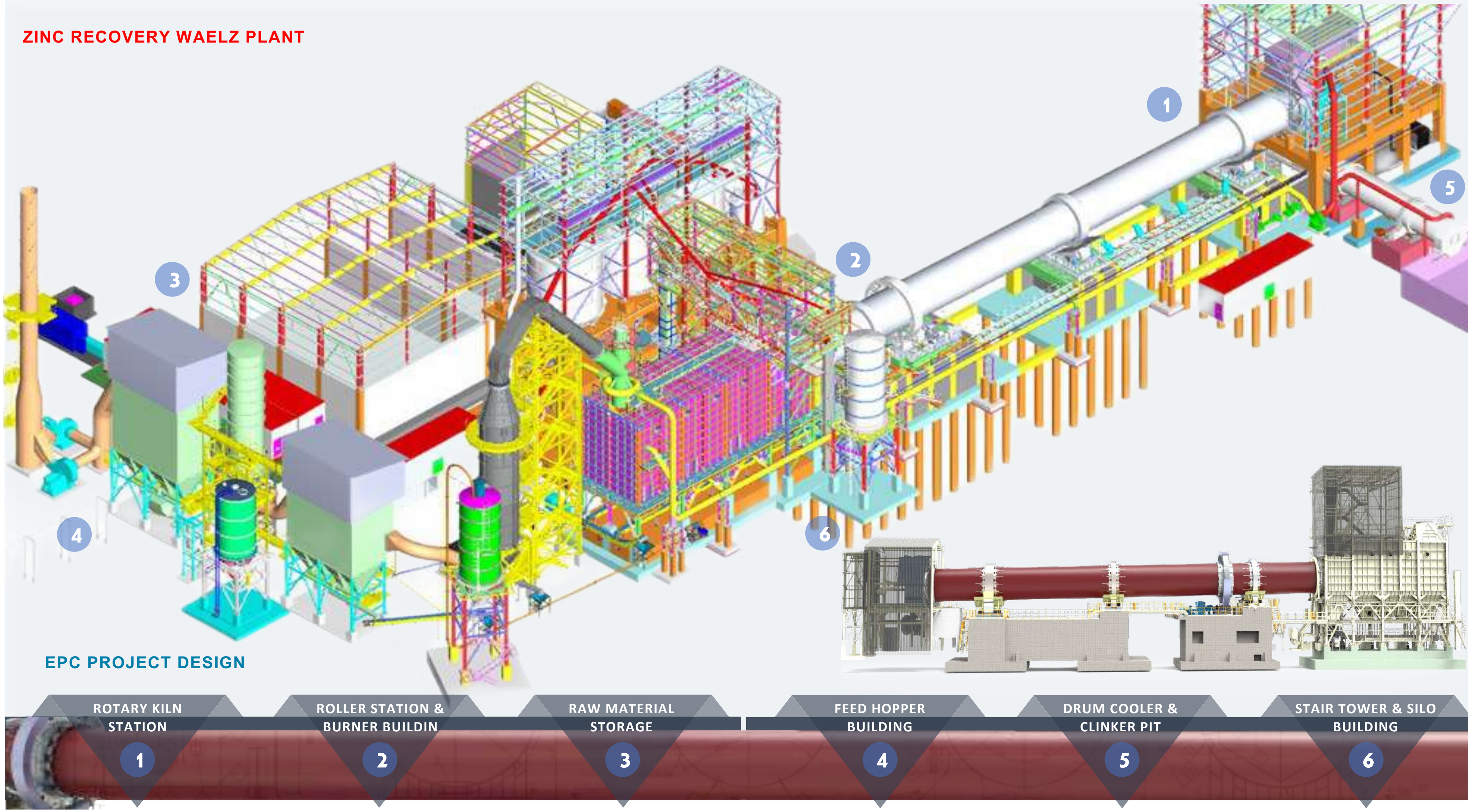
Our project management encompasses detailed design and planning, seamless implementation, perfect interface management as well as compliance with the time schedule and budget.

Pipeline	Consulting
Pipeline System and	Design Examination
Industrial Piping Installation	Piping Planning
Carbon Steel Piping	Consultancy During Pipeline
Spool Piping	Management Erection for Pipelines
Special	Repair Concepts for Pipelines
Stainless Steel Piping	Failure Analysis



PIPE STRESS CALCULATIONS

PIPING DESIGN ANALYSIS



ZINC RECOVERY WAELZ PLANT
1
2
3
4
5
6
EPC PROJECT DESIGN
ROTARY KILN STATION 1
ROLLER STATION & BURNER BUILDIN 2
RAW MATERIAL STORAGE 3
FEED HOPPER BUILDING 4
DRUM COOLER & CLINKER PIT 5
STAIR TOWER & SILO BUILDING 6

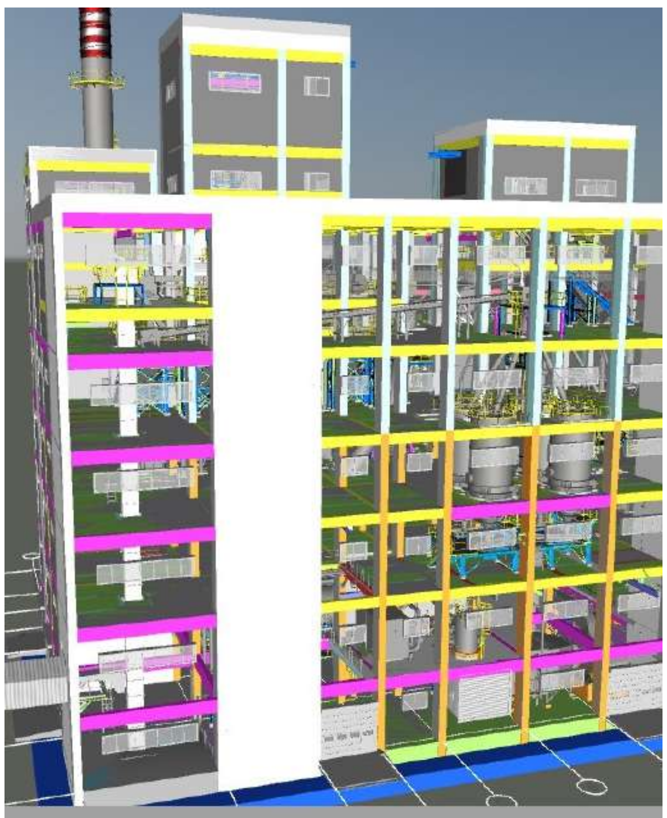
DESIGN & ENGINEERING SERVICES

DEHA TECH
GENIUS SOLUTIONS

ENGINEERING

Scope

Preparation of Manufacturing drawings of Dry Cutting equipment, material supply, manufacturing, assembly, transportation, lifting, lowering, horizontal vertical transport, welding sandblasting and painting works.



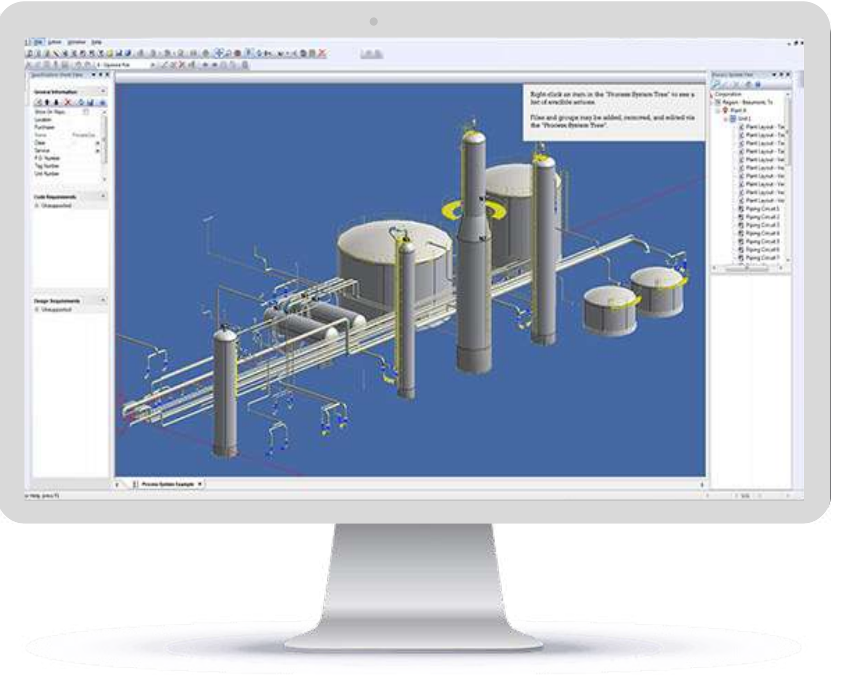
DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

PRESSURE VESSELS AND TANKS

www.dehatech.com

Deha Tech is supplier of Stainless-Steel Tanks, Process Tanks, Storage Tanks and Pressure Vessels. We have great capacity for fabrication and assembly in Tank / Vessel & Storage Facilities.

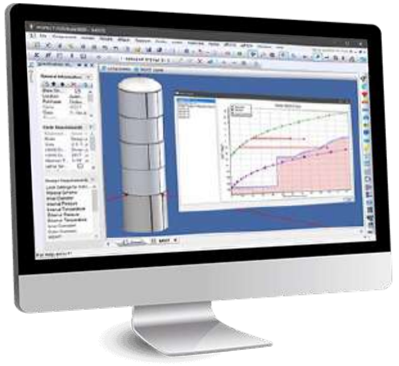
PRESSURE VESSELS AND TANKS



Deha Tech provides genius solutions worldwide for tank storage facilities. Beginning from the tendering phase up to the test and commissioning of such facilities, Deha Tech is the best industrial partner for Green Field and Renovation Projects.

We have over 20 years of experience in the design, fabrication and operation of Tank / Vessel & Storage Facilities for the

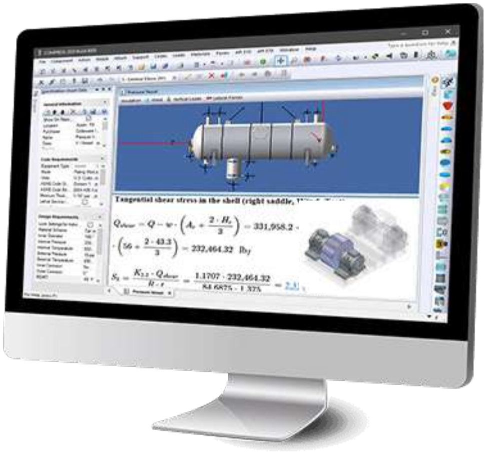
- Oil and Gas
- Petrochemical
- Petroleum
- Bulk Storage
- Chemical
- Pharmaceutical
- Water
- Wastewater Treatment
- Utility industry sectors ranging from simple storage pressure vessels to complex manifolds.



Our Fields of Specialty:

- Storage tanks for crude oil and chemicals
- Finished products
- LPG and LNG
- Biofuels, chemicals, and additives
- Loading and unloading facilities
- Jetties
- Single point moorings

Deha Tech is supplier of Stainless-steel Tanks, Process Tanks, Storage Tanks, Pressure Vessels and Silos. We have great capacity for fabrication and assembly in Tank / Vessel & Storage Facilities.



We Offer You The Highest Level Of Service:

- Competitive Prices
- Custom Built Tanks
- Fuel Management Systems
- Pumps & Accessories
- Prompt & Efficient Service
- Delivery & Collection

PRESSURE VESSELS

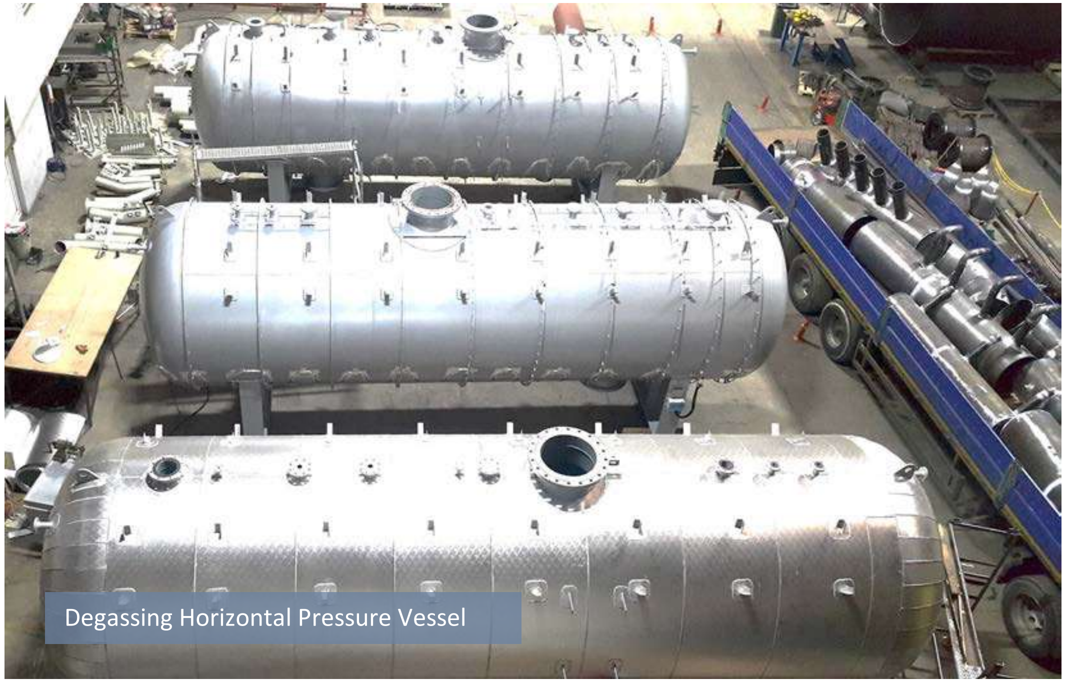
DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY


Tpo Crude Oil Horizontal Separators

Tpo Crude Oil Horizontal Separators


Tpo Crude Oil Horizontal Separators

PRESSURE VESSELS


Degassing Horizontal Pressure Vessel

Horizontal Pressure Vessel


Degassing Horizontal Pressure Vessel

Vertical Surge Tank

PRESSURE VESSELS

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY


Condensate Receiver Tank


Condensate Receiver Tank


Condensate Receiver Tank


Condensate Receiver Tank


Condensate Receiver Tank

PRESSURE VESSELS


Pressure Compensation Surge Vessel


Pressure Compensation Surge Vessel


Condensate Tank


Condensate Tank Shrink-wrap Protection

Condensate Tank

STAINLESS STEEL TANK

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

Stainless Steel Demineralized Water Storage Tank

Stainless Steel Demineralized Water Storage Tank

Stainless Steel Water Storage Tank

DUCTS

Clean Gas Duct

Flue Gas Recirculation for Biomass Power Plant

Filter Chamber

Flue Gas Recirculation

Flue Gas Recirculation

DUCTS


Esindus ACC Ducts


Ragfa Cement Plant Meal Chute


Ragfa Cement Plant Meal Chute


Ragfa Cement Plant Meal Chute

DUCTS

Ragfa Cement Plant Plate Works

Ragfa Cement Plant Plate Works

Ragfa Cement Plant Plate Works

STORAGE TANK PREFABRICATION SERVICES & CAPABILITIES

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

Cutting

Bottom Plates

Welding Edge

Packing Loading

Bending

Annular Plates

Roof Plates & Supports

Truck Loading

Machining

Shell Plates

Dimension Control

All Other Parts

KHABAT THERMAL POWER PLANT

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

KHABAT THERMAL POWER PLANT

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

Fuel Oil and Diesel Storage Tank Farm

Fuel Oil and Diesel Storage Tank Farm

Fuel Oil and Diesel Storage Tank Base

KHABAT THERMAL POWER PLANT

Fuel Oil and Diesel Storage Tank Farm

Fuel Oil and Diesel Storage Tank Farm

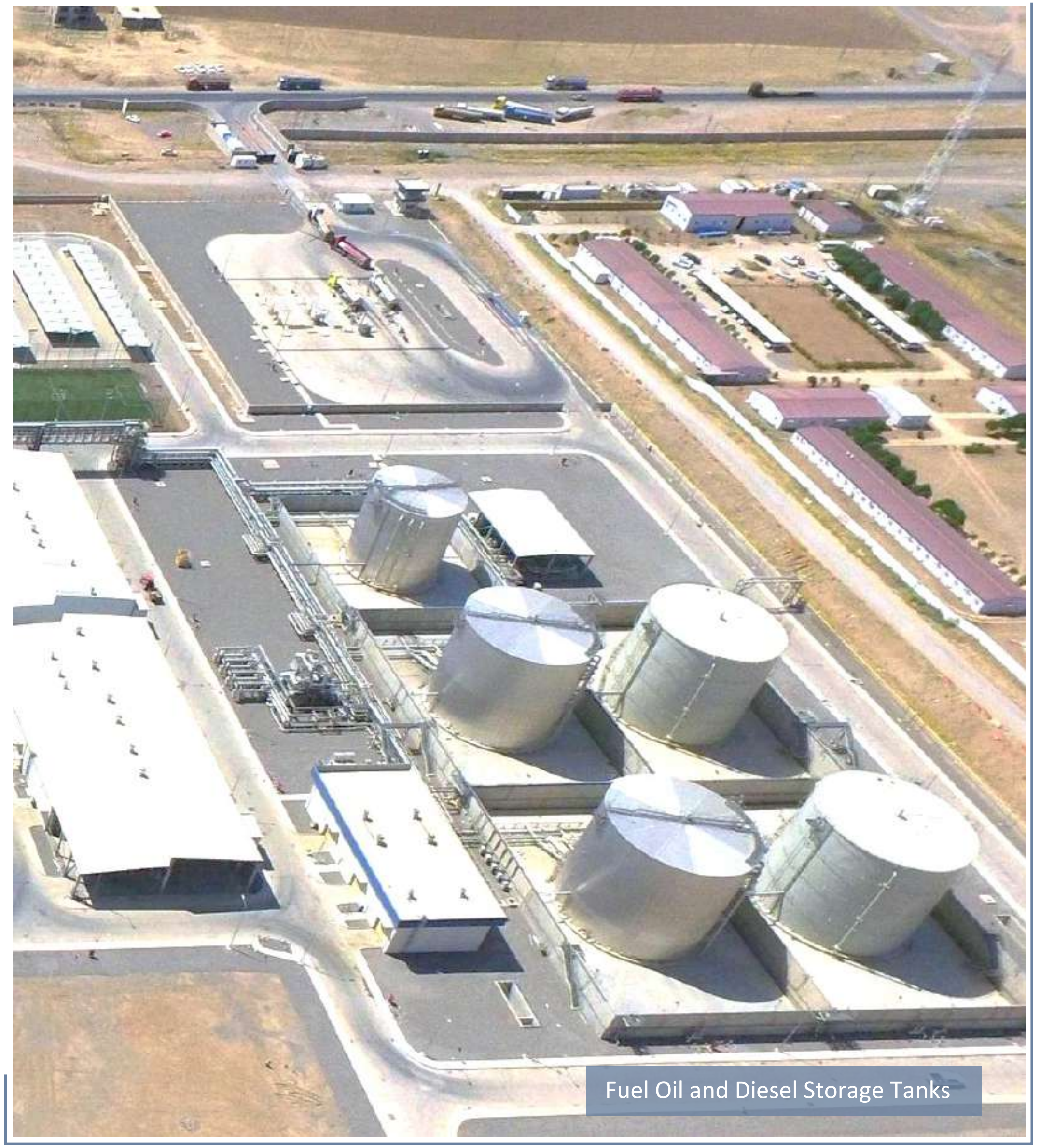
Limestone Storage Silo

KHABAT THERMAL POWER PLANT

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

Fuel Oil and Diesel Storage Tank Farm

Fuel Oil and Diesel Storage Tank Farm



Fuel Oil and Diesel Storage Tanks

KHABAT THERMAL POWER PLANT

DEHA TECH
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KHABAT THERMAL POWER PLANT

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

NAINAWA 750MW GAS TURBINE POWER PLANT

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

Works Completed by Deha Tech

Nainawa 750 MW Gas Turbine PP Tank Farm

Nainawa 750 MW Gas Turbine PP Tank Farm

Fuel & Fire Fighting System Piping

NAINAWA 750MW GAS TURBINE POWER PLANT

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

NAINAWA 750MW GAS TURBINE POWER PLANT

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

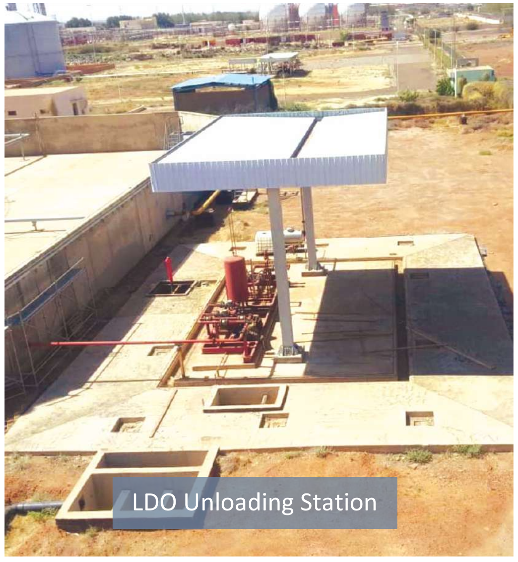
GARRI-3 SCPP

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

GARRI-3 SCPP


Foam Station and Valve Chamber for LDO & HFO Tanks


Garri 3 - 750 MW SCPP Heavy Fuel Oil Tank


LDO Unloading Station


HFO Tank Base


Works Completed by Deha Tech

GARRI-3 SCPP

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

Garri 3 - 750 MW SCPP LDO Tank

Works Completed by Deha Tech

Foam Station

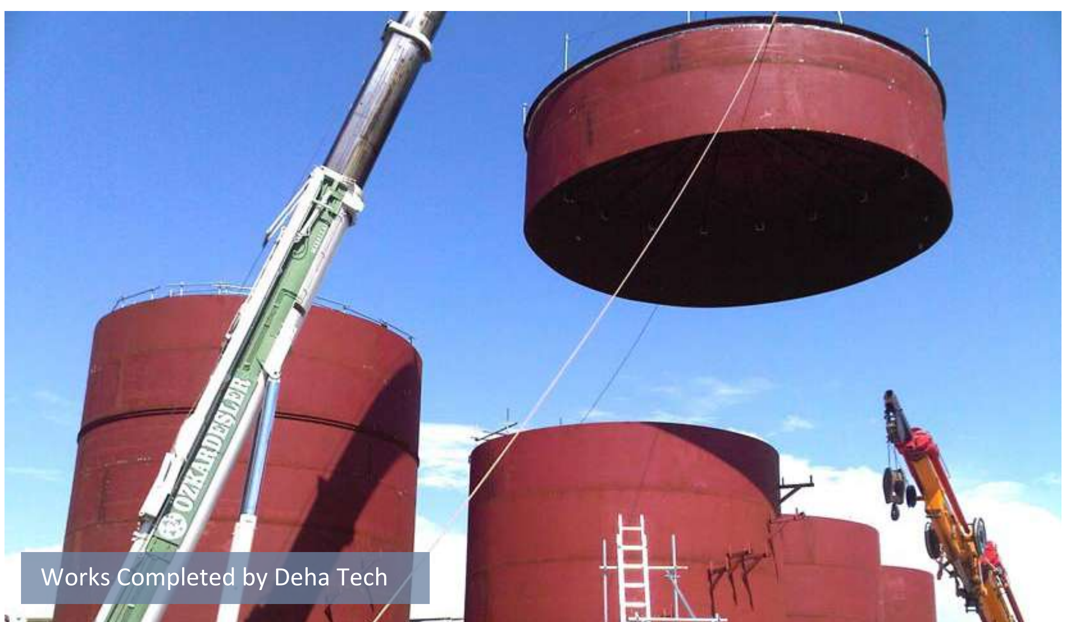
GARRI-3 SCPP

Garri 3 - 560 MW SCPP Tank Farm and Turbine Project General View

900MW ERZIN COMBINED CYCLE POWER PLANT

900MW ERZIN COMBINED CYCLE POWER PLANT

900 MW Erzin CCPP Tank Farm

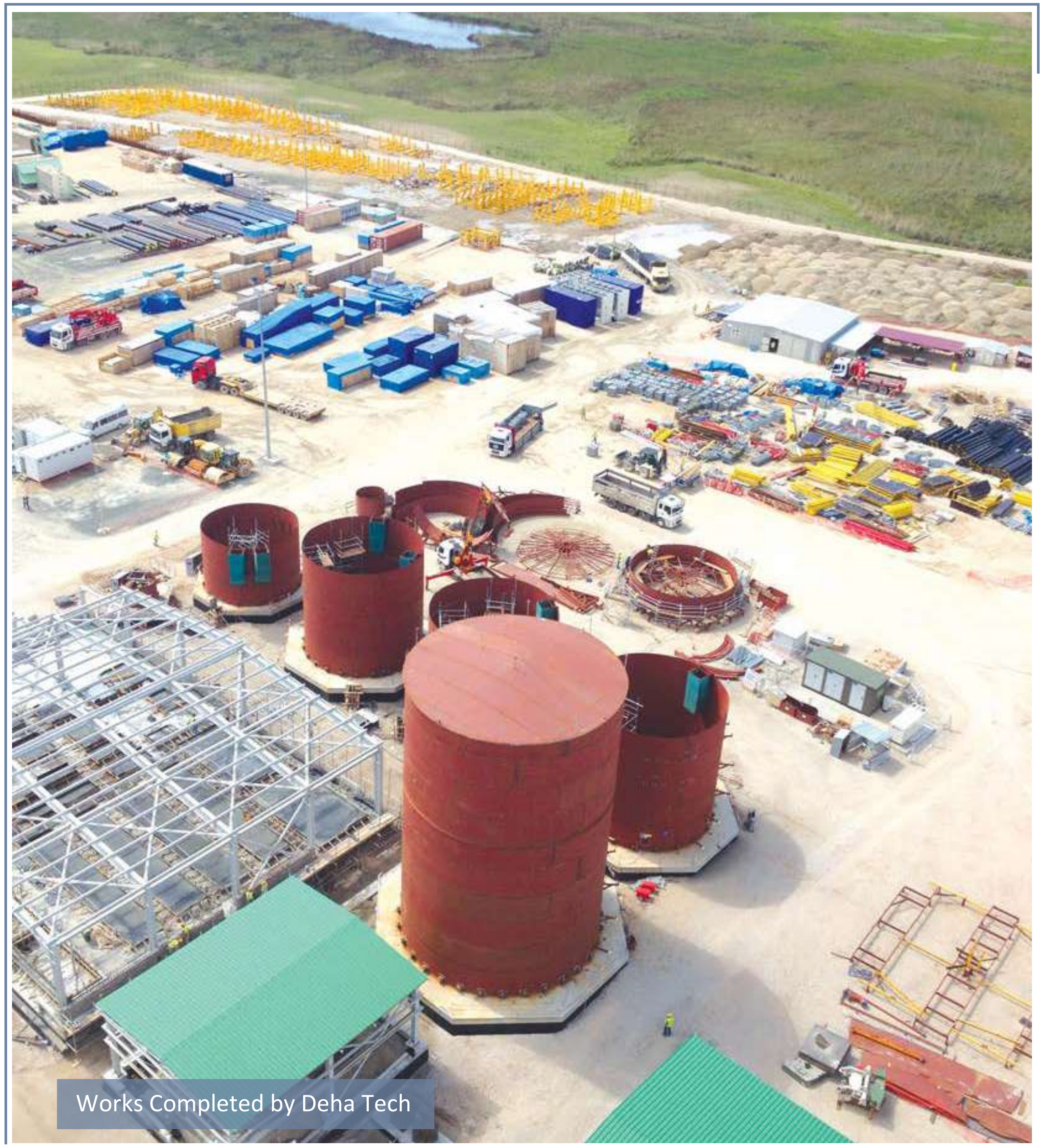


Works Completed by Deha Tech

Works Completed by Deha Tech

900 MW Erzin CCPP Tank Farm

900MW ERZIN COMBINED CYCLE POWER PLANT


Works Completed by Deha Tech

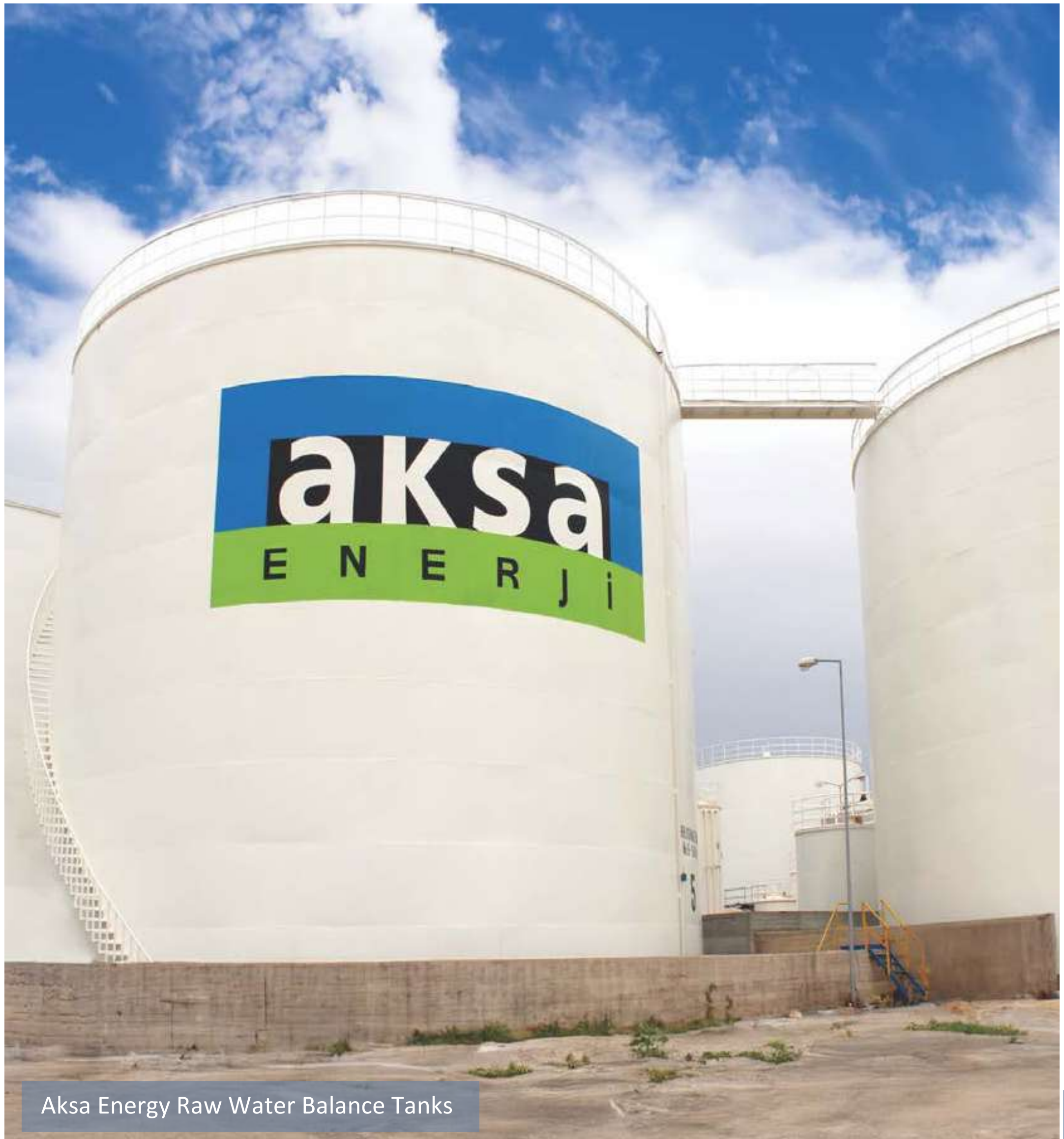

900 MW Erzin CCPP Tank Farm


900 MW Erzin CCPP Tank Farm

900MW ERZIN COMBINED CYCLE POWER PLANT

900 MW Erzin Combined Cycle Power Plant

AKSA ENERGY POWER PLANT



Aksa Energy Raw Water Balance Tanks

LO Service Tank

Aksa Energy Buffer Tank

AKSA ENERGY POWER PLANT

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

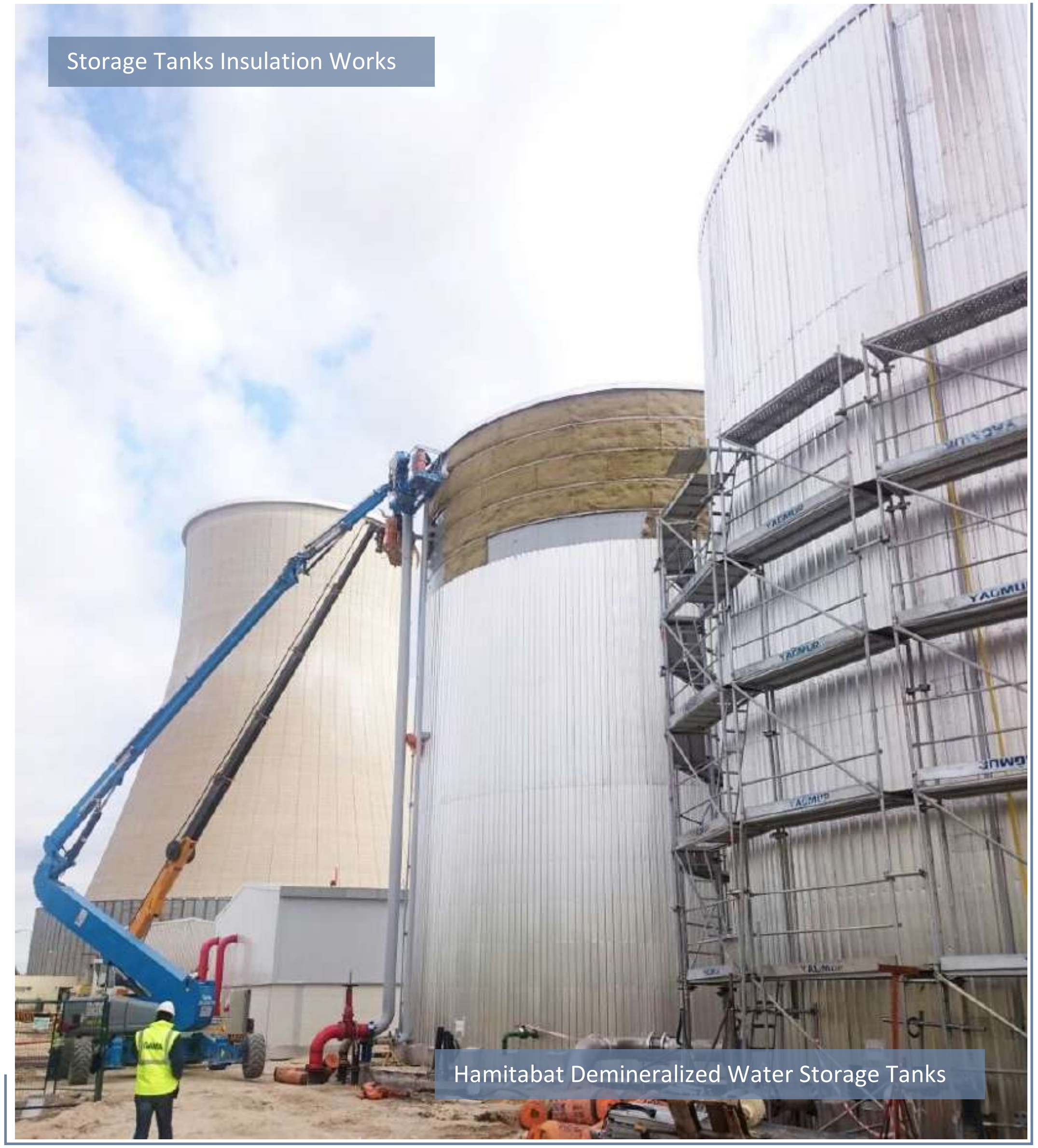
Aksa Energy HFO Buffer Tank

HAMITABAT WATER STORAGE TANKS

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

Hamitabat Demineralized Water Storage Tanks

Storage Tanks Insulation Works



Hamitabat Demineralized Water Storage Tanks

HAMITABAT WATER STORAGE TANKS

Hamitabat Demineralized Water Storage Tanks

Storage Tanks Insulation Works

Hamitabat Demineralized Water Storage Tanks

Hamitabat Demineralized Water Storage Tanks

HAMITABAT WATER STORAGE TANKS

Hamitabat Demineralized Water Storage Tanks

HAMITABAT WATER STORAGE TANKS

Hamitabat Combined Cycle Power Plant General View

MARY – 3 COMBINED CYCLE POWER PLANT

Works Completed By Deha Tech

- 2 Pcs Acid Tanks
- 2 Pcs Alkali
- 2 Pcs Clarified
- 3 Pcs Condensate Tanks
- 2 Pcs De-Mineralised Tanks
- 1 Pc Potable Water Tank

Tank Farm

Location	Turkmenistan
Plant Size	1574 MW
Completion	December 2018
Scope	Tank Farm Manufacturing

STAINLESS STEEL TANK

Stainless Steel Tank

Stainless Steel Tank

SILOS


Khabat Limestone Storage Silo


Khabat Limestone Storage Silo Assembly

Khabat Limestone Storage Silo

Khabat Limestone Storage Silo

Khabat Limestone Storage Silo

SILOS

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

Khabat Limestone Storage Silo

Khabat Limestone Storage Silo

SILOS


Lime Silo


Residue Silo


Residue Silo


Residue Silo

SILOS

DEHA TECH
PRESSURE VESSEL AND TANK INDUSTRY

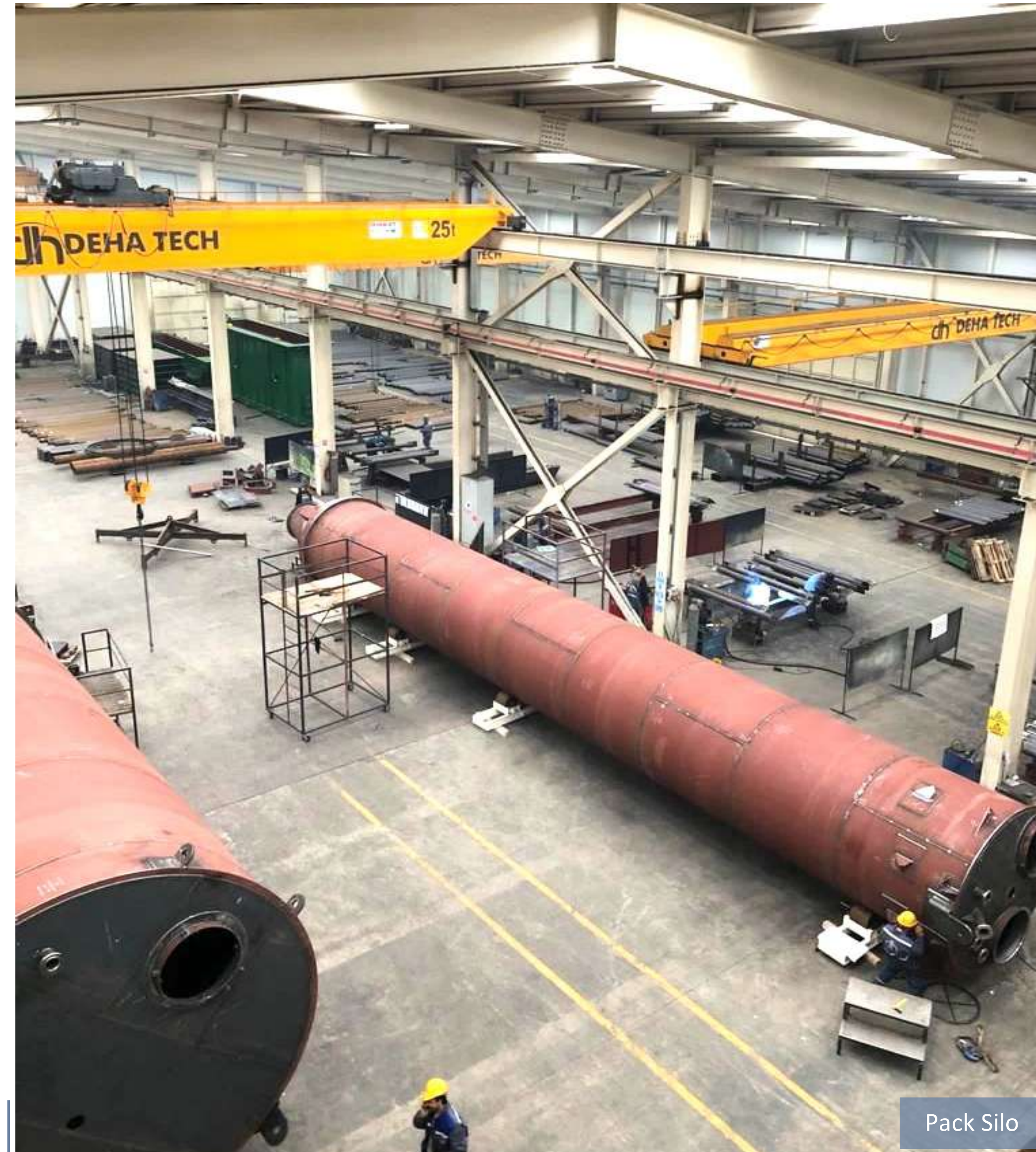
Residue Silo

Residue Silo

SILOS

Pack Silo


Pack Silo



Pack Silo

SILOS

Residue Silo

SILOS

SILOS

Residue Silo

Lime Silo

Residue Silo

Residue Silo

SILOS

Lime Silo

SILOS

Bolu Ash Silo

SILOS

Bolu Ash Silo

SILOS

Bolu Biomass Plant Process Equipment

Bolu Ash Silo

Bolu Ash Silo

Bolu Biomass Plant Steel Structure

SILOS

DEHA TECH
MACHINERY INDUSTRY AND TRADE INC.

MACHINERY INDUSTRY

www.dehatech.com

Deha Tech undertakes a wide range of fabrication and assembly projects across many industries, provides a fully comprehensive service from high volume work to small scale production jobs.

MACHINERY INDUSTRY

DEHA TECH
MACHINERY INDUSTRY AND TRADE INC.

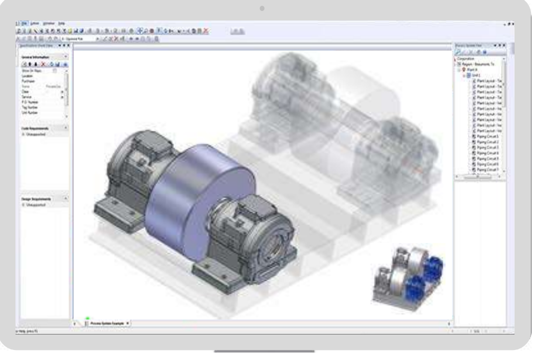
Deha Tech is recognized as a leading global supplier of fabricated components and holds an impressive range of approvals/standards for various grades of carbon steels and aluminium and stainless steel

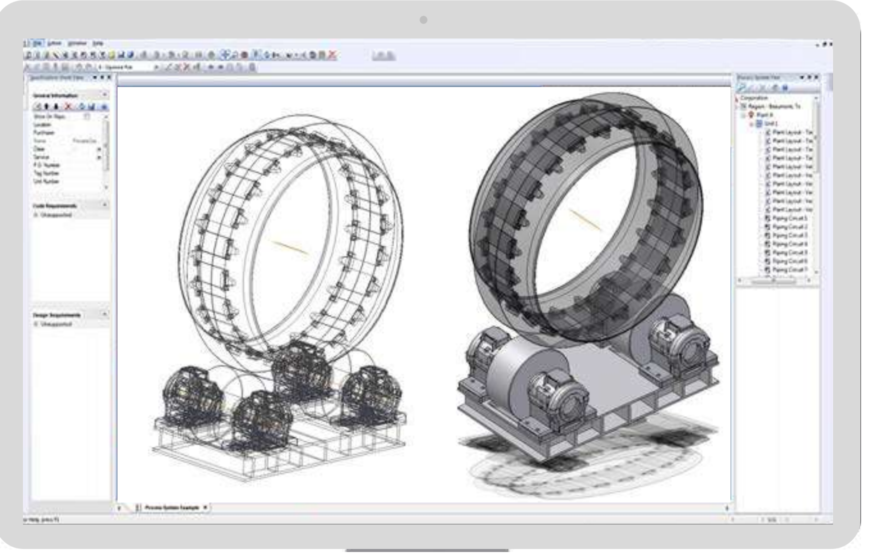
Our manufacturing facility offers an impressive 37,000 sq. Meters of modern manufacturing space. We have a wide range of modern fabrication and assembly equipment and highly qualified engineers and design specialists, with full in-house computer facilities.

We offer cost-effective, high-quality engineering and fabrication services.
A range of materials can be competently welded by our skilled workforce such as armoured steels, quenched and tempered structural steels, abrasive resistant steels, offshore grade steels and aluminium.

Deha Tech`s Advantages and Benefits in Fabrication & Assembly:

- A dedicated assembly team with many years' experience in Hydraulic, Pneumatic and Mechanical assembly.
- Highly skilled workforce allows us to supply complex components fully finished and ready to use.
- Invested in the latest industry leading equipment so we are able to manufacture with more speed and accuracy
- Keeping costs down for our global customer base
- Systematically improving the overall quality of our fabrication and assembly services.
- Extensive range of material welding capabilities
- Faster lead times, and lower transportation costs overall





Deha Tech undertakes a wide range of fabrication and assembly projects across many industries, provides a fully comprehensive service from high volume work to small scale production jobs

Our services include:

- Sub-assembly processes
- Full assembly processes from start to finish
- Design & Project management
- Assembly large and complex projects
- Coating Solutions
- Turnkey Solutions
- Our turnkey solutions make fabrication and assembly faster with comprehensive fabrication services from start to finish.


Grate Riddling Hoppers


Grate Riddling Hoppers


Grate Riddling Ducts


Grate Riddling Hoppers

Feed Hoppers for EfWP

Feed Hoppers for EfWP

Feed Hopper Chute for EfWP

Feed Hoppers for EfWP

Feed Hopper for EfWP

Feed Hoppers for EfWP

Bottom Ash Chutes for EfWP

Grate Riddling Flap Ducts for EfWP

Bottom Ash Chutes for EfWP

Bottom Ash Chutes for EfWP

Boiler Non-Pressure Parts for EfWP

Boiler Non-Pressure Parts for EfWP

Filter Plate Work for EfWP

Filter Plate Work for EfWP

MACHINERY INDUSTRY

Gas Duct

Bucket Wheel Structure for Stacker & Reclaimer

MACHINERY INDUSTRY

Ship Unloader Boom

Ship Unloader Boom

Ship Unloader Boom Support Frame

MACHINERY INDUSTRY

Ram Type Bottom Ash Extractors for EfWP

Fabric Filters Manufacturing

Fabric Filter

Fabric Filters Manufacturing

Cranes Loading Fabric Filters for Shipment

Fabric Filters Packing Process

Fabric Filters Ready for Shipment


Fabric Filters Transport to Shipment

MACHINERY INDUSTRY

Loading Fabric Filter for Shipment

Loading Fabric Filter for Shipment

Raw Gas Duct

Raw Gas Duct

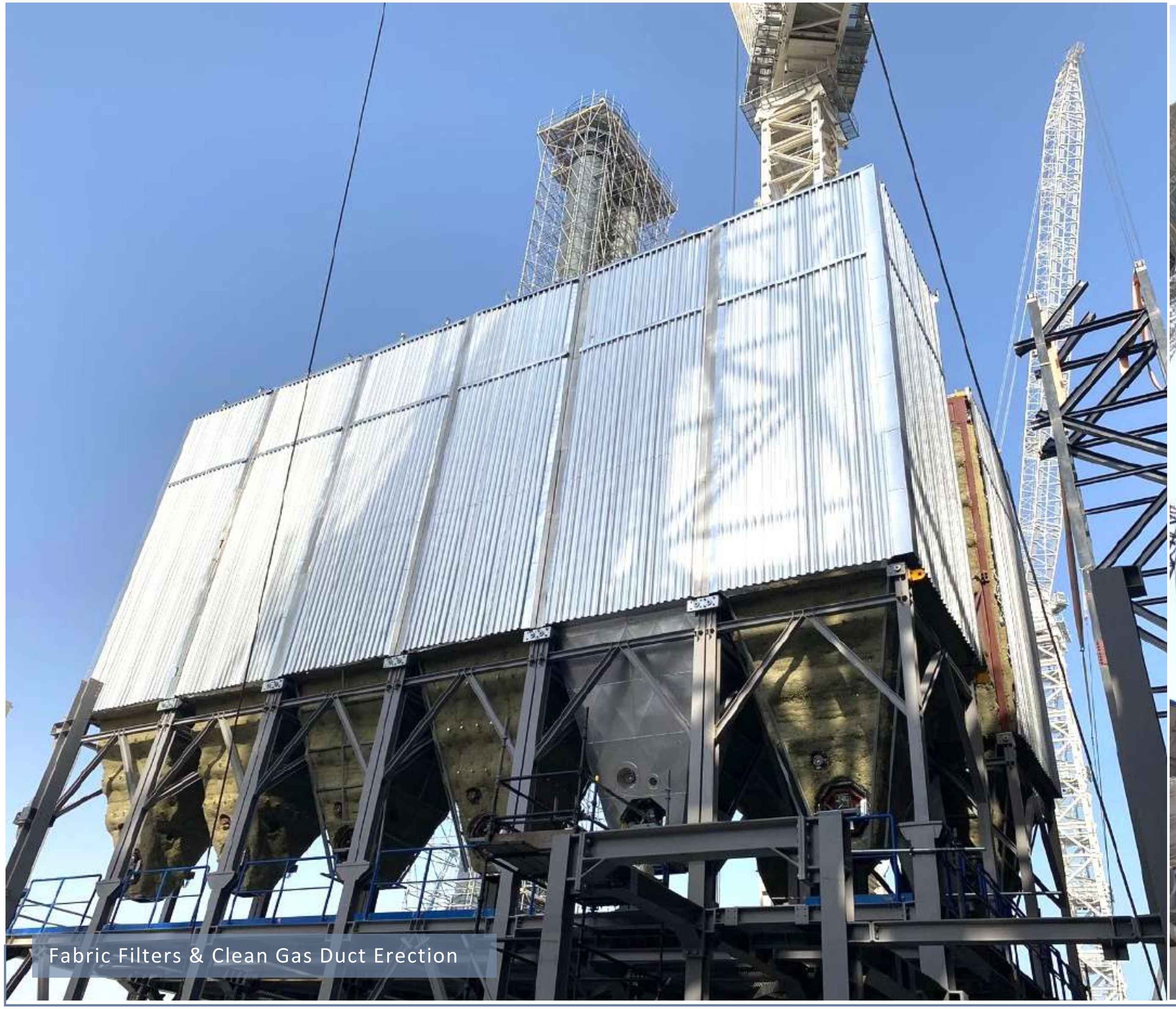
Clean Gas Duct

Fabric Filters & Clean Gas Duct Shipment

Fabric Filters & Clean Gas Duct Shipment

Fabric Filters & Clean Gas Duct Erection

Fabric Filters Erection



Fabric Filters & Clean Gas Duct Erection

Fabric Filters & Clean Gas Duct Erection

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

CONSTRUCTION AND CIVIL WORKS

www.dehatech.com

Turnkey Construction Projects

Deha Tech Group Company supplies erection services for Civil, Mechanical, Electric & Automation erection services by qualified erection team. Erection works are executed under the safety and regulated working conditions of each country.

During erection period, necessary tests, norms and standard are applied to full fill work completion in proper installation.

And Deha Tech`s primary aim is to finish our job properly and always be focused on the future and produce better results in the field of following services:

- Civil and Steel Construction
- Residences
- Stadiums /Airports /Hospitals
- Commissioning, Start-up Assistance
- Equipment & Machinery Installation
- Automotive Assembly Plant
- Civil and Steel Construction
- Ammonium Urea and Fertilizer Plant
- Port and Harbour
- Roads and Bridges

KARTEPE FACTORY AND ADMINISTRATIVE BUILDING PROJECT

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Project Name	Kartepe Factory and Administrative Building
Location	Turkey / Kocaeli / Kartepe / Arslanbey
Client	Deha Tech Machinery
Project Start	05.07.2020
Finish Date	07.06.2021
Project Scope	15250 m² Land Area 2000 m² Administrative Building 10.000 m² Closed Factory Area 1500 m² Utilites Area 5500 m² Open Stock Area Machine foundations Infrastructure works

KARTEPE FACTORY AND ADMINISTRATIVE BUILDING PROJECT

Civil Works		
Excavation	m^3	12.000
Rainwater and Wastewater Infrastructure	mt	2500
Back Filling	m^3	15.000
Form Work	m^2	7.000
Rebar Ø8-Ø24	ton	400
Concrete	m^3	2000
Waterproofing	m^2	2500
Industrial Floor Concrete (h=20cm)	m^2	16.000
Sandwich Panel Erection	m^2	15.000
Silicone Facade System	m^2	450
Steel Structure Erection and others	ton	1200

KARTEPE FACTORY AND ADMINISTRATIVE BUILDING PROJECT

Administrative Building

Factory Building

KARTEPE FACTORY AND ADMINISTRATIVE BUILDING PROJECT

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.


Factory and Administrative Building

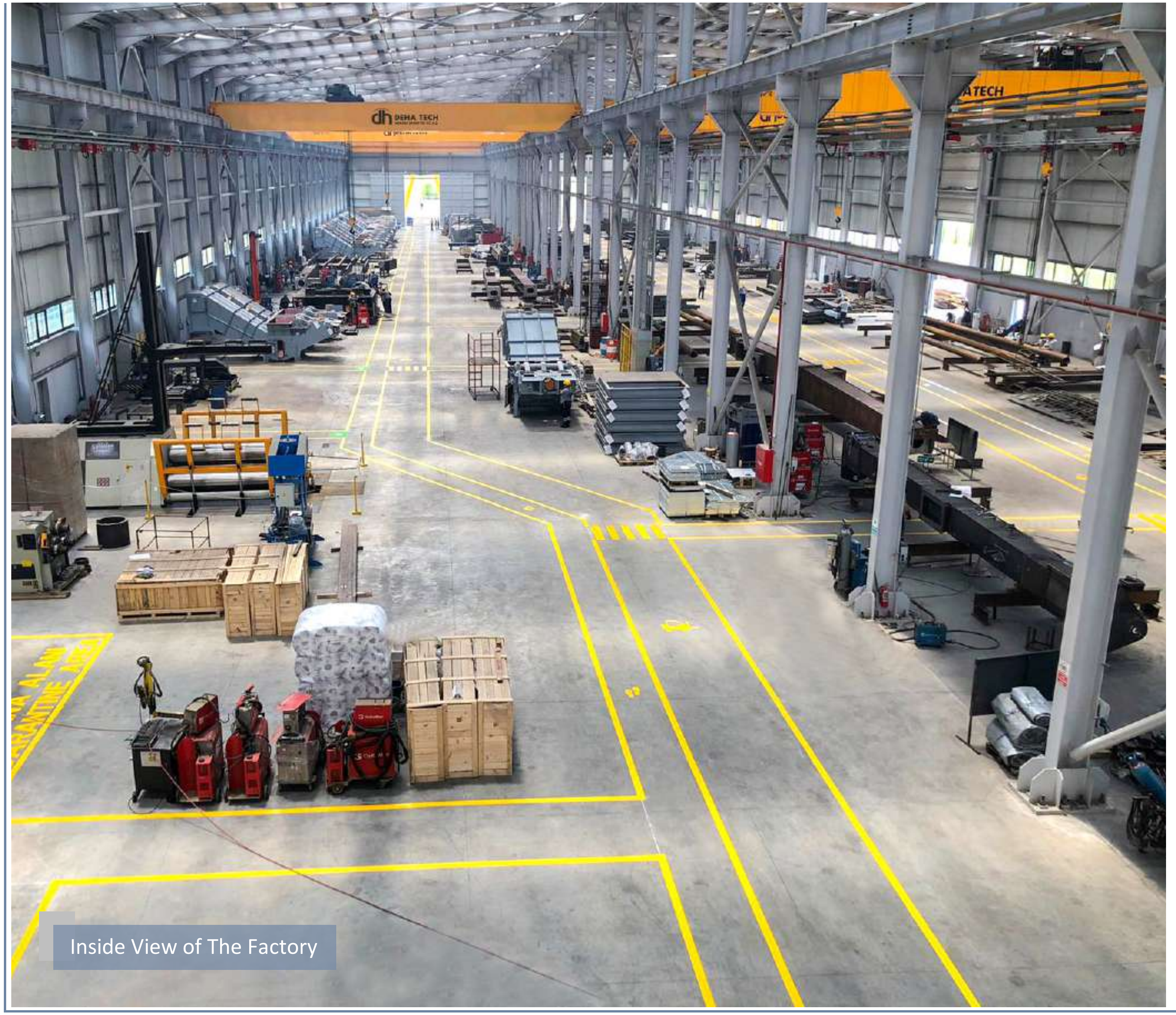

Civil Works


Completed by Deha Tech

KARTEPE FACTORY AND ADMINISTRATIVE BUILDING PROJECT

KARTEPE FACTORY AND ADMINISTRATIVE BUILDING PROJECT

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.



Inside View of The Factory

GARRI-3 OCPP PROJECT CONSTRUCTION INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

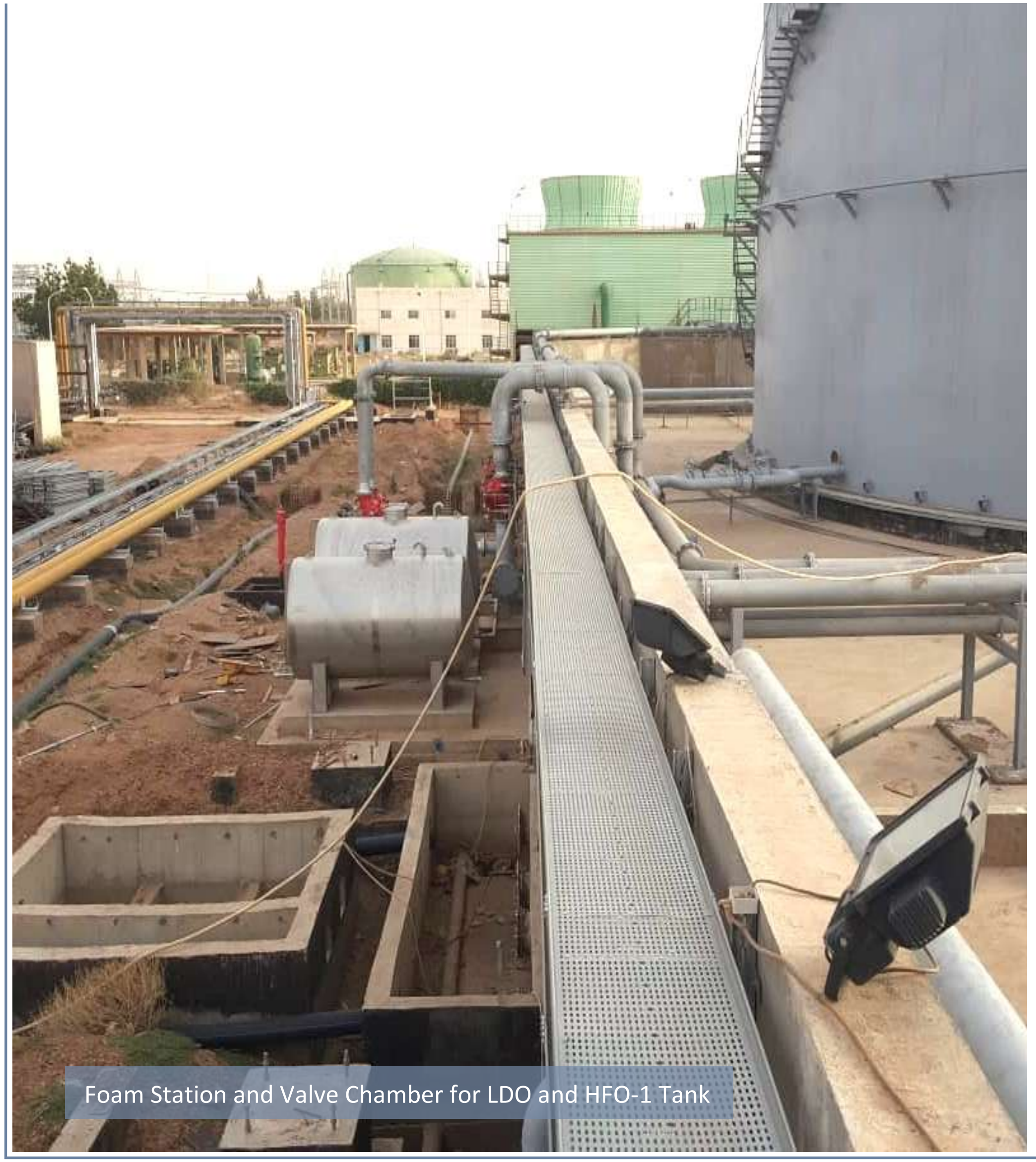
Project Name	Garri-3 SCPP, Tank Farm and Fuel Unloading Stations
Location	Sudan
Client	SEMI International Trading FZE
Project Start	21.12.2018
Project Finish	Ongoing
Project Scope	Engineering, Procurement, Construction, Test and Commissioning of Fuel Unloading Station and Fuel / Water Tanks in Garri-3 Open Cycle Power Plant

Construction Tank Farm and Fuel Unloading Station

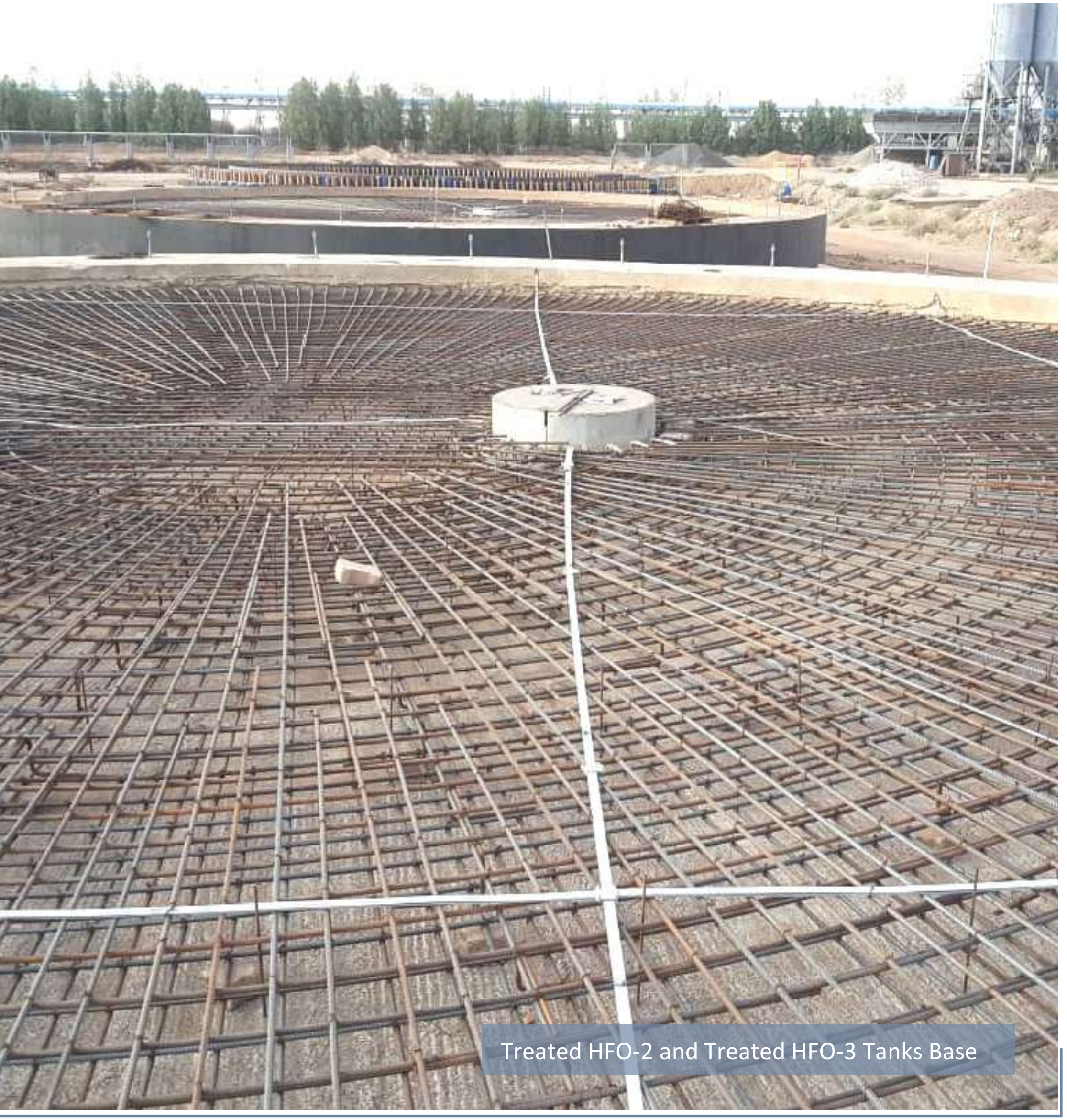
GARRI-3 OCPP PROJECT CONSTRUCTION INFORMATION

Works Completed by Deha Tech

HFO-2 Tank and Dike Wall



Foam Station and Valve Chamber for LDO and HFO-1 Tank



Treated HFO-2 and Treated HFO-3 Tanks Base

GARRI-3 OCPP PROJECT CONSTRUCTION INFORMATION

HFO-3 Tank Base

Foam Station

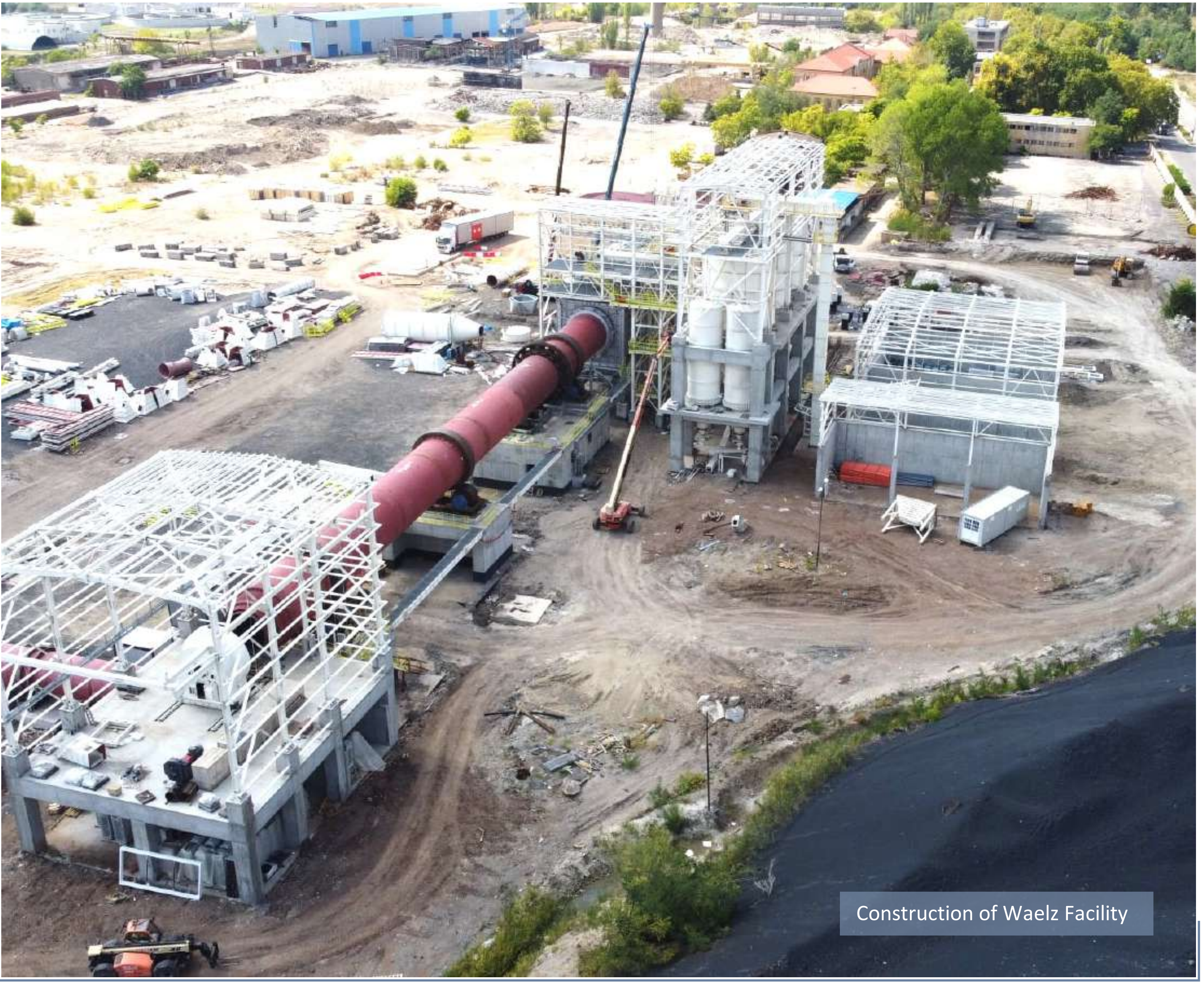
WAELZ PLANT PROJECT BUILDING INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Project Name	Waelz facility for processing of Zinc Bearing Materials
Location	Bulgaria
Client	HARMONEE
Project Start	09.03.2020
Project Finish	Ongoing
Project Scope	Construction of “Waelz facility for processing of Zn Bearing Materials Project” civil and mechanical works

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



Construction of Waelz Facility

WAELZ PLANT PROJECT BUILDING INFORMATION

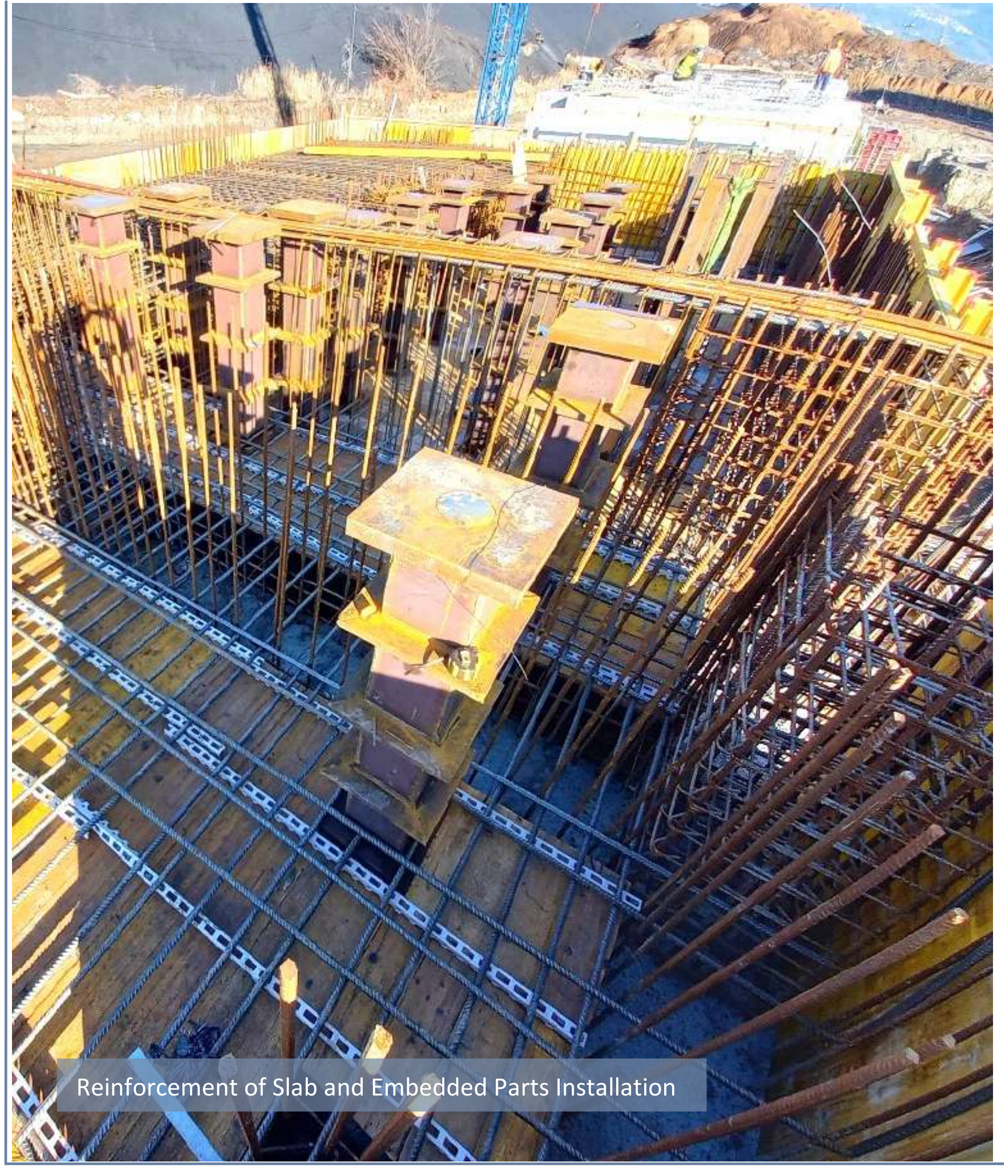
DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Civil Works	Units	Quantity
Form Work	m^2	5350
Concrete	m^3	4200
Reinforcement Steel	t	570

Roller Kiln Station Supporting Constructures for Rotary Kiln	Units	Quantity
Concrete	m^3	1500
Form Work	m^3	1300
Lean Concrete	m^2	80
Rebars	kg	155000

Stages of Construction: Excavation and Backfill

WAELZ PLANT PROJECT BUILDING INFORMATION



Reinforcement of Slab and Embedded Parts Installation

Roller stations 1, 2 and 3 – Completed Civil Works

WAELZ PLANT PROJECT BUILDING INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Foundation Formwork and Reinforcement

Walls Formwork and Reinforcement

WAELZ PLANT PROJECT BUILDING INFORMATION

Feed Hopper Building

Feed Hopper Building – it has the deepest foundation	Units	Quantity
Concrete	m^3	250
Form Work	m^3	500
Lean Concrete	m^2	11
Rebars	kg	24200

1: Excavation, backfill, lean concrete, waterproofing, lean concrete, reinforced foundation, walls, slabs, embedded steels

Frames and rollers have been installed on all 3 Roller stations

WAELZ PLANT PROJECT BUILDING INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Excavation, Backfill and Lean Concrete

Walls Formwork

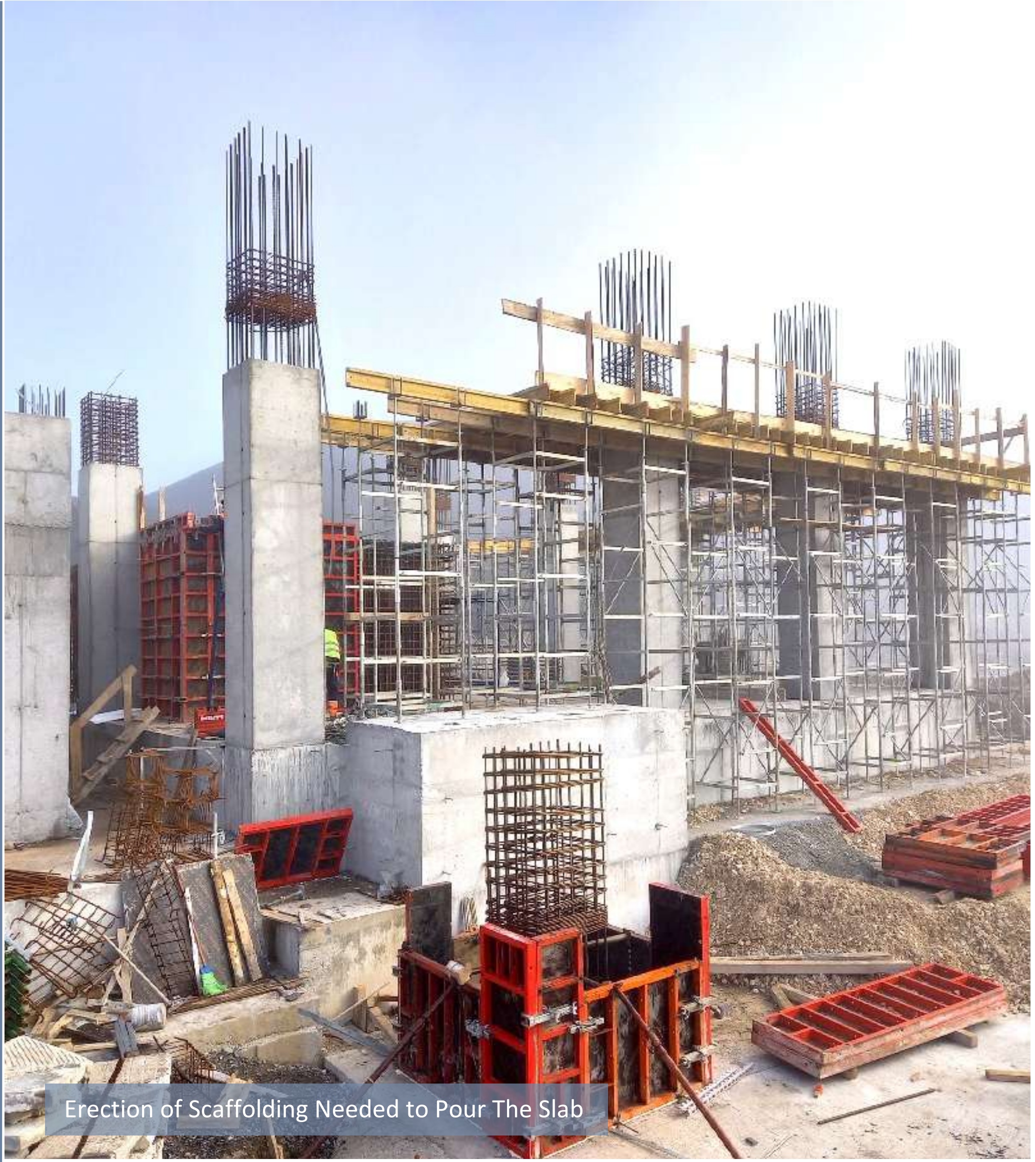
Burner Building	Units	Quantity
Concrete	m^3	795
Form Work	m^3	1300
Lean Concrete	m^2	45
Rebars	kg	86500

WAELZ PLANT PROJECT BUILDING INFORMATION

Foundation, Walls, Backfill and Level 0 Slab

Columns, Beams and Slab

WAELZ PLANT PROJECT BUILDING INFORMATION


Erection of Scaffolding Needed to Pour The Slab


Completed Reinforced Concrete Structure of Burner Building

WAELZ PLANT PROJECT BUILDING INFORMATION


Settling Chamber and Stair Tower

Settling Chamber and Stair Tower	Unit	Quantity
Concrete	m^3	500
Form Work	m^3	330
Lean Concrete	m^2	36
Rebars	kg	50800

Settling chamber and stair tower – Equipment needed for settling the product

1. Excavation, backfill, lean concrete, foundation reinforcement and concrete
2. Formwork, embedded parts and anchorages (needed for the erection of steel structure) and concrete for the columns

WAELZ PLANT PROJECT BUILDING INFORMATION

Concrete Pouring

Supporting Steel Structure

WAELZ PLANT PROJECT BUILDING INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.


Settling Chamber and Stair Tower Complete

Raw Material Storage	Units	Quantity
Concrete	m^3	1200
Form Work	m^3	1500
Lean Concrete	m^2	70
Rebars	kg	81000


Stair Tower Structure

WAELZ PLANT PROJECT BUILDING INFORMATION

Formwork and Reinforcement

Steel Structure Completed

WAELZ PLANT PROJECT BUILDING INFORMATION

Backfill Upto Zero Level

Silo Building – Raw Material	Units	Quantity
Concrete	m^3	971.32
Form Work	m^3	1789.72
Lean Concrete	m^2	46.03
Rebars	kg	168610.41

1. Excavation, backfill, lean concrete, reinforced foundation, walls, inside backfill, Ground floor slab

WAELZ PLANT PROJECT BUILDING INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Silo Building- View From the Side

Clinker Pit Walls

WAELZ PLANT PROJECT BUILDING INFORMATION


Clinker Pit Reinforcement of Foundation


Drum Cooler Foundation

AREVA MV TRANSFORMER FACTORY CONSTRUCTION

DEHA TECH CONSTRUCTION INDUSTRY AND TRADE INC.

Areva MV Transformer Factory Construction

AREVA MV TRANSFORMER FACTORY CONSTRUCTION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Scope of Works

- Relocation Manufacturing Equipment
- Uninstalling
- Transportation
- Installing Manufacturing
- Engineering
- Fabrication
- Erection
- Partial Revamping Equipment

Areva MV Transformer Factory Construction

Areva MV Transformer Factory Construction

BOLU BIOMASS POWER PLANT

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Bolu Biomass Power Plant Construction

BOLU BIOMASS POWER PLANT

General View of Bolu Biomass Power Plant Construction

BAGFAS AMMONIUM NITRATE / CALCIUM AMMONIUM NITRATE PLANT

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Bagfas AN-CAN Plant

BAGFAS AMMONIUM NITRATE / CALCIUM AMMONIUM NITRATE PLANT

BAGFAS AMMONIUM NITRATE / CALCIUM AMMONIUM NITRATE PLANT

UZBEKISTAN CEMENT PLANT PROJECT INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Scope of Works

Project Name	Construction of the 4th technological line for the production of clinker in the territory of JSC "QIZILQUMSEMENT"
Project Location	Uzbekistan
Client	QIZILQUM CEMENT
Project Start Date	6.10.2020
Project Finish Date	23.02.2022
Project Scope	Construction of the 4th technological line for the production of clinker

UZBEKISTAN CEMENT PLANT PROJECT INFORMATION

BUILDINGS

- Piling Works
- Preheater Tower Concrete Structure
- Rotary Kiln Concrete Structure
- Cooler and Cooler Filter Concrete Structure
- Cement Silos Concrete Structure
- Cooling Tower Foundation Structure
- Kiln Filter and Vertical Raw Mill Concrete Structure

Clinker Silo Foundation

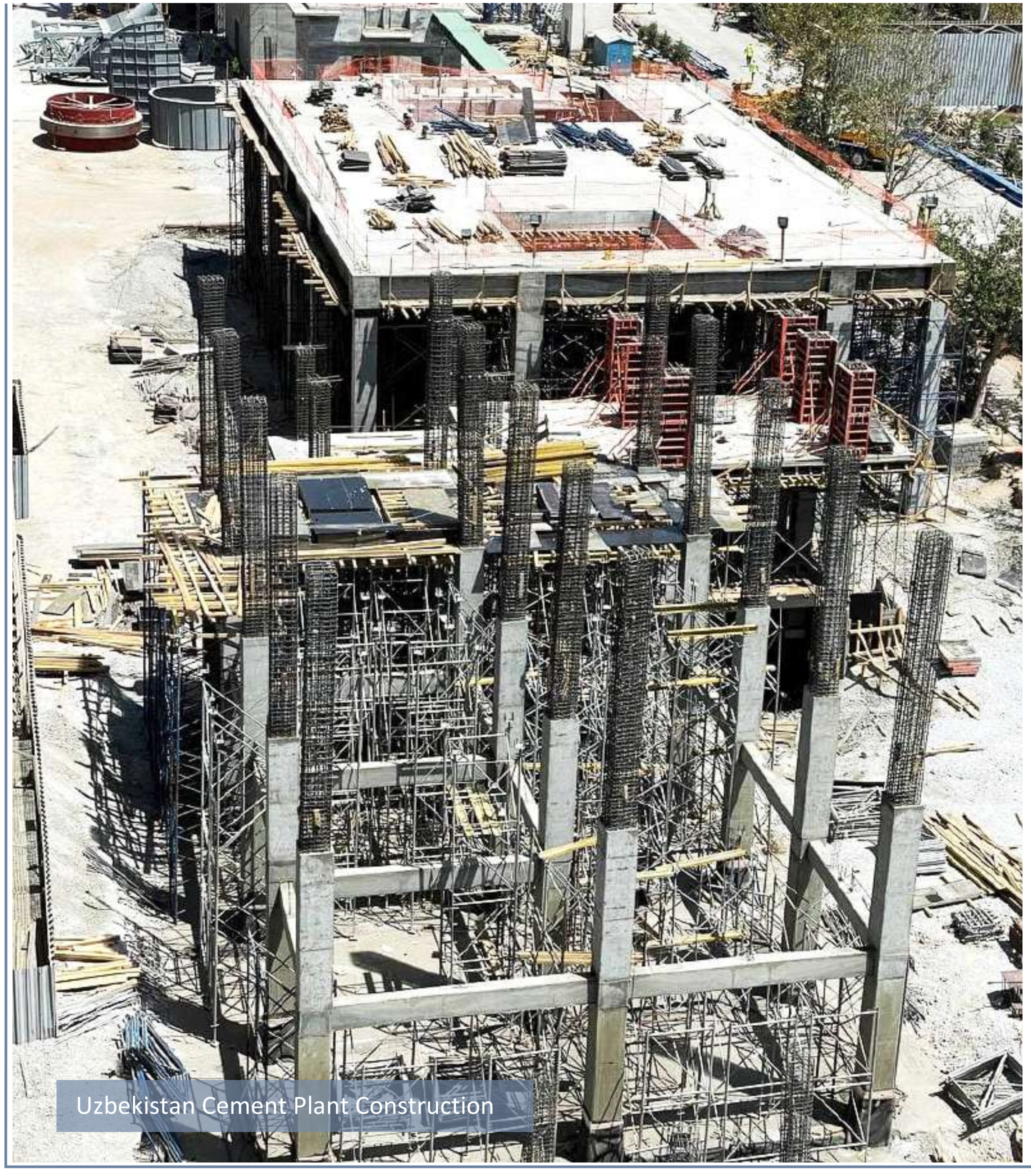
UZBEKISTAN CEMENT PLANT PROJECT INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Civil Works	Unit	Quantity
Piling Works	mt	11.000
Excavation	m^3	48.500
Back Filling	m^3	16.500
Form Work	m^2	32.000
Concrete	m^3	19.000
Reinforcement Steel	kg	2,600
Steel Structure & Equipment Erection	Tons	8.000


Cement Plant Clinker Line

UZBEKISTAN CEMENT PLANT PROJECT INFORMATION



Uzbekistan Cement Plant Construction

Uzbekistan Cement Plant

UZBEKISTAN CEMENT PLANT PROJECT INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Rotary Kiln

Cyclone Civil Erection

Foundation Civil Works

CEMENT PLANT 5500 TPD TURNKEY FOR CLINKER LINE / NAVOI - UZBEKISTAN

Clinker Line

TASHKENT GRINDING STATION PROJECT CONSTRUCTION INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Project Name	Tashkent 100TPH Cement Grinding And Packing Station
Location	Uzbekistan
Client	RWS OPTIMUM
Project Start	09.03.2021
Project Finish	23.02.2022
Project Scope	Construction of the 4th technological line for the production of clinker

Grinding and Packing Station

TASHKENT GRINDING STATION PROJECT CONSTRUCTION INFORMATION

BUILDINGS

- Piling Works
- Wagon Unloading Concrete and Steel Structure
- Cement Stockhol Concrete and Steel Structure
- Cement Dosing Concrete and Steel Structure
- Cement Mill Concrete and Steel Structure
- Cement Silos Concrete and Steel Structure
- Cement Packing Concrete and Steel Structure

Cement Packing Concrete and Steel Structure

TASHKENT GRINDING STATION PROJECT CONSTRUCTION INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Civil Works	Units	Quantity
Piling Works	mt	360
Excavation	m^3	18.500
Backing Filling	m^3	10.500
Form Work	m^2	3.400
Concrete	m^3	15.200
Reinforcement Steel	t	1.400
Steel Structure Erection Others	t	1.200

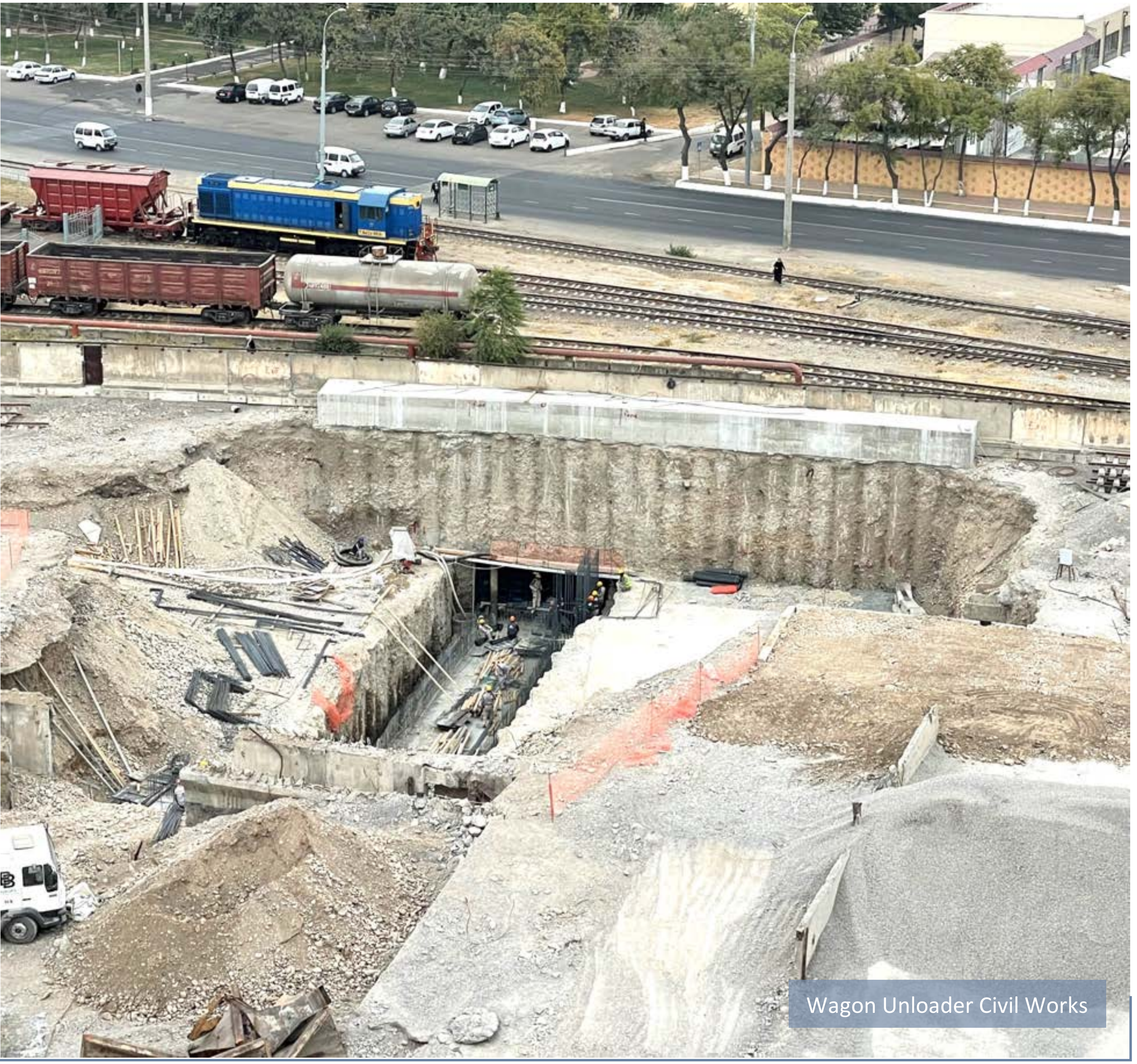
Tashkent Grinding Station Civil Works

TASHKENT GRINDING STATION PROJECT CONSTRUCTION INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Pump Station Excavation Works

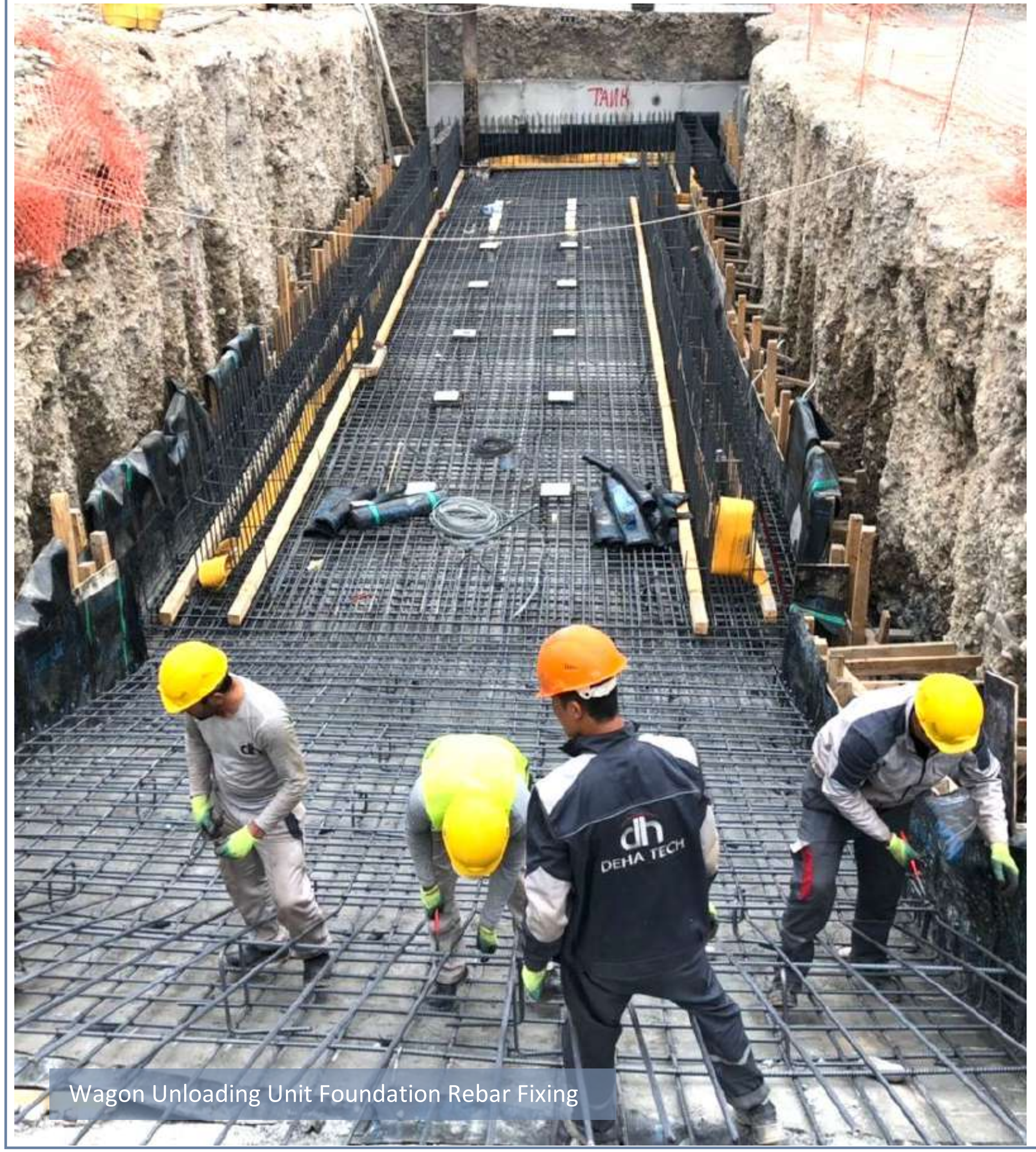
Axial and Level Workings Going on for Cement Mill



Wagon Unloader Civil Works

TASHKENT GRINDING STATION PROJECT CONSTRUCTION INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.



Wagon Unloading Unit Foundation Rebar Fixing

Wagon Unloading Unit Foundation Rebar Fixing

TASHKENT GRINDING STATION PROJECT CONSTRUCTION INFORMATION

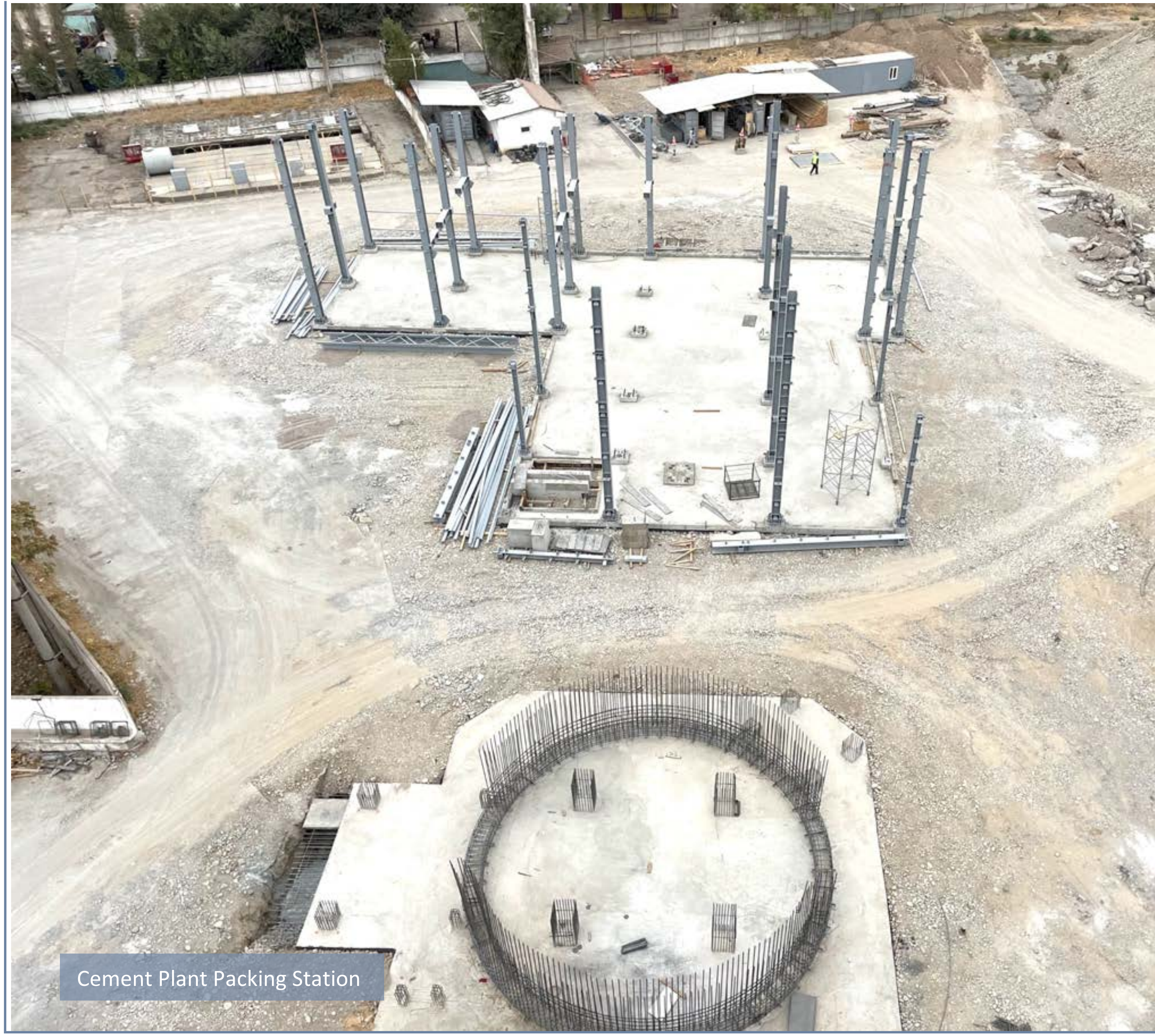
DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Cement Mill Foundation

Cement Mill Foundation

Pan Conveyor Gallery

TASHKENT GRINDING STATION PROJECT CONSTRUCTION INFORMATION



Cement Plant Packing Station

Cement Plant Packing Station

TASHKENT GRINDING STATION PROJECT CONSTRUCTION INFORMATION

DEHA TECH
CONSTRUCTION INDUSTRY AND TRADE INC.

Cement Silo

DEHA TECH
GENIUS SOLUTIONS

CEMENT & MINING INDUSTRY

www.dehatech.com

Designed to last, our easy-to-install and maintain material handling solutions serve both the Cement and Mining Industries.

CEMENT AND MINING INDUSTRY

DEHA TECH has comprehensive technologies like feasibility study, designing, manufacturing, procurement, construction, test-running, running, maintenance of a CEMENT Plant as well as manufacturing machinery for the plant.

Deha Tech provides following activities for Cement and Grinding Plants Project according to customer needs.

The design, manufacturing and supply of the system and technological equipment are a part of our scope:

- Complete Clinker Production Plant
- Complete Cement Grinding Plant
- Complete Coal Grinding Plant
- Raw Material Crusher
- Storage Systems
- Preheater / Clinker Cooler
- Turn-key Rotary Kiln & Dryer
- Vertical and Ball Mill
- Dynamic Classifier /Thrust Roller
- V-Separator / Girth & Pinion Gears
- Conveying and Elevator Systems
- Rotary Kiln Tyre & Rollers

Ragfa Cement Plant

CEMENT AND MINING INDUSTRY

Construction and Erection Works

Deha Tech Group Company supplies erection services for Civil, Mechanical, Electric & Automation erection services by qualified erection team. Erection works are executed under the safety and regulated working conditions of each country.

During erection period, necessary tests, norms and standard are applied to full fill work completion in proper installation.

MAIN EQUIPMENT AND MACHINERY

- Vertical Roller Mill
- Rotary Kiln Shell Manufacturing
- Clinker Cooler Main Frame
- Dynamic Separator
- Process Bag Filter
- Electrostatic Precipitators etc.
- Belt Conveyors and Supporting Frames
- Bucket Elevators Casings and Buckets
- Air Slides
- Screw, Chain and Drag Chain Conveyors
- Rotary Feeders
- Diverter Gates and Pendulum Flaps
- Bins, Hoppers or Bunker
- Preheater Cyclones
- Dedusting Cyclones
- Process Gas Ducts
- Process Chimneys
- Chutes and Spillage Box

Ragfa Cement Plant

CEMENT AND MINERAL INDUSTRY MAJOR REFERENCES

Project Name	Project Description	Year	Client	Country	Statu
Navoi Clinker Production Line	5500 TPD EPC Clinker Line	2020	Navoi Cement	Uzbekistan	Ongoing
Tashkent Grinding Plant	100 TPH EPC Cement Grinding Plant	2020	Tashkent Cement	Uzbekistan	Ongoing
Alabama Ragfa Cement Plant Project	5000 TPD Fabrication of All Machinery	2020	Thyssenkrupp	USA	Ongoing
Bulgaria Zinc Recovery Plant	EPC Zinc Recovery Plant	2020	Harmonee	Bulgaria	Ongoing
Befesa Zinc Recovery Plant	EPC Pyro Process of Zinc Recovery Plant	2018	Sartech	Turkey	Completed
Cimentas Kars Cement Factory Filter Conversion	Kiln Bag Filter Conversation Brand New Clinker Cooler, Heat Exchanger and Bag Filter	2013	CTP	Turkey	Completed
EPC Zinc Recycling Project	EPC Zinc Recovery Plant	2012	Marzinc	Turkey	Completed

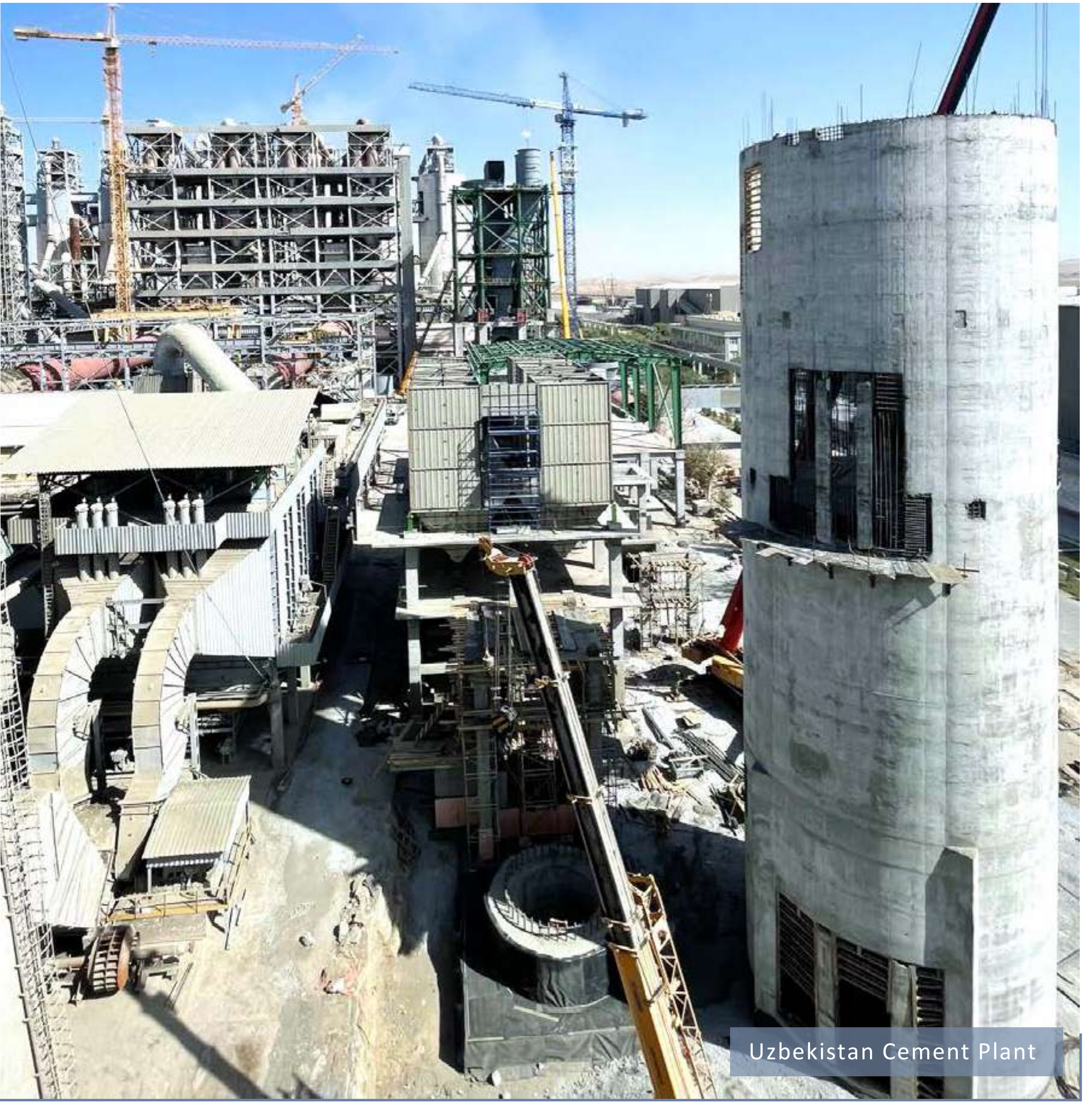

Tashkent Cement Mill Installation

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

Uzbekistan Cement Plant General View

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI


Cement Plant Clinker Line


Uzbekistan Cement Plant

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

DEHA TECH
GENIUS SOLUTIONS

Cement Plant Preheater Construction

Rotary Kiln Production

Site Photo

Site Photo

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

Cement Plant Clinker Line

Cement Plant Preheater Tower

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

DEHA TECH
GENIUS SOLUTIONS

Scope

Fabrication, Site Erection & Commissioning of 300.000 m3 Kiln Bag Filter & 150.000 m3 Clinker Cooler

Kiln Bag Filter

Clinker Cooler Bag Filter with

Plenum, Hoppers, Gates &

Tube Type Heat

2 Radial Fans

2 Stacks & Flue Gas

Ducts

Conveying System

Structural Steel

Uzbekistan Cement Plant Overview

Cement Plant Cooling Tower

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

DEHA TECH
GENIUS SOLUTIONS

Uzbekistan Cement Plant Overview

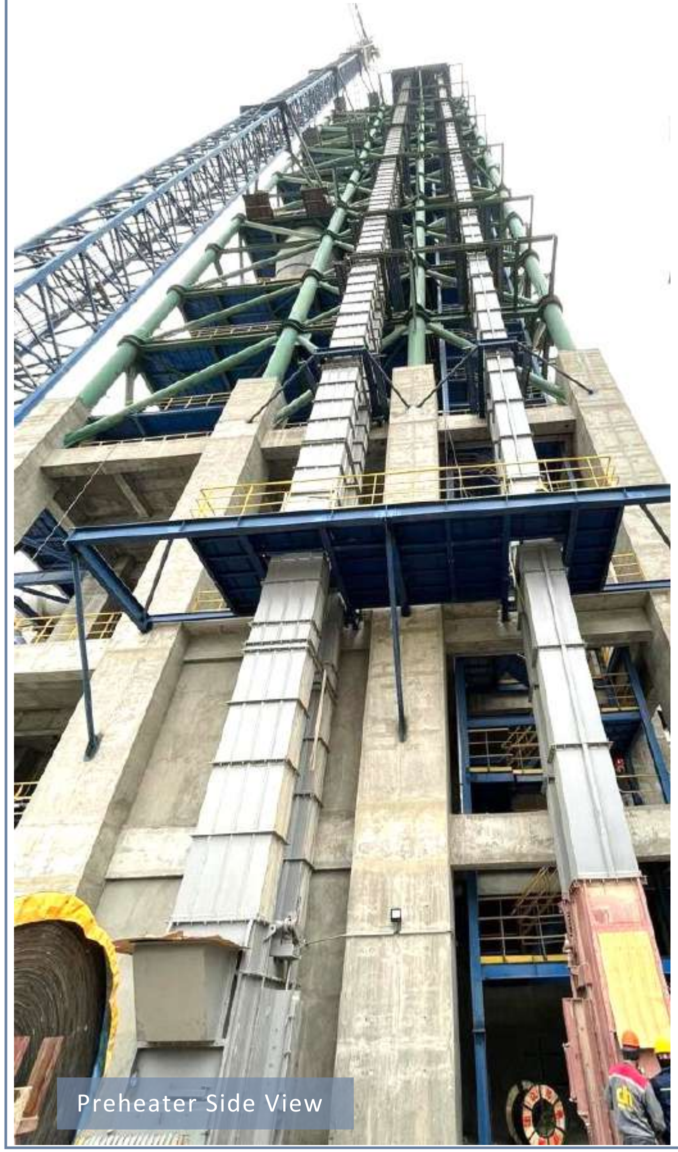
Cement Plant Cooling Tower

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

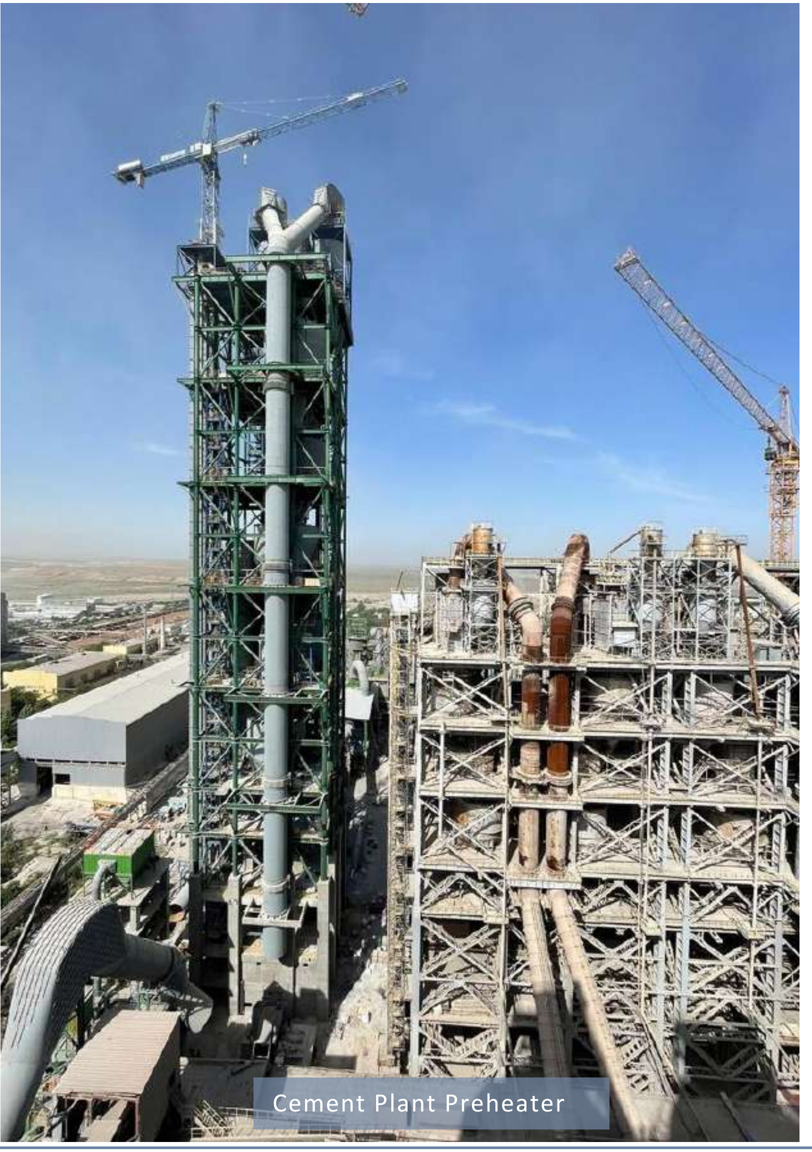

Uzbekistan Cement Plant Overview


Cement Plant Cooling Filter

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI



Preheater Side View



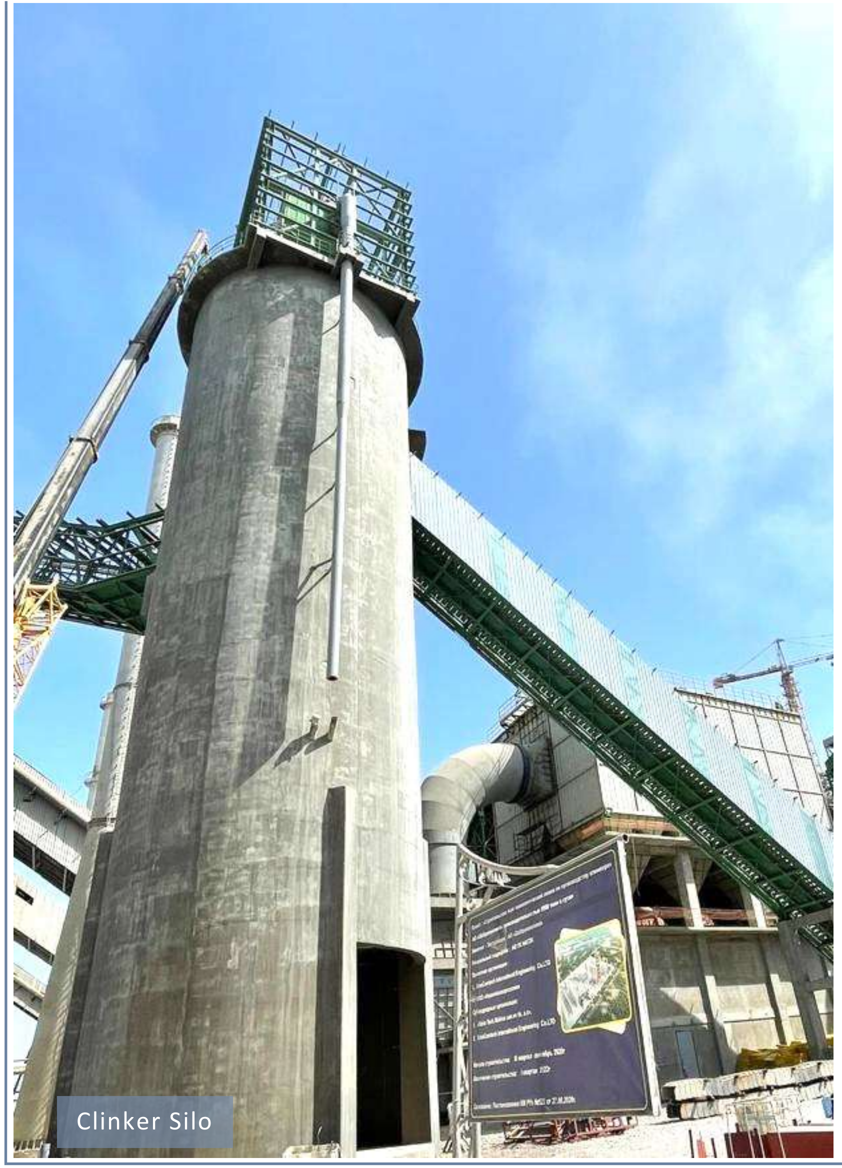
Cement Plant Preheater

Uzbekistan Cement Plant Overview

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

DEHA TECH
GENIUS SOLUTIONS



Clinker Silo

Pan Conveyor

CEMENT PLANT 5500 TPD / UZBEKISTAN / NAVOI

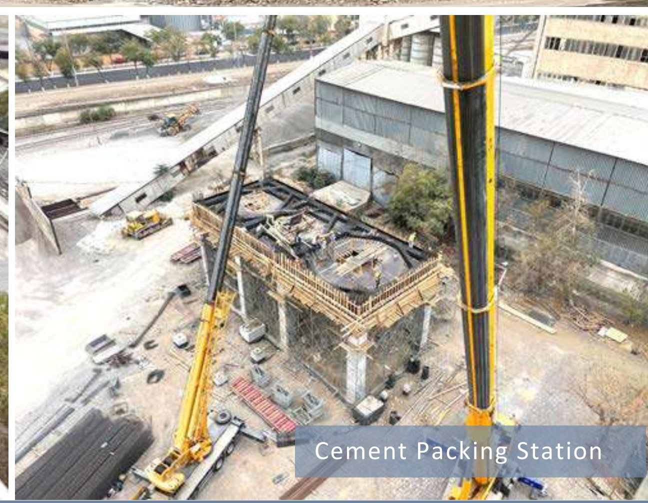
Cement Plant Clinker Line

TASHKENT CEMENT PLANT GRINDING STATION PROJECT

Cement Silo

Tashkent Cement Grinding Plant
Engineering
Construction
Procurement
Capacity 100 TPH

Cement Mill



Cement Packing Station

Wagon Unloading Unit Foundation Rebar Fixing

TASHKENT CEMENT PLANT GRINDING STATION PROJECT

Cement Mil Installation

TASHKENT CEMENT PLANT GRINDING STATION PROJECT

Cement Mill Main Reducer

TASHKENT CEMENT PLANT GRINDING STATION PROJECT

DEHA TECH
GENIUS SOLUTIONS

Tashkent Cement Silos General View

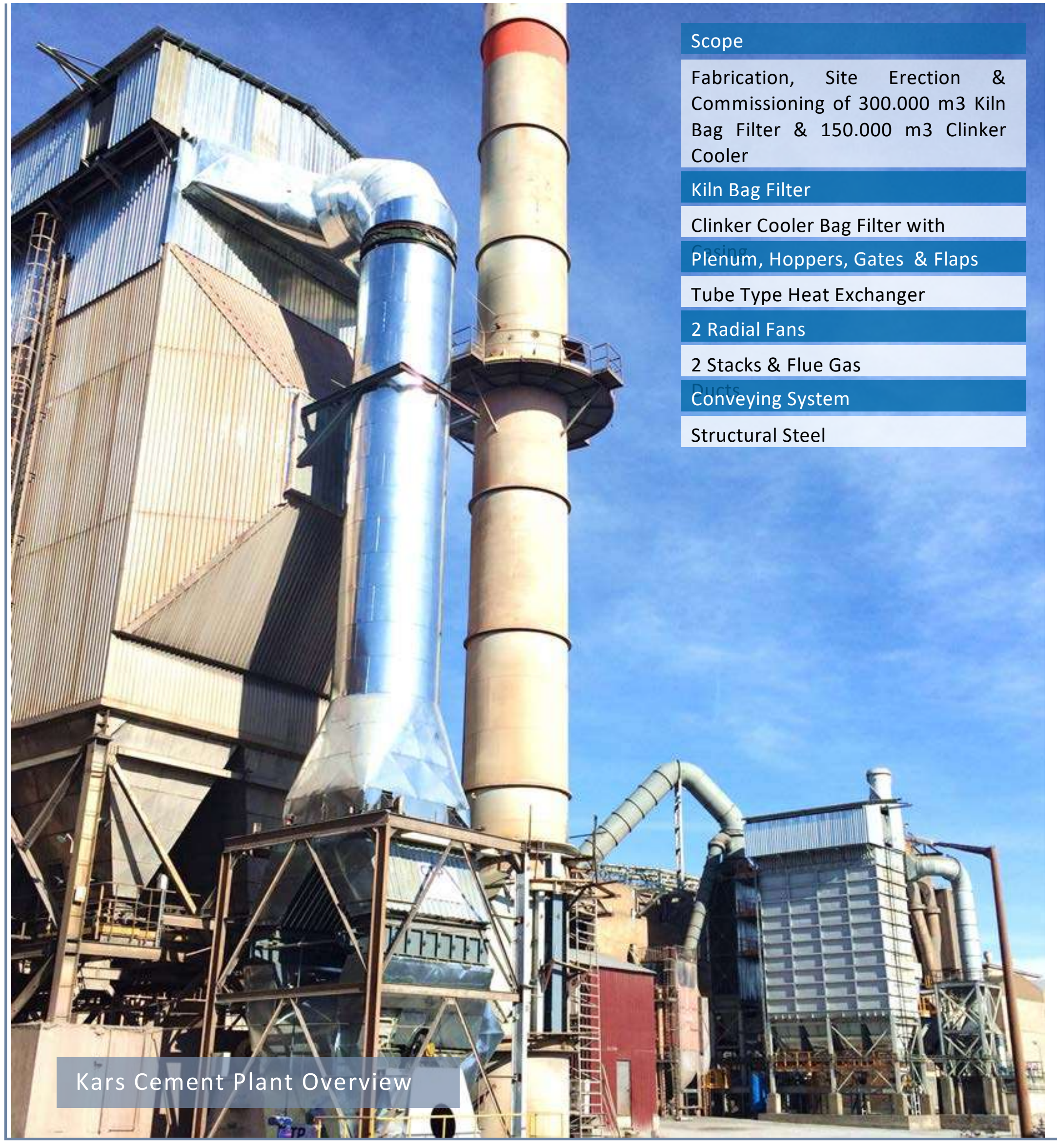
TASHKENT CEMENT PLANT GRINDING STATION PROJECT

DEHA TECH
GENIUS SOLUTIONS

Tashkent 100TPH Cement Grinding And Packing Station General View

KARS CEMENT PLANT

Scope
Fabrication, Site Erection & Commissioning of 300.000 m3 Kiln Bag Filter & 150.000 m3 Clinker Cooler
Kiln Bag Filter
Clinker Cooler Bag Filter with Design
Plenum, Hoppers, Gates & Flaps
Tube Type Heat Exchanger
2 Radial Fans
2 Stacks & Flue Gas Ducts
Conveying System
Structural Steel



Kars Cement Plant Overview

Kars Cement Plant Structural Steel and Conveying System

KARS CEMENT PLANT

Kars Cement Bag Filters

Kars Cement Plant Stacks, Flue Gas Ducts Installation

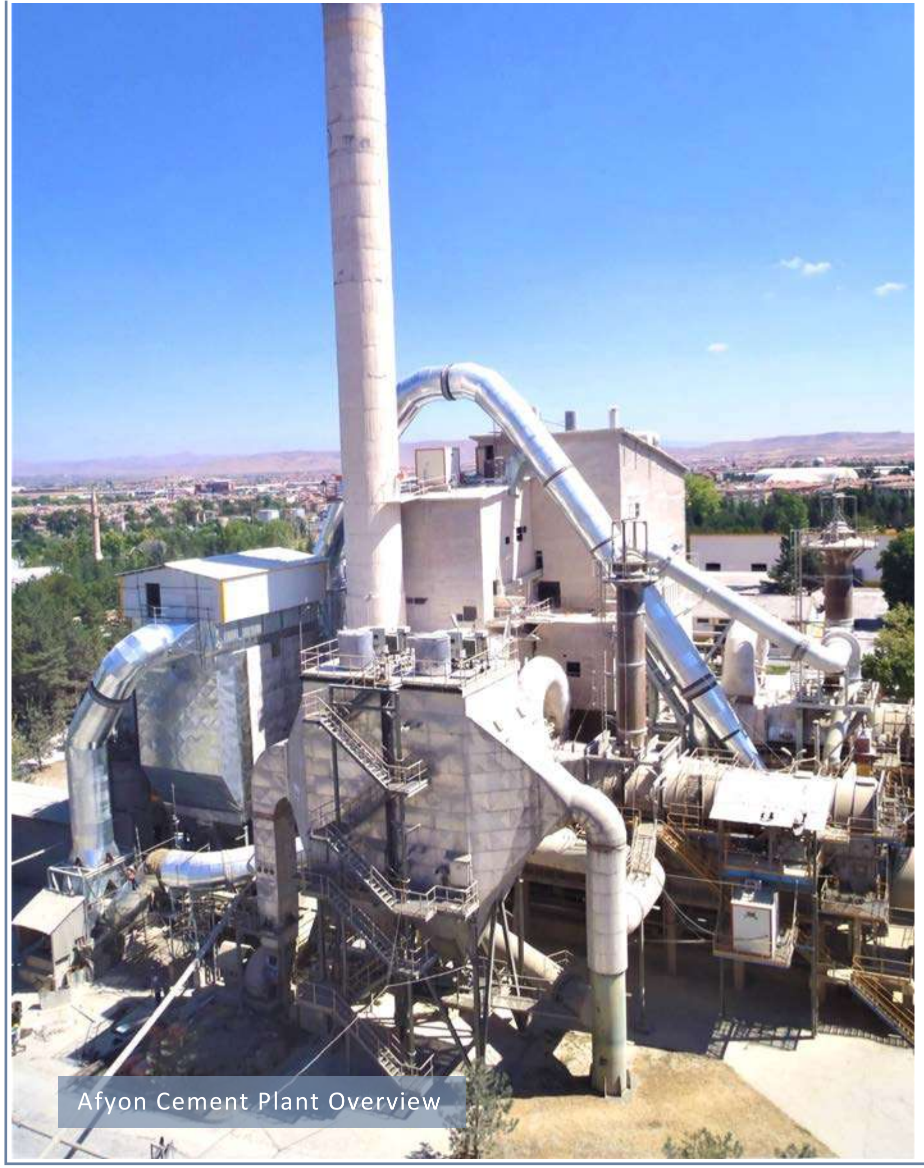
KARS CEMENT PLANT

Kars Cement Overview

Kars Cement Plant Bag Filters, Flue Gas Ducts

AFYON CEMENT PLANT

DEHA TECH
GENIUS SOLUTIONS



Afyon Cement Plant Overview

Afyon Cement Plant Bag Filters Installation

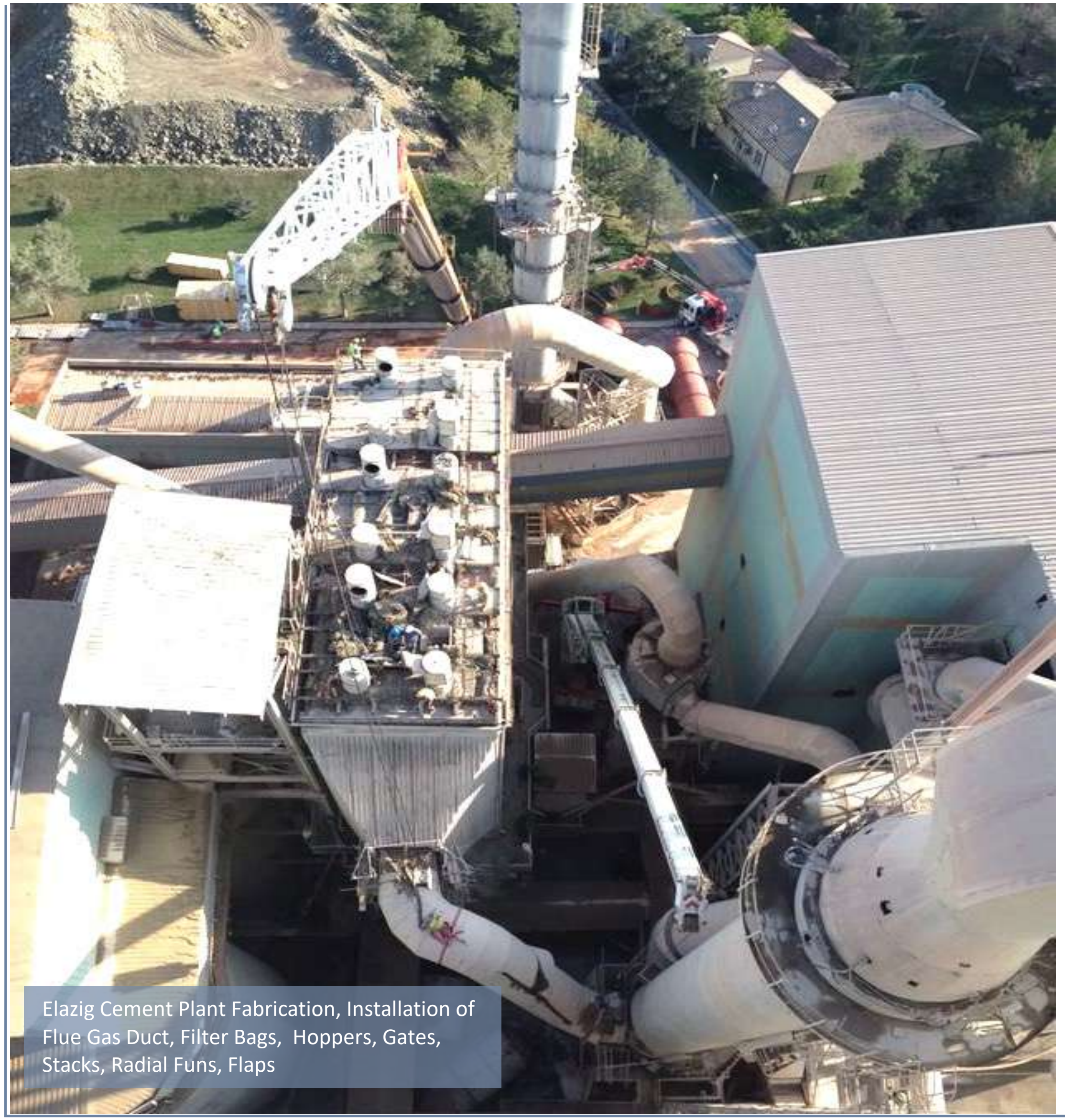
AFYON CEMENT PLANT

Afyon Cement Plant Filter Conversation

Afyon Cement Plant Piping

Afyon Cement Plant Ducts

ELAZIG CEMENT PLANT FABRICATION & INSTALLATION



Elazig Cement Plant Fabrication, Installation of Flue Gas Duct, Filter Bags, Hoppers, Gates, Stacks, Radial Funs, Flaps

Elazig Cement Plant Stack

Elazig Cement Plant Conveying System & Structural Steel

ELAZIG CEMENT PLANT FABRICATION & INSTALLATION

Elazig Cement Plant Flue Gas Ducts

Elazig Cement Plant Bag Filters

SONMEZ 5000 TPD CEMENT PLANT

DEHA TECH
GENIUS SOLUTIONS

Sonmez 5000 TPD Cement Plant Engineering, Fabrication & Surface Preparation

SONMEZ 5000 TPD CEMENT PLANT

DEHA TECH
GENIUS SOLUTIONS

Sonmez Cement Plant Overview

Sonmez Cement Plant Preheater Unit

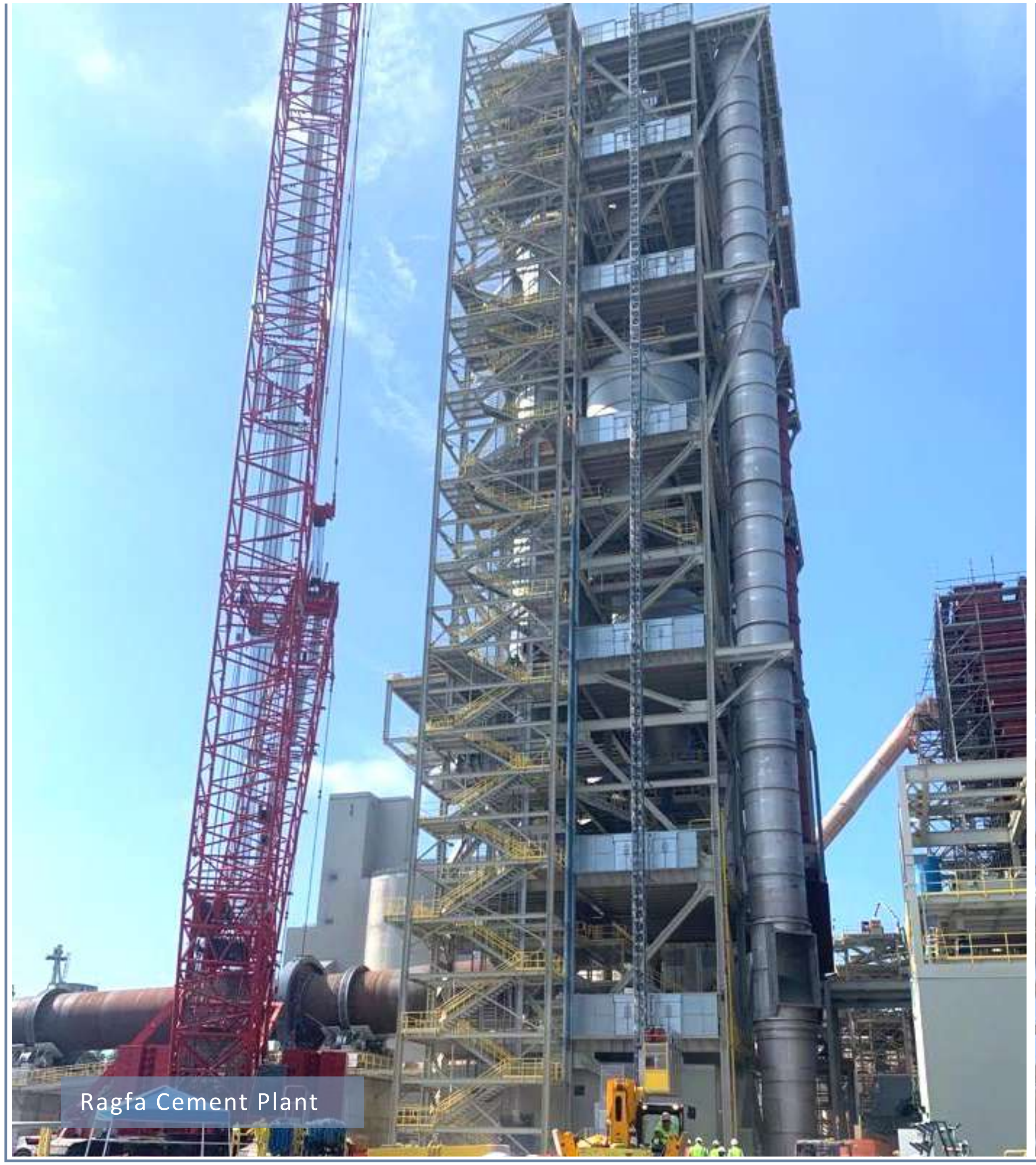
SONMEZ 5000 TPD CEMENT PLANT

Sonmez 5000 TPD Cement Plant Preheater Units

Preheater Unit

RAGFA CEMENT PLANT 5000 TPD EQUIPMENT FABRICATION ALABAMA / USA

DEHA TECH
GENIUS SOLUTIONS



RAGFA CEMENT PLANT 5000 TPD EQUIPMENT FABRICATION ALABAMA / USA

Ragfa Cement Plant Equipment Fabrication

Cement Plant Equipment Shipment To USA

Cement Plant Equipment Shipment To USA

ZINC RECOVERY WAELZ PLANT / BULGARIA

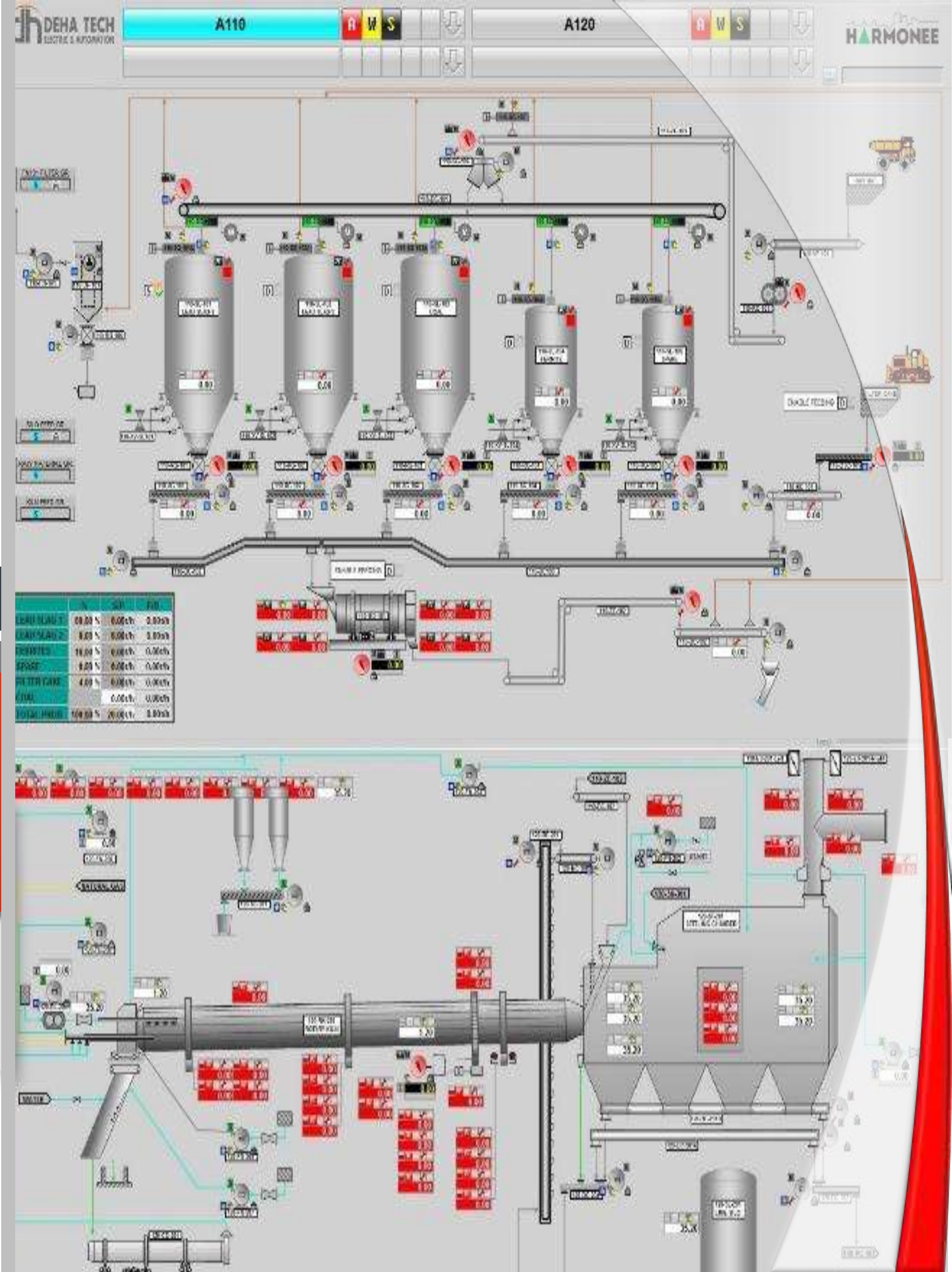
Bulgaria Zinc Recovery Waelz Plant

ZINC RECOVERY WAELZ PLANT / BULGARIA

Bulgaria Zinc Recovery Waelz Plant

DEHA TECH
ELECTRIC AUTOMATION INDUSTRY AND TRADE INC.

ELECTRIC & AUTOMATION



www.dehatech.com

ABOUT ELECTRIC AND AUTOMATION

One of the Deha Tech Group companies, Deha Tech Electric and Automation is a sought-after and preferred solution partner with its long years of experience and competence especially in waelz, cement and filter automation.

This ensures you total control of plant operations, and the benefits that brings:

- Enhanced and guaranteed performance
- Consistent product quality
- Uncompromising safety
- Reduced environmental impact

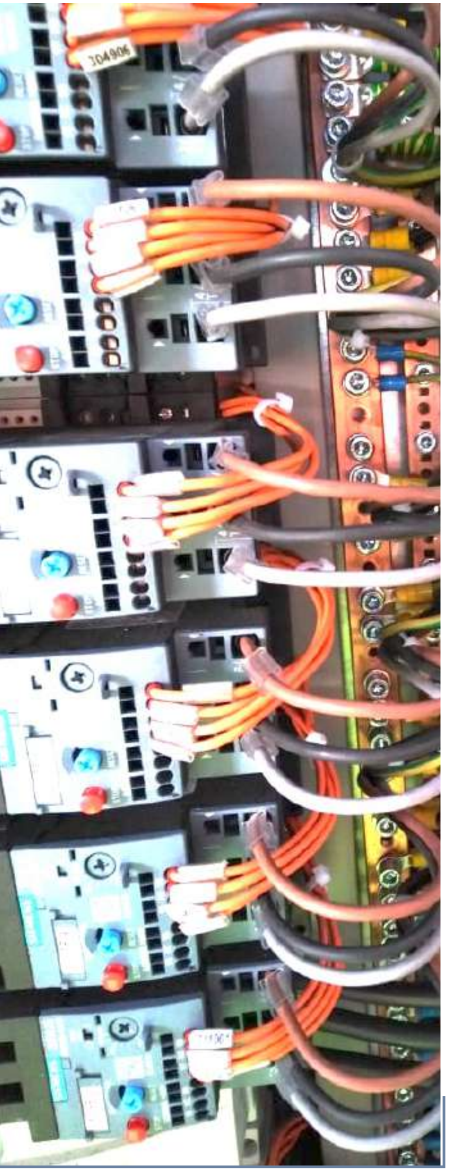
For your next installation or commissioning of an industrial automation system, choose Deha Tech to get a scalable, cost-competitive and high-quality solution.

We design and build control systems for water, wastewater, cement, paper mining, manufacturing, and other industrial applications, as well as providing the associated testing, documentation, installation supervision, operator training, and maintenance services to support these systems.

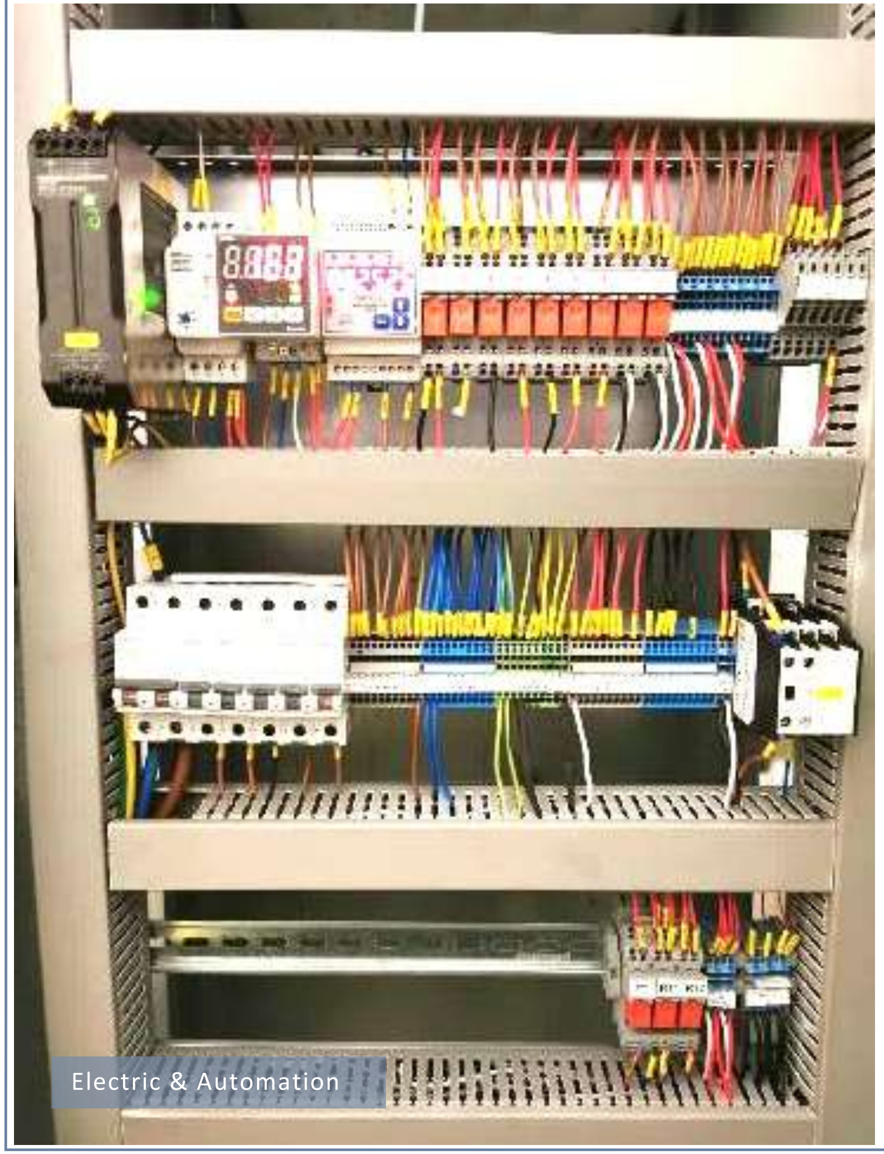
ELECTRIC AND AUTOMATION

Deha Tech Scope of Works	
3 Set	Remote I/O Panel
1 Set	PLC Panel
1 Set	SCADA System
400 pcs	I/O
158 pcs	Instrument
203 pcs	Lighting Fixture
8.218 m.	LV Cable
7.552 m.	Instrumentation Cable
30 pcs	LV Motor
830 m.	Cable Tray

Design, procurement, installation, test and commissioning of electrical and instrumentation systems were completed by Deha Tech



ELECTRIC AND AUTOMATION



Electric & Automation

Electric & Automation Test and Commissioning

TAMAN PORT SHIP-LOADER ELECTRICAL & INSTRUMENTATION SYSTEMS

Deha Tech Scope of Works	
12 Set	Remote I/O Panel
8 Set	MCC Panel
8 set	MV/LV Transformer
580 pcs	Instrument
736 pcs	Lighting Fixture
96.060 m.	LV-MV-instrumentation Cable
324 pcs	Local Box, Junction Box
4.036 m.	Cable Tray

Installation, test and commissioning of electrical and instrumentation systems were completed by Deha Tech.

TAMAN PORT SHIP-LOADER ELECTRICAL & INSTRUMENTATION SYSTEMS

TAMAN PORT SHIP-LOADER ELECTRICAL & INSTRUMENTATION SYSTEMS

Motor Wiring

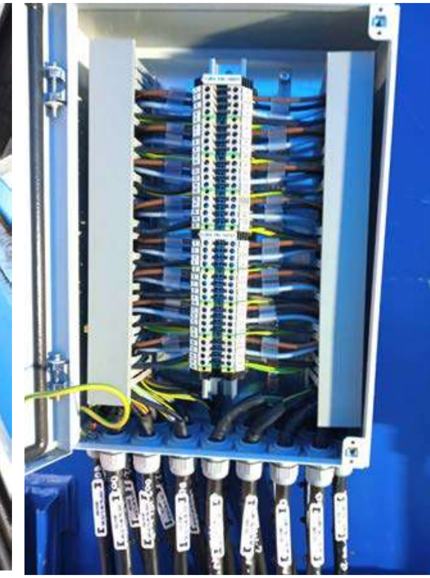
Motor Kontrol Centre – EMG - 01

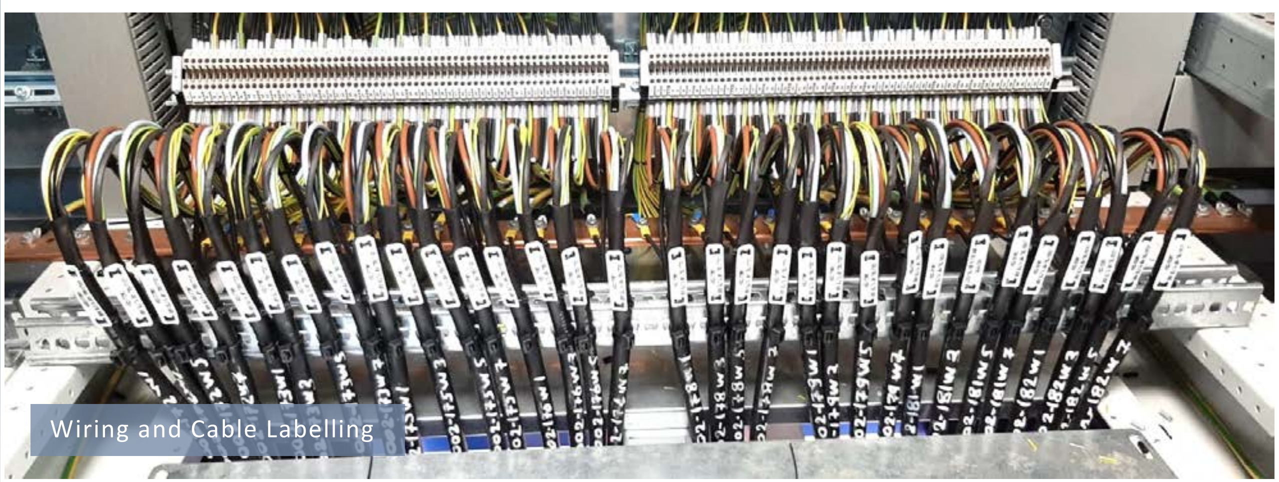
Acoustic Siren Installation

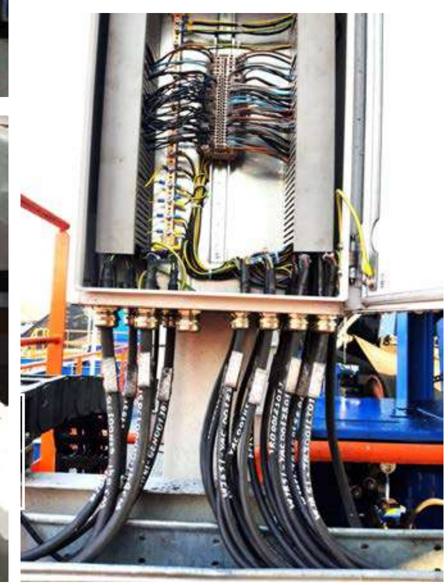
Control System

ELECTRICAL & INSTRUMENTATION SYSTEMS


Motor Control Centre




Wiring and Cable Labelling

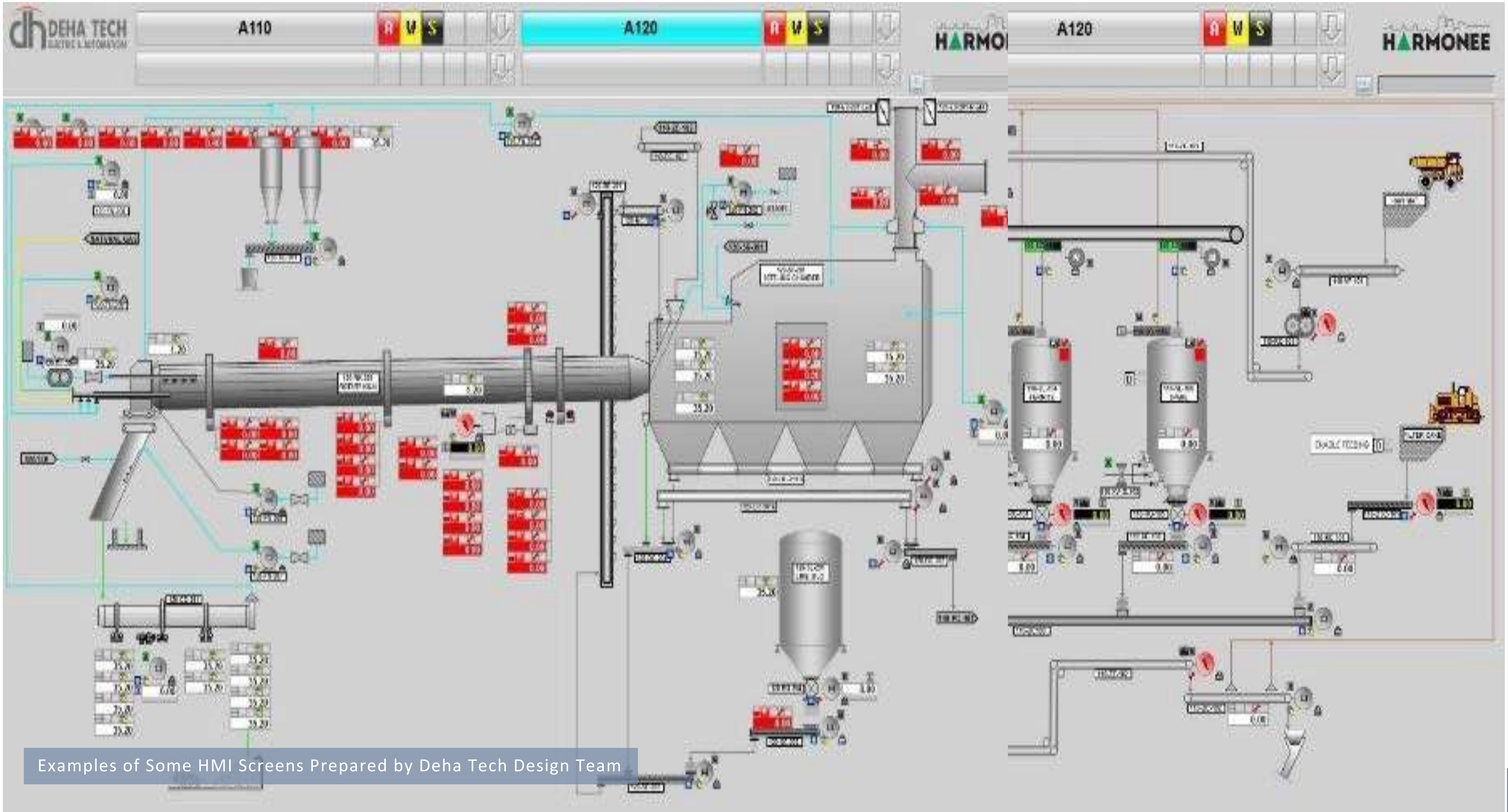


ELECTRICAL & INSTRUMENTATION SYSTEMS


Motor Control Centre

Electrical & Instrumentation Systems

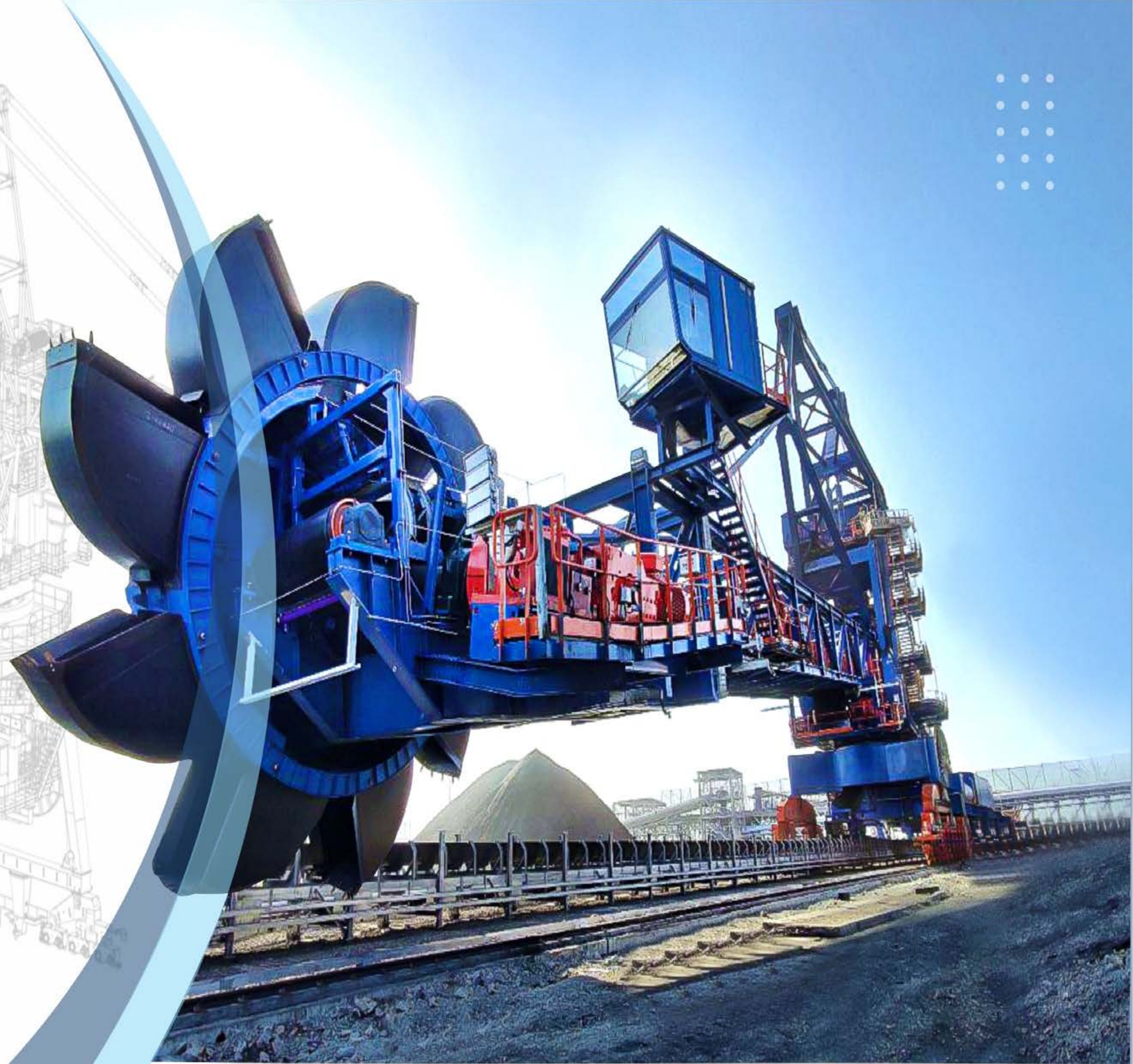
ELECTRIC AND AUTOMATION OF HARMONEE WAELZ FACILITY



Examples of Some HMI Screens Prepared by Deha Tech Design Team

DEHA TECH
GENIUS SOLUTIONS

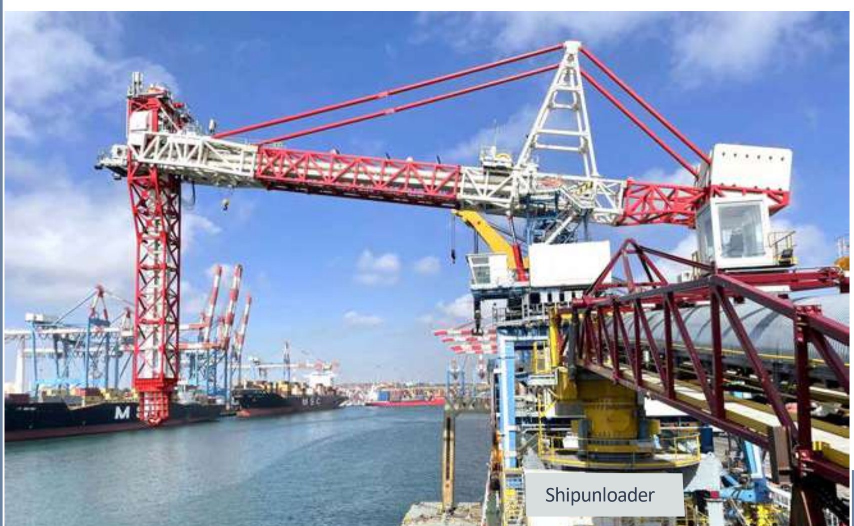
Material Handling System



Presentation

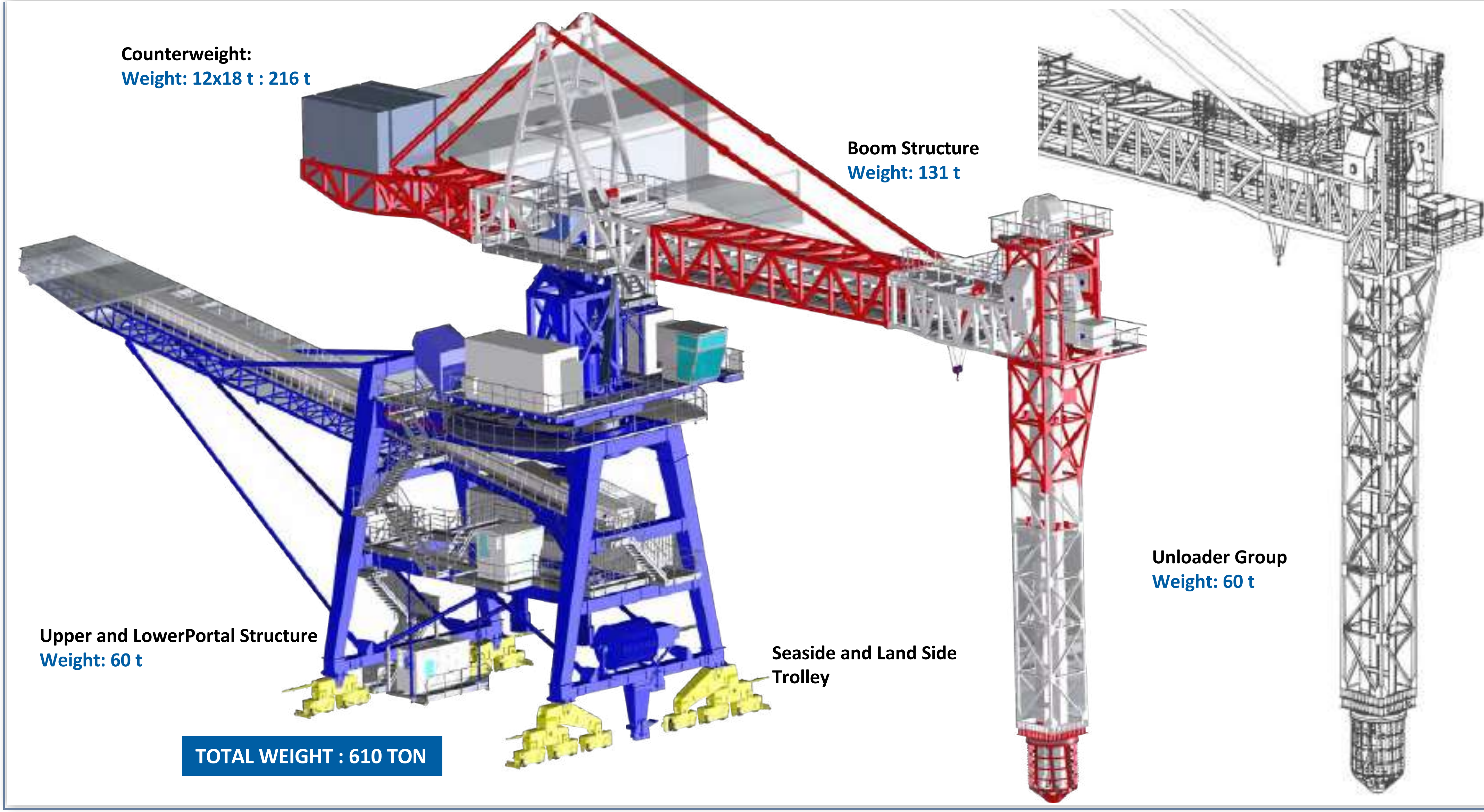
SHIPUNLOADER PROJECT, ITALY

Project Name	Mechanical Continuous Shipunloader		
Place	Italy		
Customer	Bedeschi		
Subcontractor	Deha Tech		
Capacity	This shipunloader will operate at a capacity of 1200 t/h		
Service	Procurement, Manufacturing, Erection		
Project Start Date	Dec 2020	**Finish Date**	Mar 2021


Shipunloader


Mechanical Continuous Shipunloader transported the fully assembled from the Haydarpasa Terminal in Istanbul, Turkey

3D DRAWING PREVIEW FOR SHIPUNLOADER



SHIPUNLOADER WORKSHOP FACILITIES

Ship unloader Assembly

SHIPUNLOADER PROJECT, ITALY


Shipunloader Lower Portal Assembly


Shipunloader Trolley Assembly


Shipunloader Trolley Assembly

SHIPUNLOADER PROJECT, ITALY

DEHA TECH GENIUS SOLUTIONS

SHIPUNLOADER PROJECT, ITALY

Shipunloader Assembly

SHIPLOADER AND SHIPUNLOADER WORKSHOP FACILITIES

Haydarpasa Port Workshop Ship-Loader and Ship-Unloader Supply & Assembly Facilities

SHIPLOADER WORKSHOP FACILITIES

4 Nos. 8000 TPH Coal Ship-Loader


Haydarpasa Port Workshop

SHIPLOADER AND WORKSHOP FACILITIES

DEHA TECH
GENIUS SOLUTIONS


4 Nos. 8000 TPH Coal Shiploader Assembly


Shiploader Shipment Processing

SHIPLOADER WORKSHOP FACILITIES

Shiploader Shipment Processing


Shiploader Boom Shipment Processing

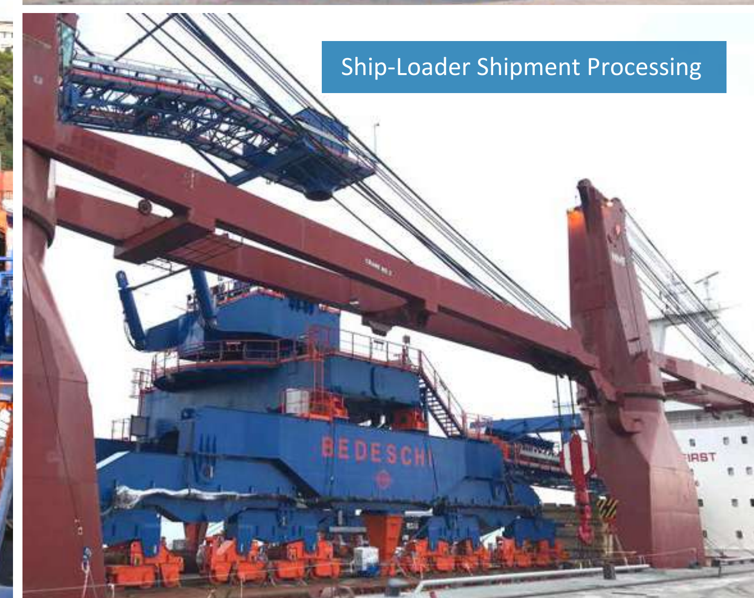
Shiploader Boom Shipment Processing

SHIPLOADER WORKSHOP FACILITIES

DEHA TECH
GENIUS SOLUTIONS

Haydarpasa Port Workshop Ship-Loaders Assembly

Ship-Loader Assembly



Ship-Loader Shipment Processing

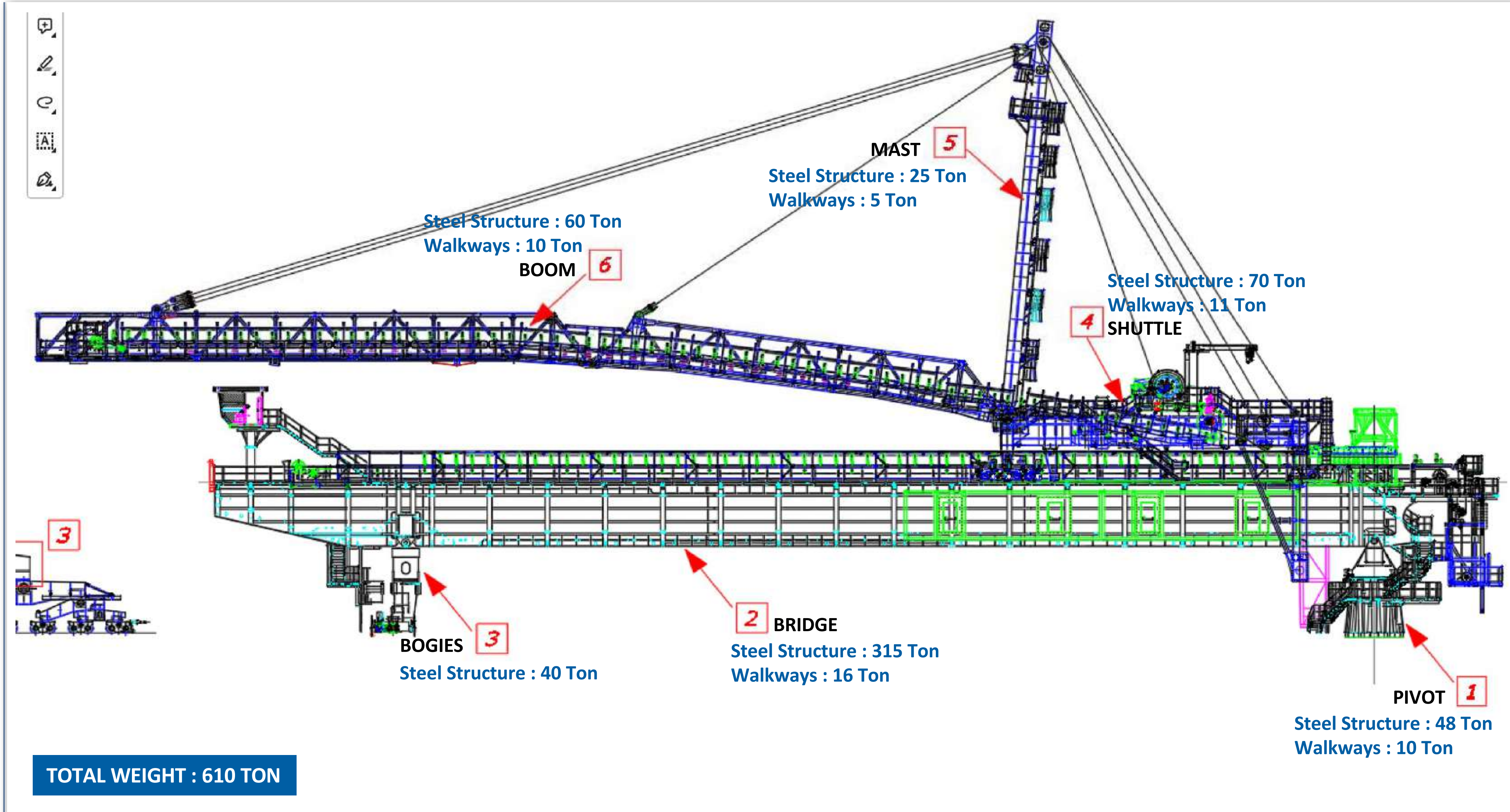
AEON SHIPLOADER, ITALY

DEHA TECH

Project Name	Aeon Shiploader
Place	Italy
Customer	Bedeschi
Subcontractor	Deha Tech
Scope	Fabrication, Engineering, Procurement
Service	Engineering Pre-Manufacturing Manufacturing Painting Assembly Works Shipment
Project Start Date	Dec 2021 **Finish Date** Mar 2023

Breakdown fabrication steel weight Aeon (Pivot, Bridge, Bogies, Shuttle, Mast, Boom) 850 t

BREAKDOWN FABRICATION STEEL WEIGHT SHIPLOADER



AEON SHIPLOADER, ITALY

Bridge: Steel Structure 315 t. Walkways 16 t

Bridge Ship loader Part

AEON SHIPLOADER, ITALY

AEON SHIPLOADER, ITALY

DEHA TECH
GENIUS SOLUTIONS

Bridge: Steel Structure 315 t. Walkways 16 t


Bridge Shiploader Part

AEON SHIPLOADER, ITALY

Bridge: Steel Structure 315 t. Walkways 16 t

Bridge Shiploader Part

TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM

DEHA TECH

GENIUS SOLUTIONS

Bucket wheel reclaimers are ideal for handling and moving large amounts of bulk materials at the earliest time.

They can be designed as combined bucket wheel stacker reclaimers for handling huge volumes of coal, ores, and other materials in ports, power plants, stockyards.

Our bucket wheel reclaimers, which are the result of experience and technical competence, combine stability with remarkable speed and high efficiency.

Bucket Wheel Stacker-Reclaimers, Conveyors (47,5 T + 703,1 T)

Mechanical Installation, Electrical Installation & Commissioning

TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM


Bucket Wheel Stacker-Reclaimer Erection


Stacker-Reclaimer Bucket wheel Testing


Bucket wheel Stacker-Reclaimer Erection


Supply Stacker-Reclaimers

TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM

DEHA TECH
GENIUS SOLUTIONS

Supply And Installation Of Belt Conveyors

Installation Of Belt Conveyors

TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM

Supply And Installation Of Bucket Wheel Stacker - Reclaimer

TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM

Storage For Stacking And Reclaiming

Coal Handling Facility

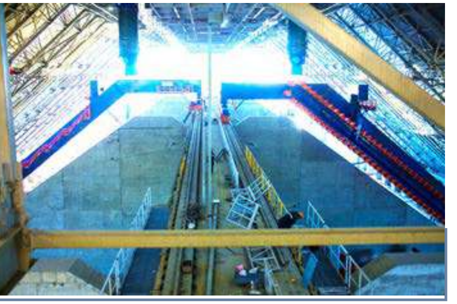
Stacker – Reclaimer Erection

Conveyor Belt

Bucket Wheel Stacker – Reclaimer

TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM

Automatic Storage For Stacking And Reclaiming



TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM


Stacker & Reclaimer Completion


Trolleys Alignment


Tripper Walkways


Trolleys Assembly


Tripper Completion

TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM

DEHA TECH
GENIUS SOLUTIONS


Stacker-Reclaimer & Tripper Overview


Bucket Wheel Stacker-Reclaimer


Stacker-Reclaimer & Tripper Coal Handling


Stacker-Reclaimer Overview

TAMAN PORT STACKER – RECLAIMER & CONVEYOR SYSTEM

Stacker-Reclaimer Completion

WAELZ (ZINC RECOVERY) TECHNOLOGY

www.dehatech.com

WAELZ (ZINC RECOVERY) PLANTS

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

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

DEHA TECH
GENIUS SOLUTIONS

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

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

Waelz (Zinc Recovery) Plant 3D General View

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

DEHA TECH
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WAELZ (ZINC RECOVERY) PLANT / BULGARIA

Kiln Shell

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

Kiln Shell

Rotary Kiln Girth Gear Assembly

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

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Rotary Kiln Assembly

Rotary Kiln Assembly

Rotary Kiln Assembly

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

DEHA TECH
GENIUS SOLUTIONS

Clinker Pitt Walls

Clinker Pit Reinforcement of Foundation

Drum Cooler Foundation

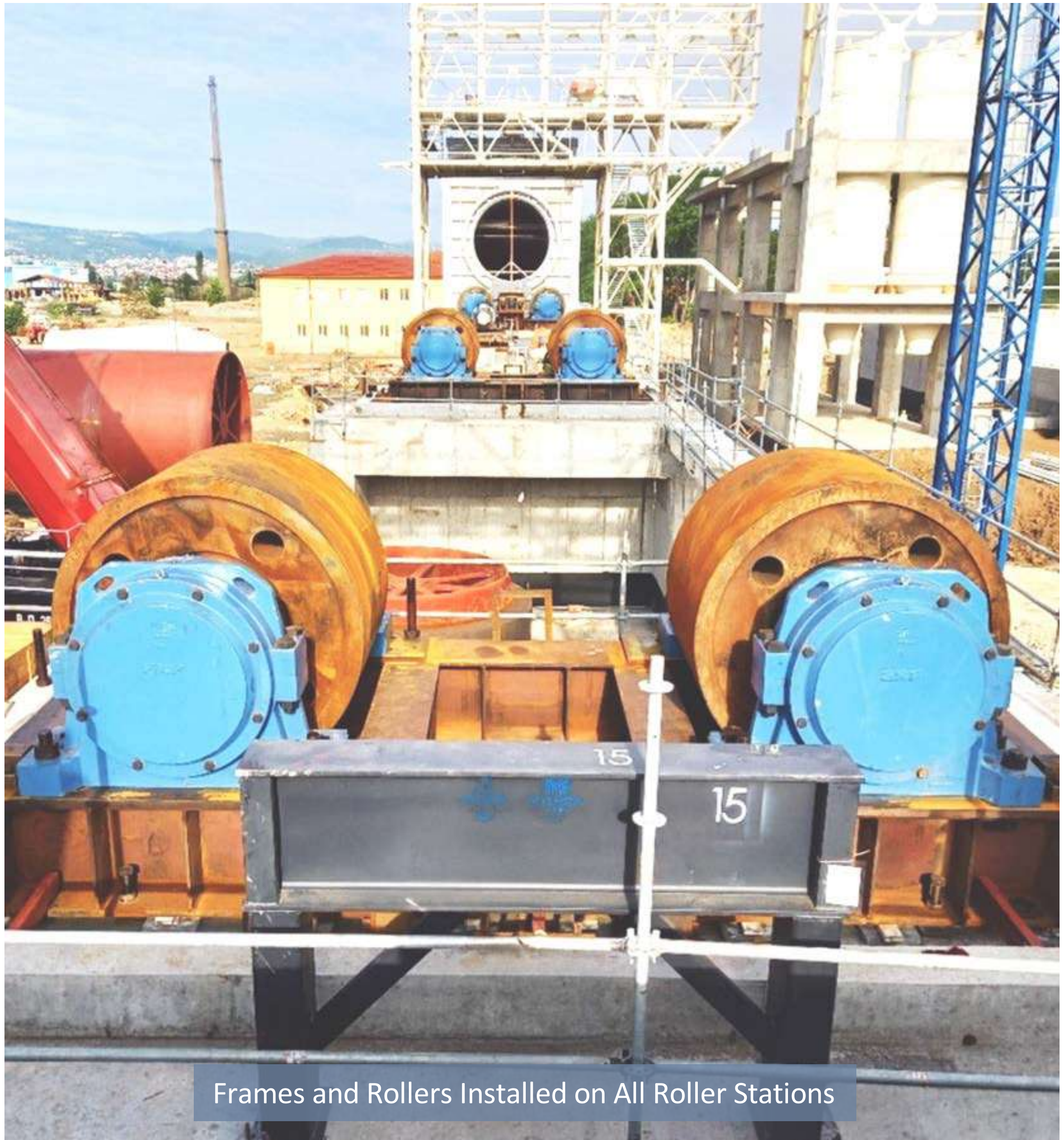
WAELZ (ZINC RECOVERY) PLANT / BULGARIA


Erection of Scaffolding Needed to Pour The Slab


Supporting Steel Structure


Completed Reinforced Concrete Structure of Burner Building

WAELZ (ZINC RECOVERY) PLANT / BULGARIA



Frames and Rollers Installed on All Roller Stations

Settling Chamber and Stair Tower Complete

WAELZ (ZINC RECOVERY) PLANT / BULGARIA


Silo Building – View From The side


Roller stations 1, 2 and 3 – completed civil works

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

DEHA TECH

Stages of Construction

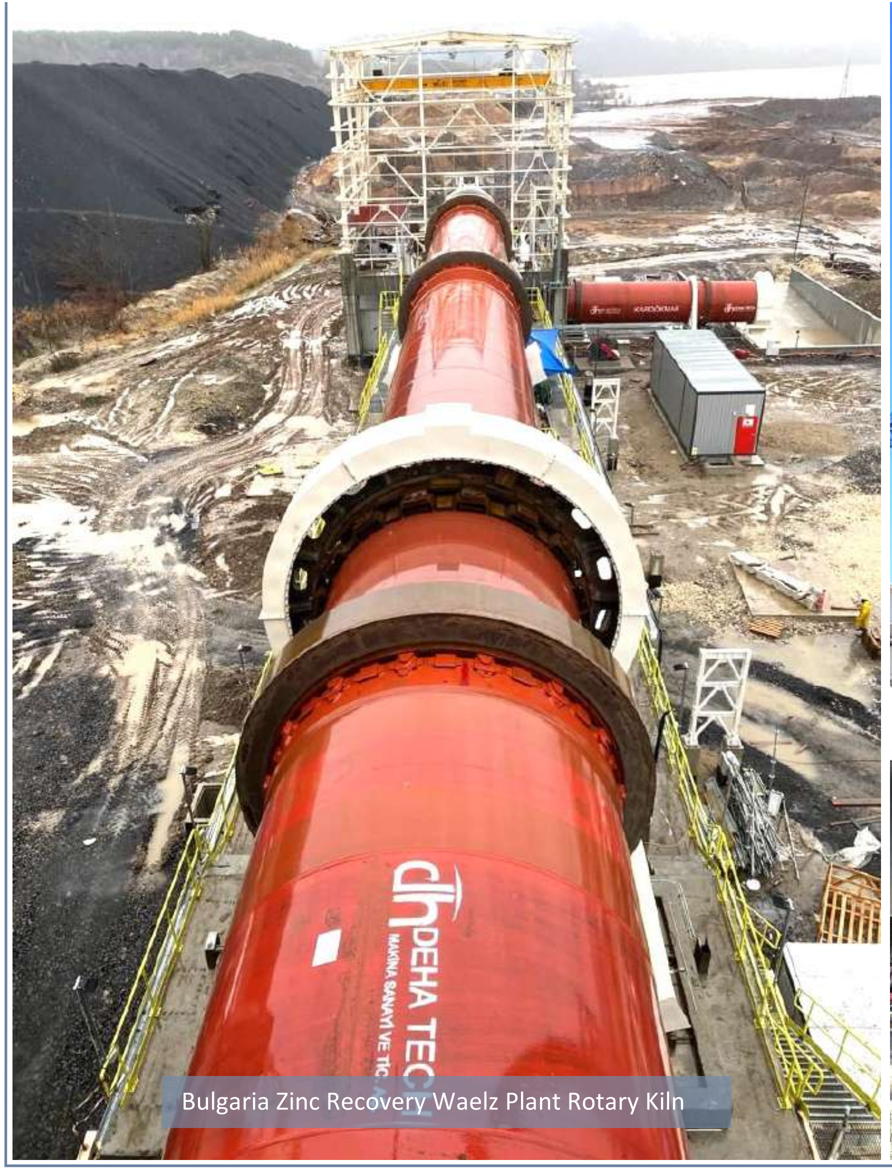
Dust Settling Chamber Assembly

Feed Hoppers

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

DEHA TECH
GENIUS SOLUTIONS

ZINC RECOVERY WAELZ PLANT / BULGARIA



Bulgaria Zinc Recovery Waelz Plant Rotary Kiln

Bulgaria Zinc Recovery Waelz Plant Rotary Kiln Girth Gear Assembly

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

Zinc Recovery Waelz Plant General View

WAELZ (ZINC RECOVERY) PLANT / BULGARIA

ZINC RECOVERY WAELZ PLANT / BULGARIA

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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

ROTARY KILN & WAELZ PLANT

5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN

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

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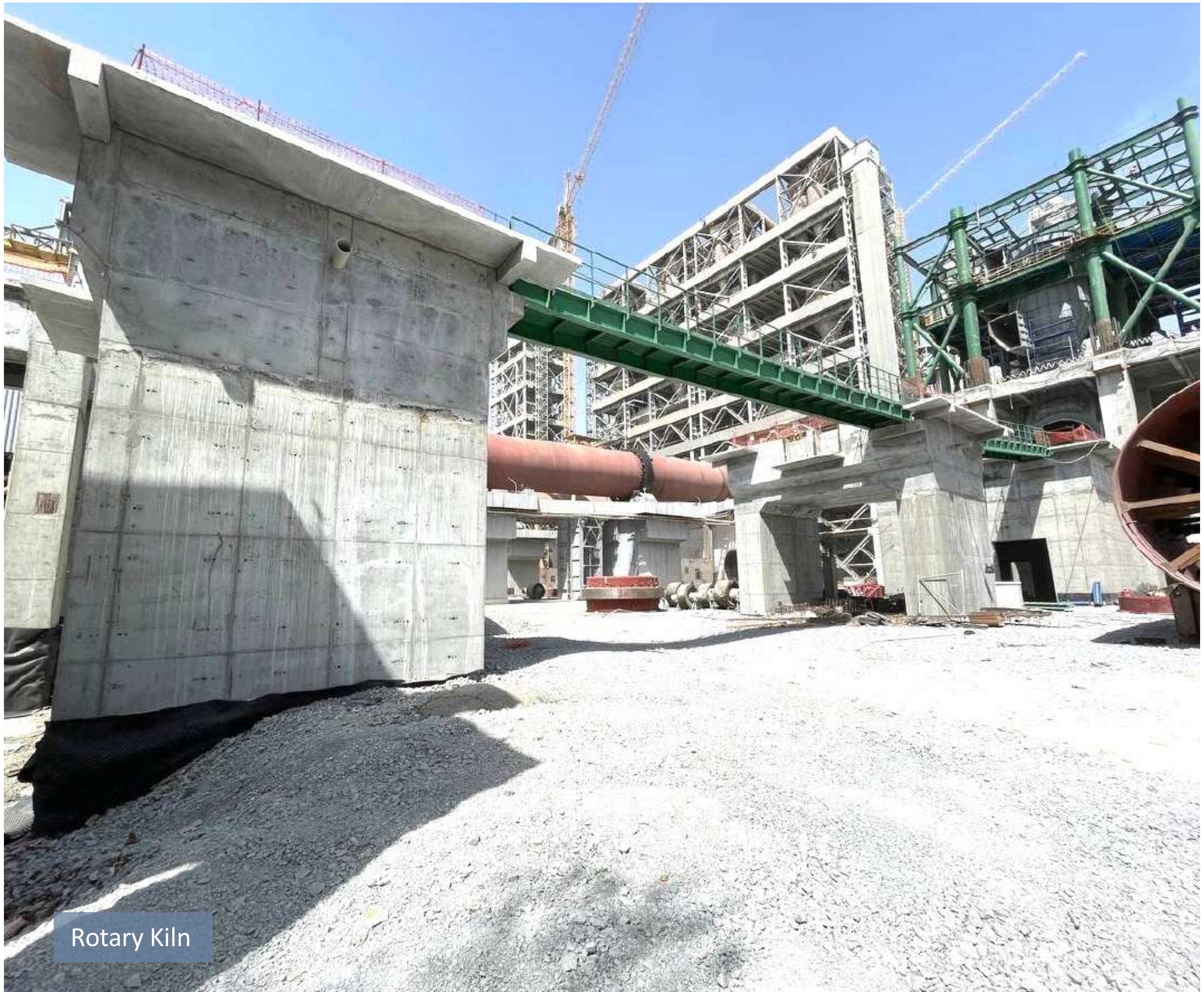

Rotary Kiln

Site View

Rotary Kiln

5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN

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Rotary Kiln

Rotary Kiln Base Frame

5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN

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Side View

Clinker Line

Test Piles of The Rotary Kiln

Reinforcement for The Rotary Kiln

Foundation Preparation for The Rotary Kiln

5500 TPD CLINKER PRODUCTION LINE PROJECT NAVOI /UZBEKISTAN

Rotary Kiln

BEFESA WAELZ OXIDE PLANT

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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	İskenderun / Turkey
Client	Sartech
Project Start Date	2018
Project Finish Date	2019
Project Scope	Rotary Kiln and Dust Settling Chamber Design, Manufacturing And Construction

BEFESA WAELZ OXIDE PLANT

BEFESA WAELZ OXIDE PLANT

Befesa Waelz Oxide Side View

Kiln Girth Gear Assembly

BEFESA WAELZ OXIDE PLANT

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Kiln Assembly


Kiln Roller Assembly


Kiln Girth Gear Assembly

BEFESA WAELZ OXIDE PLANT

BEFESA WAELZ OXIDE PLANT

BEFESA WAELZ OXIDE PLANT


Befesa Waelz Oxide Plant Completed by Deha Tech


Site View

MARZINC WAELZ ZINC OXIDE PLANT ROTARY KILN MANUFACTURING

DEHA TECH
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Marzinc Marmara Geri Kazanım A.Ş. İs 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 WAELZ ZINC OXIDE PLANT ROTARY KILN MANUFACTURING

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Zinc Oxide Plant Roller Station

Dust Settling Chamber

Kiln Shell

MARZINC WAELZ ZINC OXIDE PLANT ROTARY KILN MANUFACTURING

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Marzinc Waelz Zinc Oxide Plant General View


Refractory Assembly


Casting & Machining of Riding Ring

DEHA TECH

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

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ENERGY FROM WASTE PLANT, ISTANBUL / TURKEY

DEHA TECH
GENIUS SOLUTIONS

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 CO_2 Emissions

ENERGY FROM WASTE PROJECT, ISTANBUL / TURKEY

DEHA TECH
GENIUS SOLUTIONS

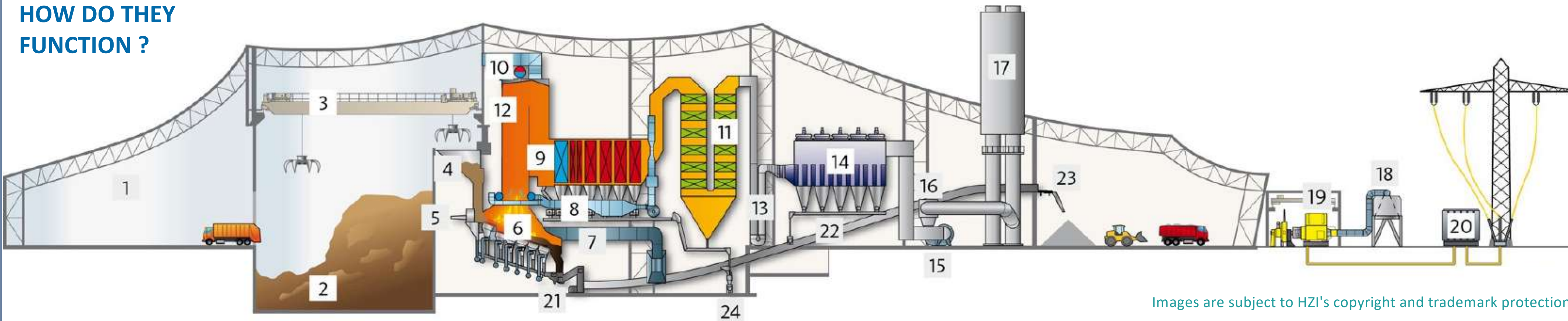
Istanbul Waste to Energy Plant Recovery	
Type	Extraction Condensing Turbine
Electric Power	77 MW at 100%
Annual Capacity	1,000,000 t/a
Type of Waste	Municipal Solid Waste

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 ?



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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

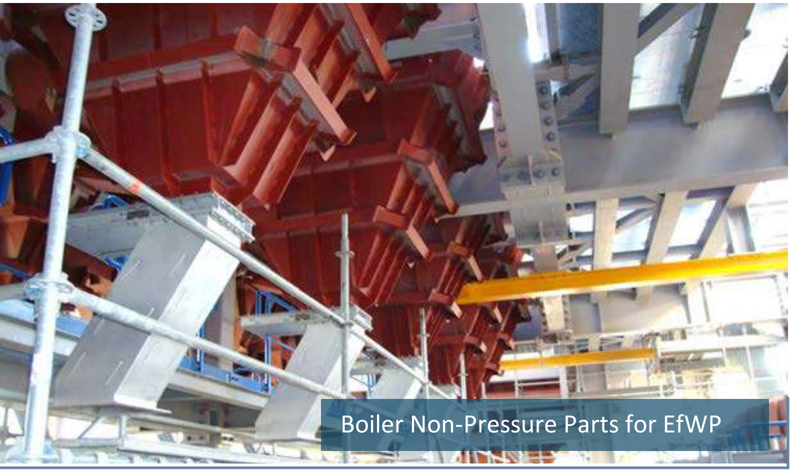
ENERGY FROM WASTE PLANT, ISTANBUL / TURKEY

ENERGY FROM WASTE PLANT, ISTANBUL / TURKEY

DEHA TECH
GENIUS SOLUTIONS

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

DEHA TECH
GENIUS SOLUTIONS


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

DEHA TECH
GENIUS SOLUTIONS

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

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 gratea
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

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ENERGY FROM WASTE PLANT, DUBAI / UAE

Fabric Filters Manufacturing

Fabric Filter Manufacturing

Fabric Filter

ENERGY FROM WASTE PLANT, DUBAI / UAE

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Fabric Filters Manufacturing

Cranes Loading Fabric Filters for Shipment

ENERGY FROM WASTE PLANT, DUBAI / UAE

DEHA TECH
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Fabric Filters Packing Process

Fabric Filters Ready for Shipment

Fabric Filters Transport to Shipment

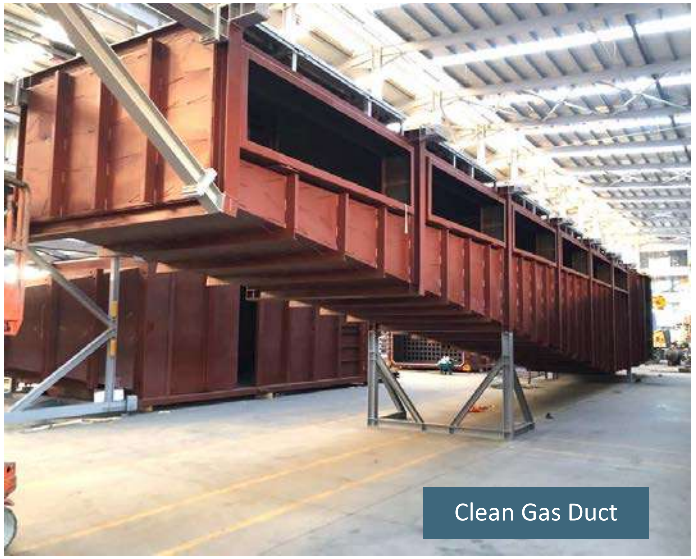
ENERGY FROM WASTE PLANT, DUBAI / UAE

DEHA TECH

Loading Fabric Filter for Shipment

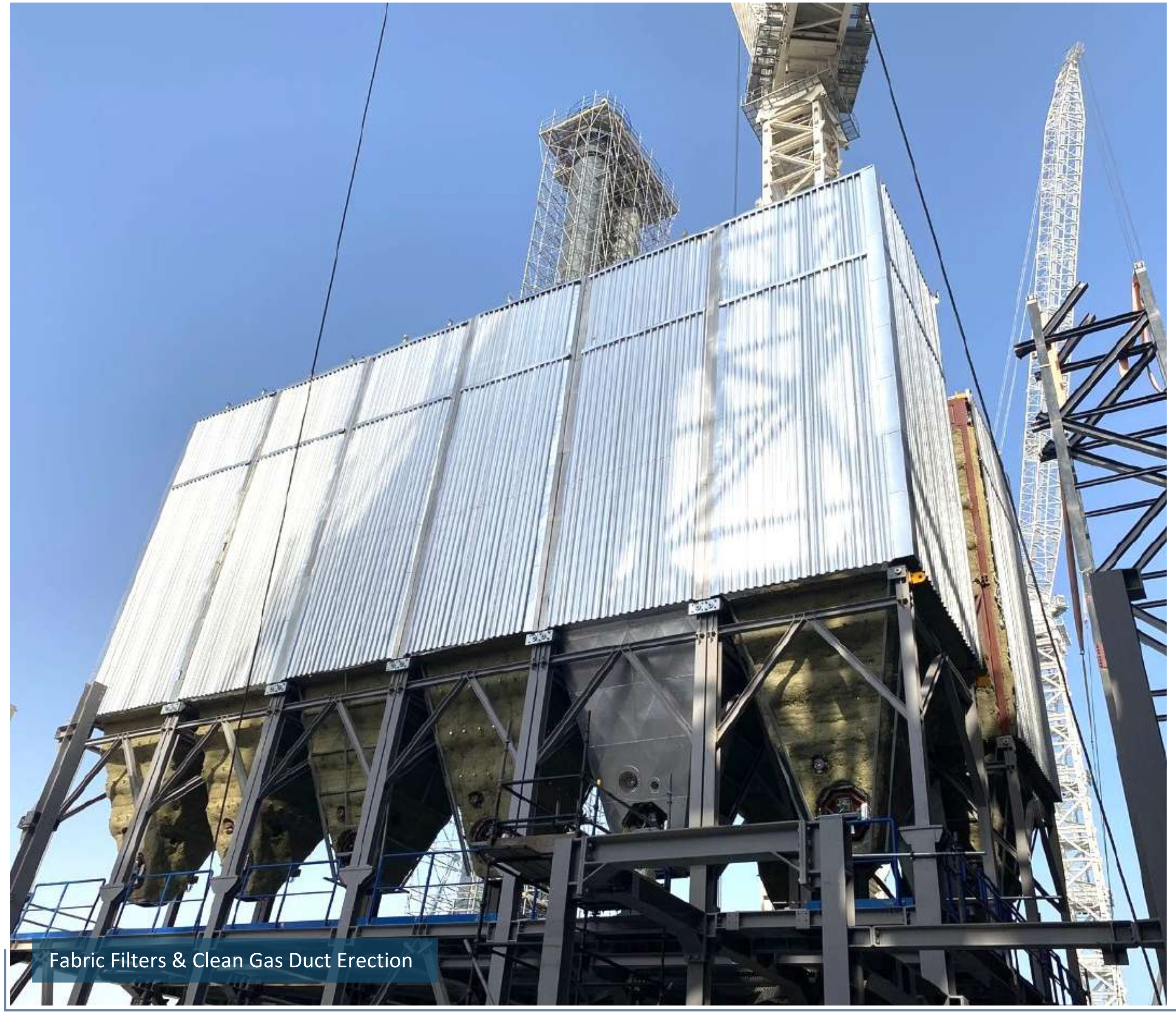
Loading Fabric Filter for Shipment

ENERGY FROM WASTE PLANT, DUBAI / UAE



ENERGY FROM WASTE PLANT, DUBAI / UAE

DEHA TECH



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	Aalborg
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

BIOMASS POWER PLANT, BOLU / TURKEY

Flue Gas Duct System Bolu Biomass Power Plant

Ash Silo Bolu Biomass Power Plant

Bolu Biomass Power Plant

BIOMASS POWER PLANT, BOLU / TURKEY

BIOMASS POWER PLANT, BOLU / TURKEY

DEHA TECH
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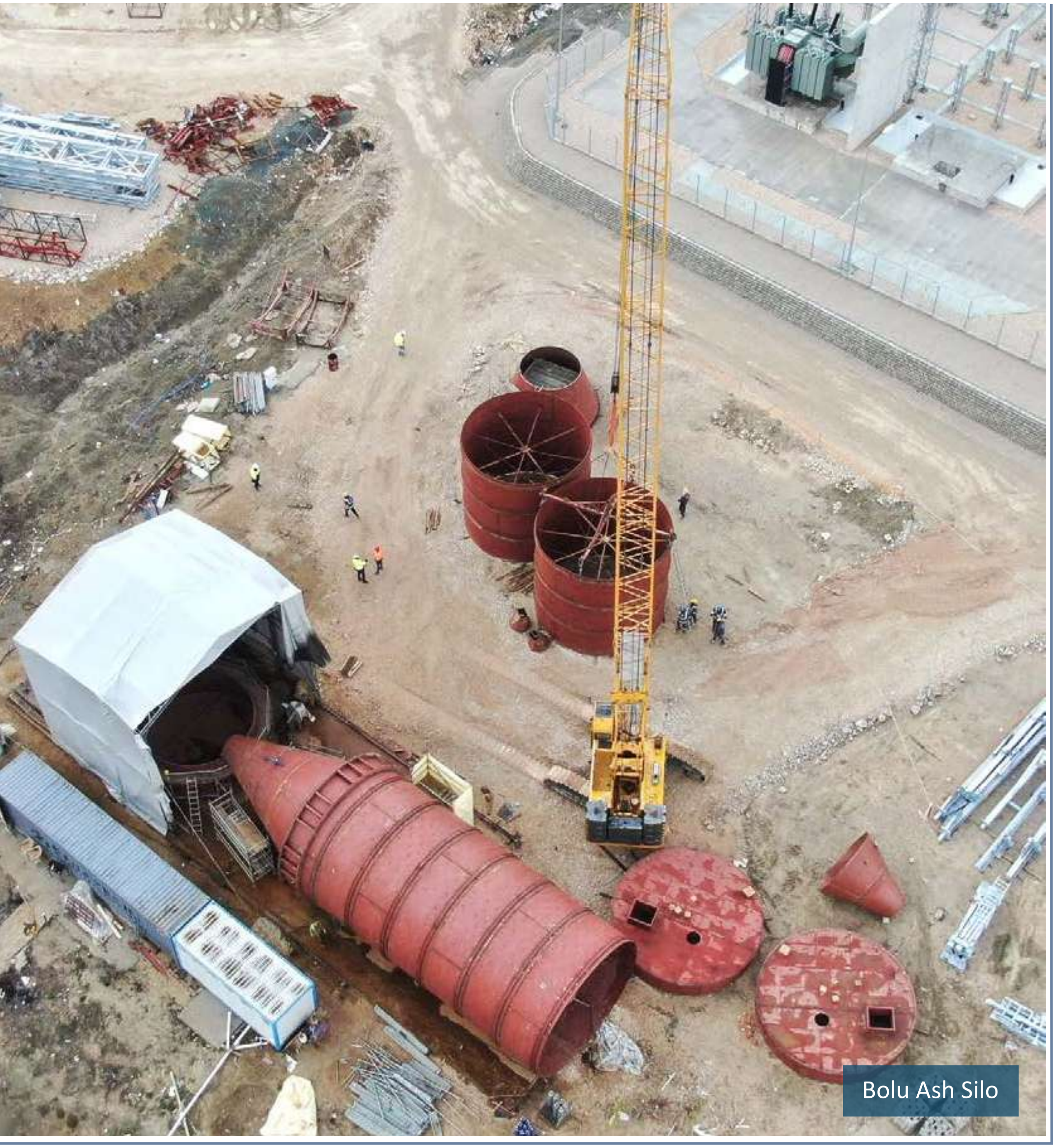
Bolu Ash Silo


Bolu Ash Silo


Bolu Ash Silo

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

Westfield UK EFW Project

Plate Work Bent, Fabrication

ENERGY FROM WASTE PLANT, WESTFIELD / UK

DEHA TECH
GENIUS SOLUTIONS

Plate Work, Fabrication

ENERGY FROM WASTE PLANT, LONDON / UK

DEHA TECH
GENIUS SOLUTIONS

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 CO_2. The new ERF will also save the equivalent of 215,000 tonnes of CO_2 each year – the equivalent of taking 110,000 cars off the roads.


Feed Hopper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North London Waste Authority

ENERGY FROM WASTE PLANT, LONDON / UK

Bottom Ash Chute


Grate Riddling


Grate Riddling

ENERGY FROM WASTE PLANT, EMMENSPITZ / 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

North London Waste Autority

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Boiler Non-Pressure Parts for EfW

ENERGY FROM WASTE PLANT, EMMENSPITZ / SWITZERLAND

Furnace Door

ENERGY FROM WASTE PLANT, SLOUGH / UK

DEHA TECH

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

DEHA TECH
GENIUS SOLUTIONS

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

DEHA TECH
GENIUS SOLUTIONS

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

DEHA TECH
GENIUS SOLUTIONS

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

Feed Hopper for EfW Plant


Feed Hopper for EfW Plant

ENERGY FROM WASTE PLANT, ROCKINGHAM / AUSTRALIA

DEHA TECH
GENIUS SOLUTIONS

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


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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

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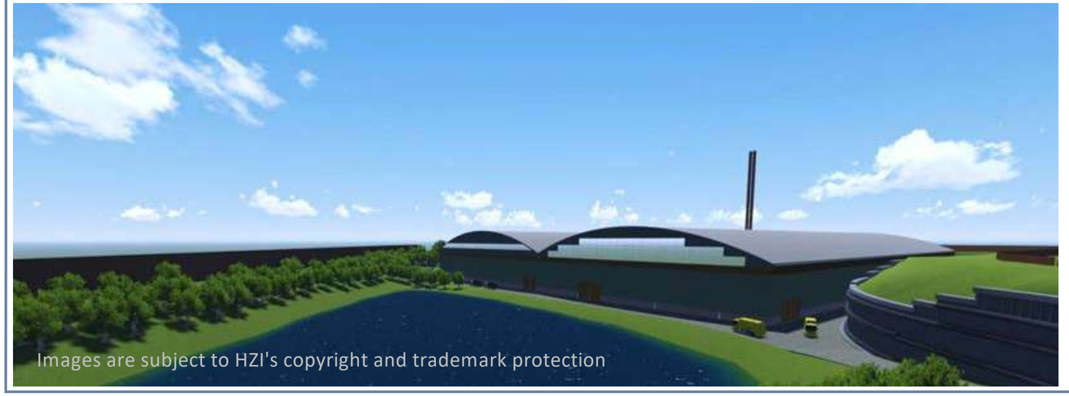
Ram Type Bottom Ash Extractor for EfW Plant

ENERGY FROM WASTE PLANT, RIVENHALL / UK

DEHA TECH
GENIUS SOLUTIONS

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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Boiler Non-Pressure Parts for EfW Plant

ENERGY FROM WASTE PLANT, ROOKERY / UK

DEHA TECH
GENIUS SOLUTIONS

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


Residue Silo


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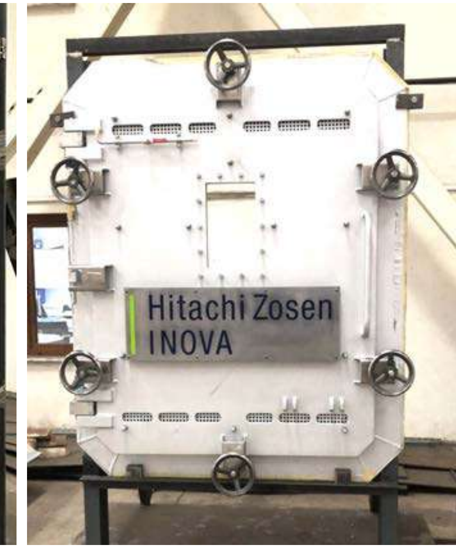
Silo (Pac)

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

Furnace Door



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


Bottom Ash Extractor

ENERGY FROM WASTE PLANT, PLYMOUTH / UK

DEHA TECH GENIUS SOLUTIONS

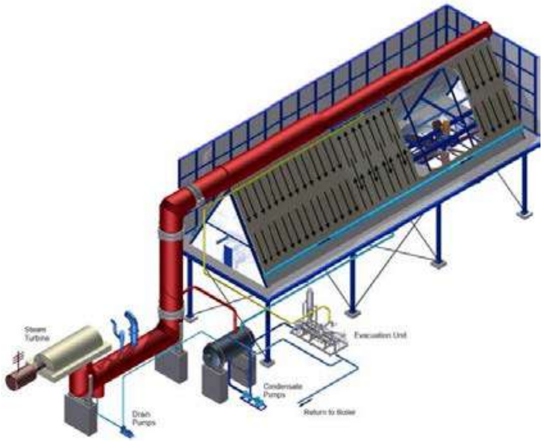
Project Name	Air-cooled Condenser System for Thermal Recycling P.
Place	Plymouth / United Kingdom
Customer	Clyde Bergeman Termotec
Subcontractor	Deha Tech
Service	Fabrication
Scope	The Air-Cooled Condenser System Will be Used in The New Thermal Recycling Plant in Plymouth 350 Ton Structural Steel Erection 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

Ducting and Chutes

Structural Steel Erection

ENERGY FROM WASTE PLANT, PLYMOUTH / UK

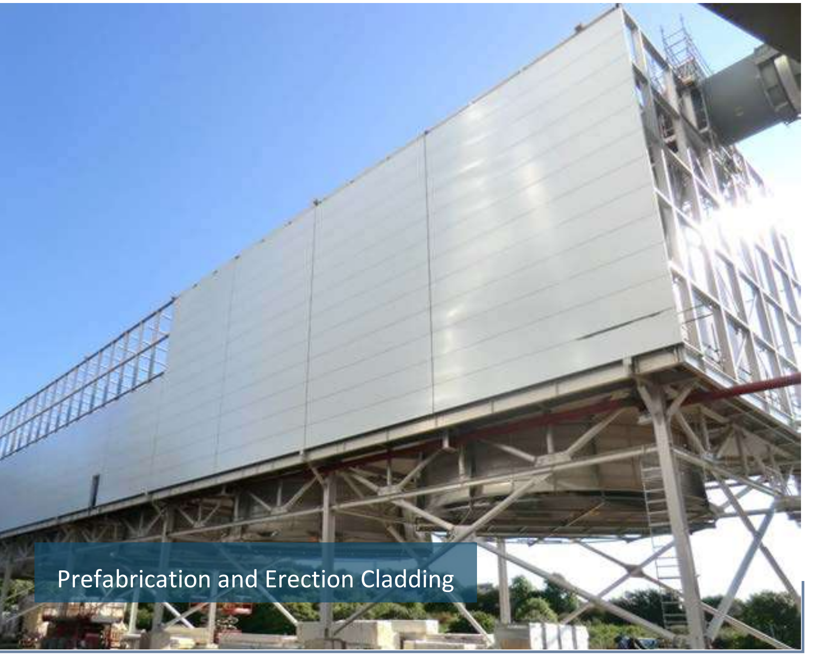
Air-cooled Condenser System for Thermal Recycling Plant



Structural Steel Erection

ENERGY FROM WASTE PLANT, PLYMOUTH / UK

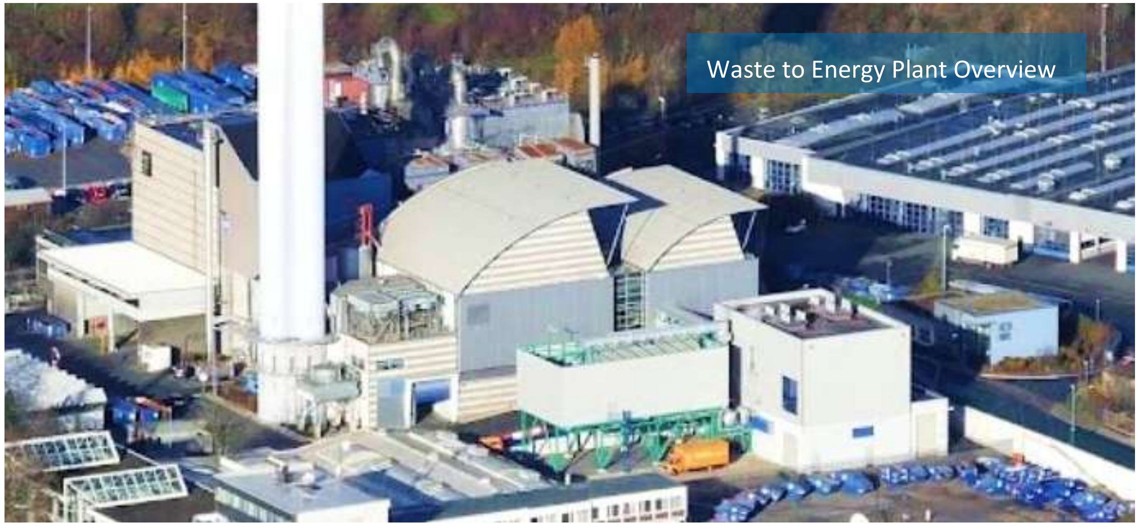

Air-cooled Condenser System for Thermal Recycling Plant


Prefabrication and Erection Cladding

ENERGY FROM WASTE PLANT, HAGEN / GERMANY

DEHA TECH
GENIUS SOLUTIONS

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



Waste to Energy Plant Overview

Prefabrication and Erection Cladding

ENERGY FROM WASTE PLANT, HAGEN / GERMANY

Structural Steel Erection

Structural Steel Erection

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DeSOx AND DeNOx SYSTEMS

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AKSA ENERGY POWER PLANT CYPRUS

DEHA TECH
GENIUS SOLUTIONS


Aksa De-Sox Tower & Pump Station


Aksa De-Sox Tower


Aksa 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

DEHA TECH
GENIUS SOLUTIONS

Aksa De-Sox Tower & Pump Station

Aksa De-Sox Tower

Aksa De-Sox Tower

AKSA ENERGY POWER PLANT CYPRUS

DEHA TECH
GENIUS SOLUTIONS


De-Sox Tower & Steam Drum


Aksa De-Sox Tower


Steam Drum

TUBITAK FLUID BED BOILER – MAM PROJECT


Heat Recovery Steam Turbine System


Mechanical Manufacturing and Erection Works


Heat Recovery Steam Turbine System

MANUFACTURING PLANTS

KARTEPE FACTORY 1 PROFILE

DEHA TECH
GENIUS SOLUTIONS

Location	Kartepe	**Status**	Active
Open Area	18.000 m²	**Closed Area**	10.000 m²
Production Capacity	4.800 t	**Personnel**	150
Main Equipment	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		
Crane Capacity	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		

KARTEPE FACTORY 2 PROFILE

Location	Kartepe
Status	Active
Open Area	2.500 m²
Closed Area	2.500 m²
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	2.000 m²
Closed Area	3.000 m²
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

DEHA TECH
GENIUS SOLUTIONS

Location	Haydarpaşa Port
Status	Active
Open Area	50.000 m²
Closed Area	1.000 m²
Production Capacity	4.500 Tons
Personnel	230

Field Dimensions

Length	250 meters
Width	70 meters
Door Entry Width	6 meters
Door Height	8 meters
Draft (Dock Depth)	11 meters
Dock Width	115 meters

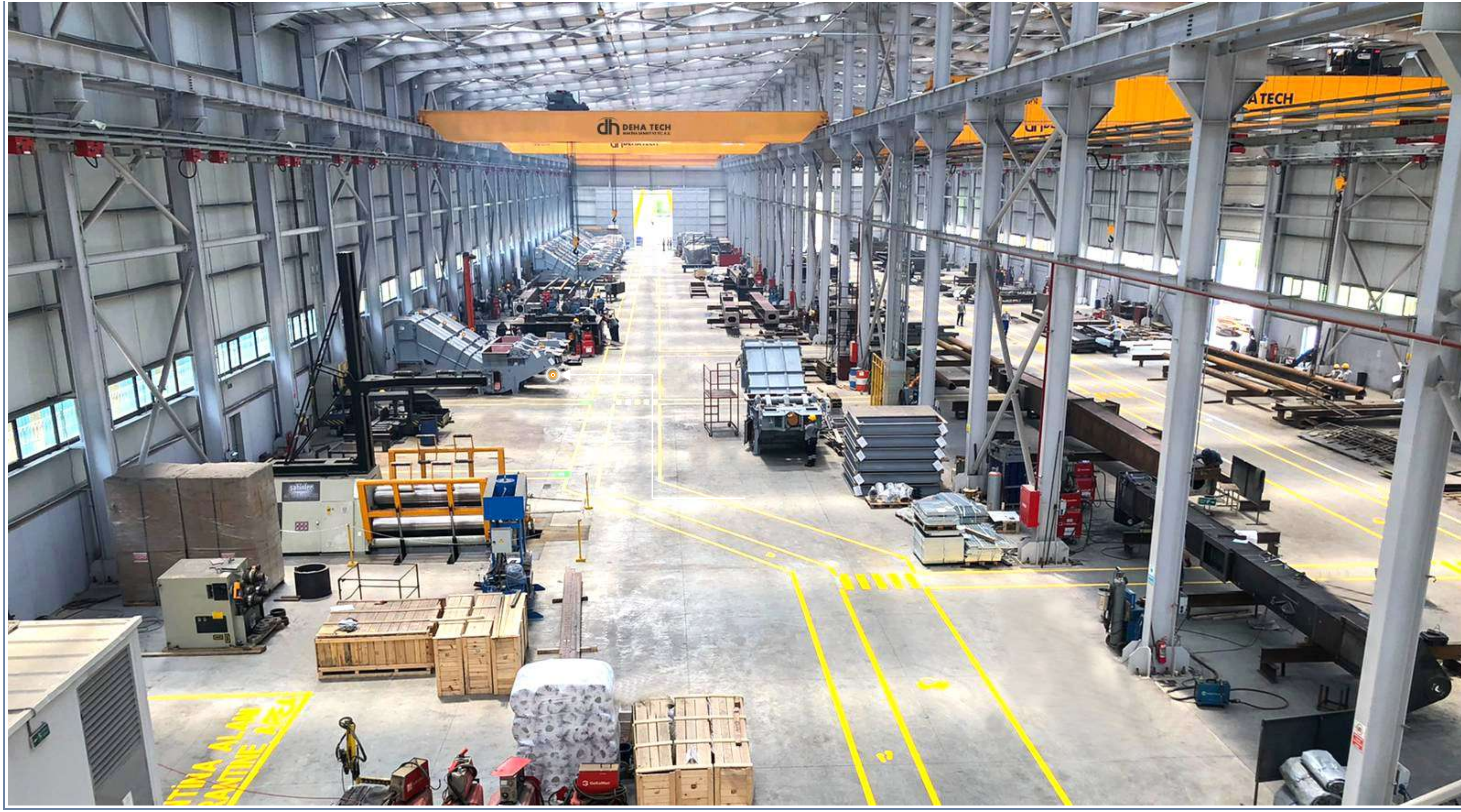
The barge can dock and be loaded with materials using SPMTs.

KARTEPE FACTORY 1 GENERAL VIEW

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.

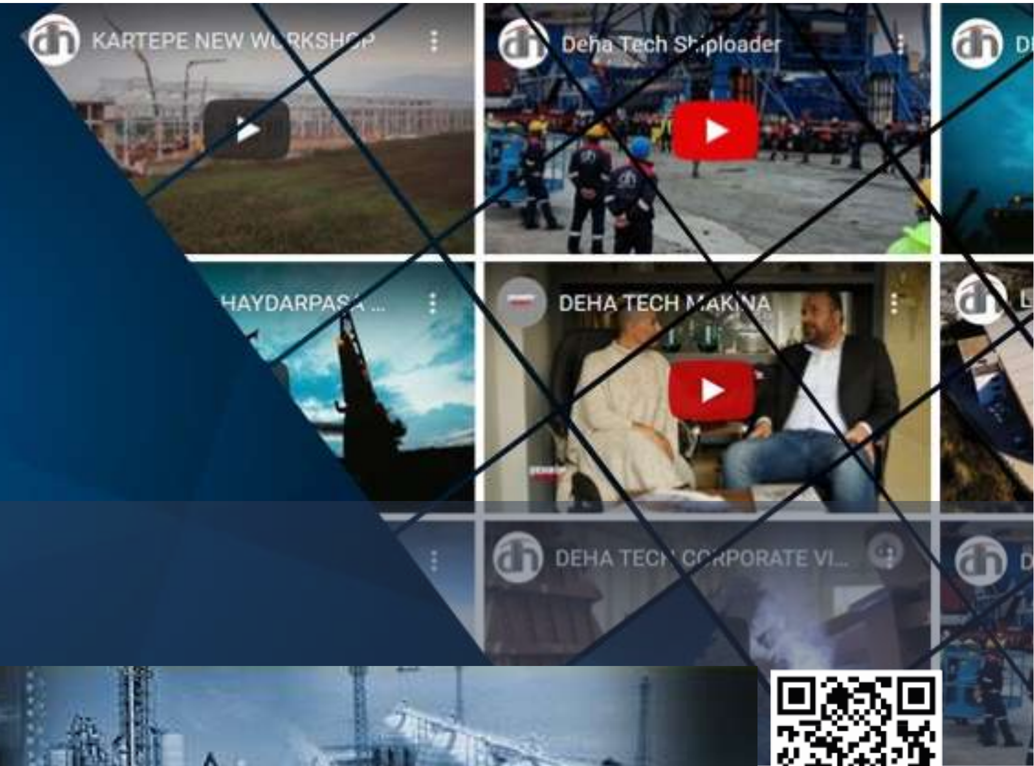
DEHA TECH KARTEPE FACTORY INTERIOR VIEW

DEHA TECH
GENIUS SOLUTIONS



DEHA TECH KARTEPE FACTORY GENERAL VIEW

DEHA TECH`S CONTACT DETAILS



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