







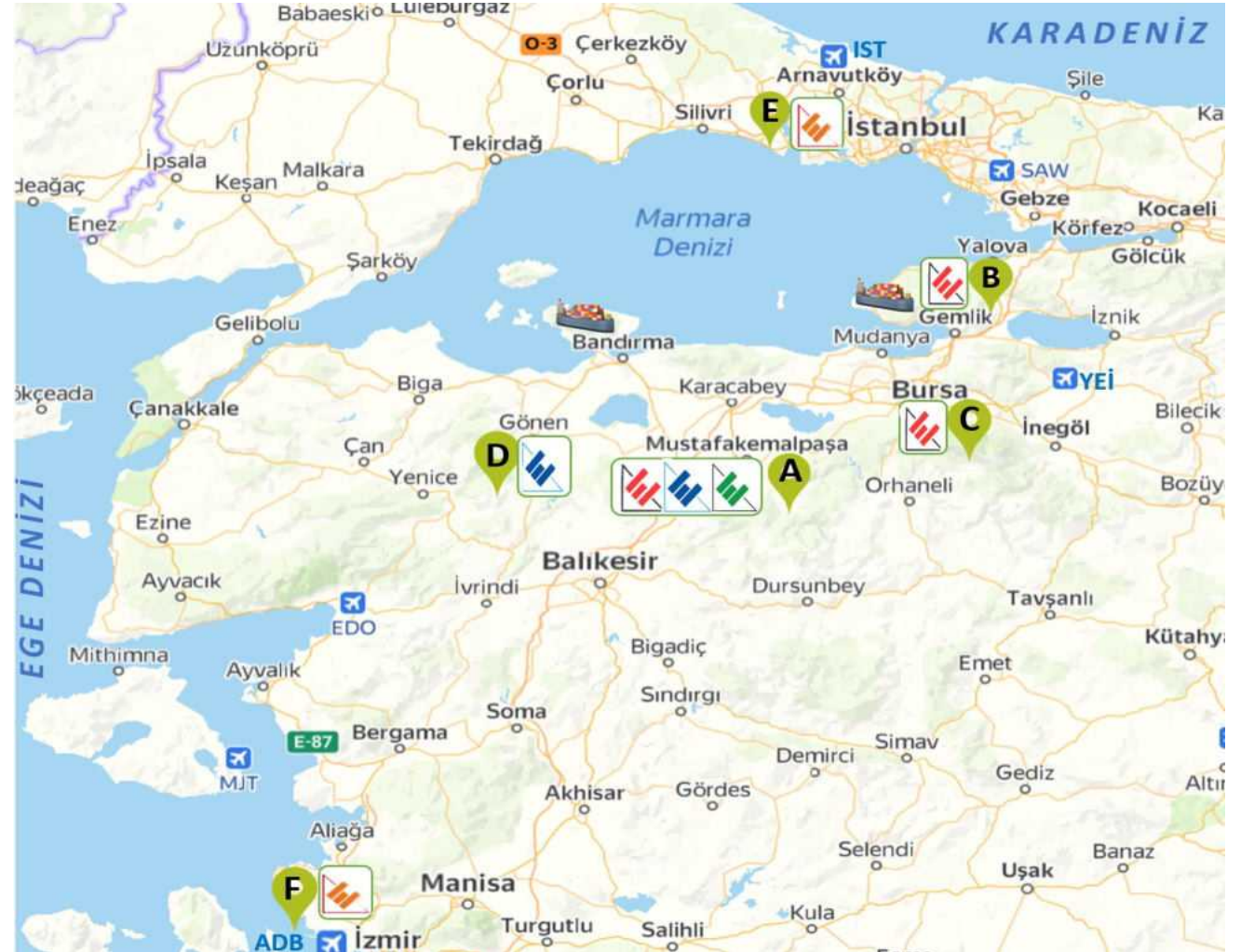
ERALP[®]
BOILER & ENERGY TECHNOLOGIES

GROUP COMPANIES



LOCATION

- A** [M. Kemalpaşa Factory and R&D Center](#)
 ERALP BOILER & ENERGY TECHNOLOGIES
 ERALP FINTUBE
 ERALP CHEMICAL & WATER TECHNOLOGIES
- B** [Gemlik Free Zone Factory](#)
 ERALP BOILER & ENERGY TECHNOLOGIES
- C** [Headquarter Office](#)
- D** [Gonen Deri OSB Factory](#)
 ERALP CHEMICAL & WATER TECHNOLOGIES
- E** [ISBI Yesilkoy Free Zone / Istanbul](#)
 ERALP NEW GEN. SOFTWARE FACTORY
- F** [Izmir Office](#)
 ERALP NEW GEN. SOFTWARE FACTORY

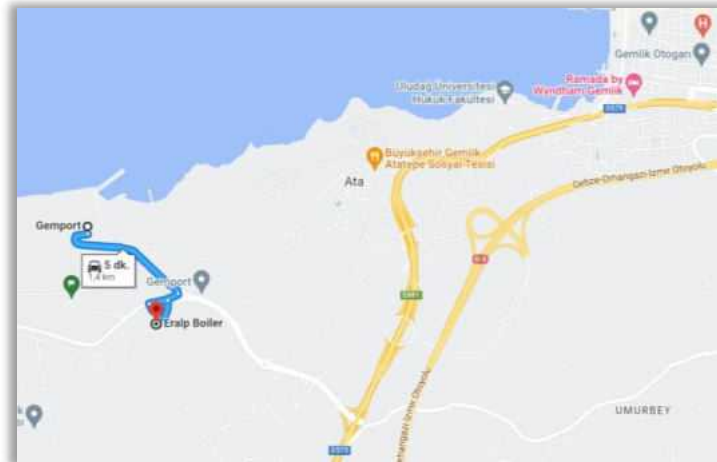


FACTORY - MUSTAFAKEMALPASA



55.000 m2 total, 15.000 m2 closed area, Mustafakemalpaşa, BURSA, TURKEY

FACTORY – GEMLIK FREE ZONE



5.000 m2 closed area, 16 meter building height, Gemlik Free Zone, BURSA, TURKEY

TOTAL : 180 STAFF

MANAGEMENT RESOURCES

- 8 Executive Staff
- 10 Engineering
- 4 Project Executives
- 3 Procurement
- 3 Quality
- 3 Welding Engineers
- 2 Planning
- 5 Sales

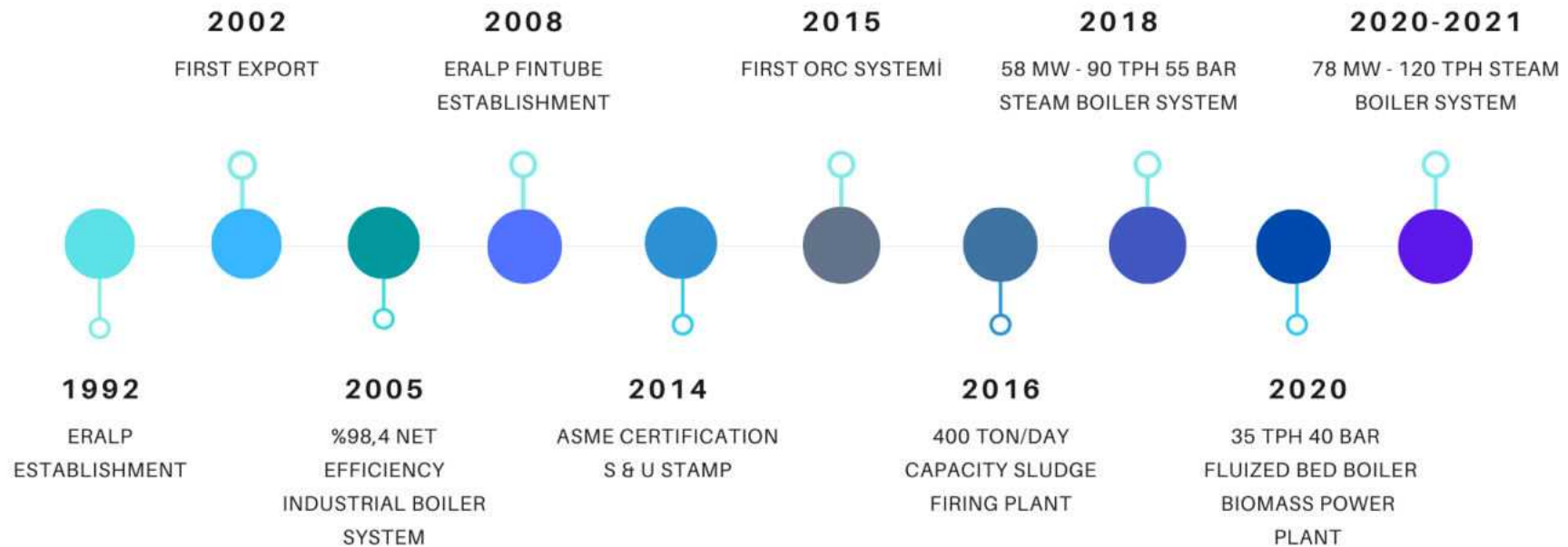
MANUFACTURING RESOURCES

- 90 Direct Employees
- 20 Subcontractors



MILESTONES

MILESTONES



FIRST AND ONLY R&D CENTER IN SECTOR



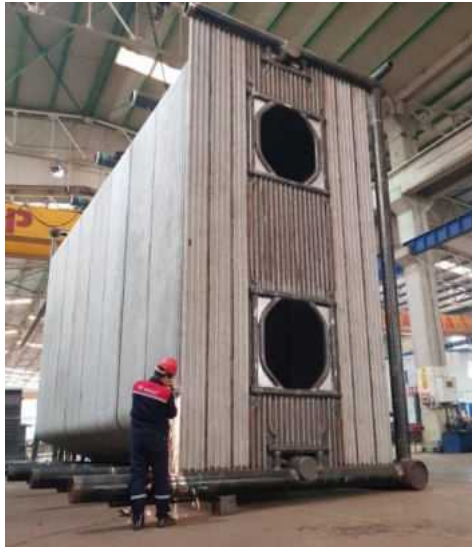
We make our design in ERALP R&D center which is the first and only one in our sector since 2019 .

We manufacture and export new and innovative products that have developed in this Center.



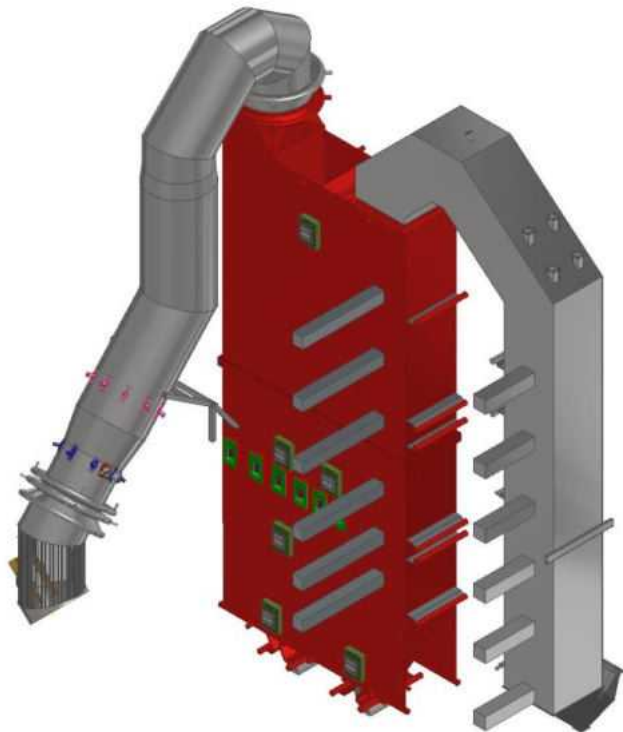
PRODUCTS

- **HEAT RECOVERY STEAM GENERATORS**
- **SLUDGE INCINERATION PLANTS**
- **BIOMASS BOILER / POWER PLANTS**
- **STEAM BOILERS (2 t/h - 300 ton/h)**
- **FLUIDIZED BED / RECIPROCATING GRATE BOILERS**
- **THERMAL OIL HEATER**
- **ORC BOILERS**

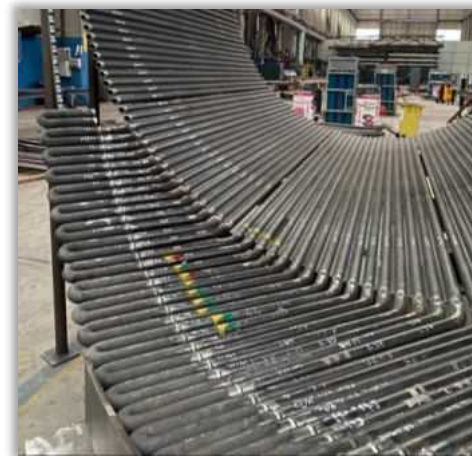


PRODUCTS

- **PROCESS EQUIPMENTS / PLANTS**
- **LA MONT BOILERS / NH₃ REACTORS**
- **HEAT EXCHANGER**
- **MANUFACTURING OF FURNACE FOR IRON & STEEL PRODUCTION SYSTEMS AND COMPONENTS**



- **SKIRT**
- **COOLING RING**
- **MOVABLE & ADJUSTABLE & FIXED HOOD**
- **LANCE DOME & SUBLANCE DOME & CHUTTE**
- **COMBUSTION CHAMBER**
- **ECONOMISER**



PRODUCTS

- HIGH FREQUENCY WELDED FIN TUBE
- BUNDLE MANUFACTURING
- MEMBRANE WALL / PANEL MANUFACTURING
- DRUM AND PRESSURE PARTS
- ECONOMISER
- DEAERATOR
- INDUSTRIAL STACK
- INDIRECT AIR HEATER



- **AUTOCLAVES**
 - **GLASS LAMINATION AUTOCLAVES**
 - **COMPOSITE AUTOCLAVES**
 - **AERATED CONCRATE AUTOCLAVES**
 - **RUBBER CURING AUTOCLAVES**
- **STEAM ACCUMULATORS**
- **CHEMICAL REACTORS**



PRODUCTS

- **WATER TREATMENT SYSTEMS**
 - **WASTE WATER RECOVERY SYSTEM**
 - **SEA WATER TREATMENT SYSTEM**
-
- **REVERSE OSMOSIS SYSTEMS**
 - **ULTRAFILTRATION**
 - **EDI**
 - **MBR SYSTEMS**
 - **WATER SOFTENING SYSTEMS**
 - **SAND FILTERS**
 - **MINERAL FILTER SYSTEMS**



Corner Type Water Tube Boilers



Boiler systems

ERK boilers

More than seven decades of ERK Boiler implementation and 6,100 installed boiler systems worldwide demonstrate the unique benefits of the ERK design and our ongoing desire to improve and innovate.

Our services cover the provision of ERK water tube boilers, fire tube boilers, firing systems, heat exchangers and engineering services in industrial and power plants. On request, we can provide more detailed references and even organise site visits to allow you to experience our high-quality work first-hand.

more than

6000

References

The ERK (corner tube) Boiler is a modern, natural-circulation water tube boiler. The main characteristics are a very active water circulation, rapid load change capability, light-weight construction and self-supporting structure.

Twinfluid System for Fluized Bed Firing Systems



alera International Pte. Ltd. • 4 Battery Road
25 - 01 Bank of China Building, Singapore

To whom it may concern

06.04.2020

Patent Utilisation
General license
ERALP KAZAN

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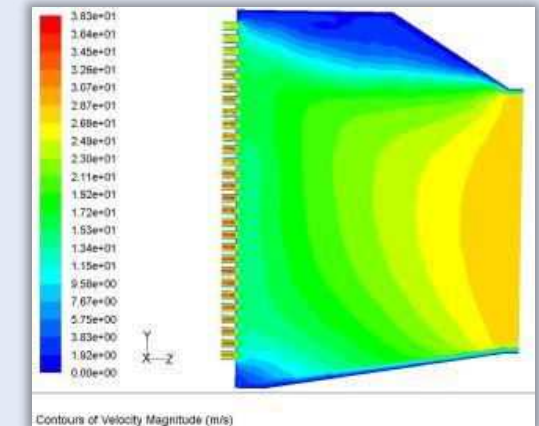
Registration Number
200917032D

This is to confirm that

ERALP MAKİNE KAZAN KİMYA VE EKİPMANLARI SAN. VE TİC. A.Ş.
Organize Sanayi Bölgesi, 3, Cadde No:11, Mustafakemalpaşa
BURSA - TURKEY

under general license agreement dated 3.2.2020 with alera international Pte Ltd, Eralp Kazan has the right to grant licenses to their clients covering the **TwinFluid** fluidised bed technology and utilising all intellectual property rights covering the **TwinFluid** technology, owned by Christa Frodeno, managing director of alera international Pte. Ltd

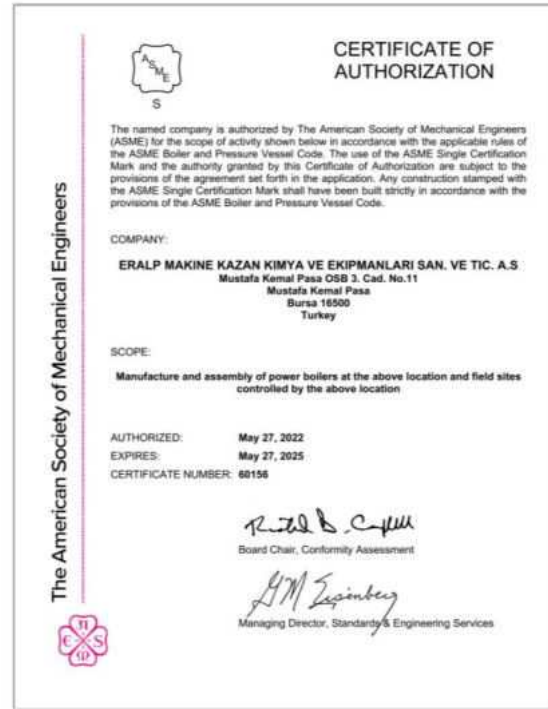
Should Eralp Kazan, for whatever reason, fail permanently to service the **TwinFluid** licence to their client as agreed between Eralp Kazan and the client, alera international Pte Ltd undertakes to make available the patent rights under the same conditions as agreed between Eralp Kazan and the client.



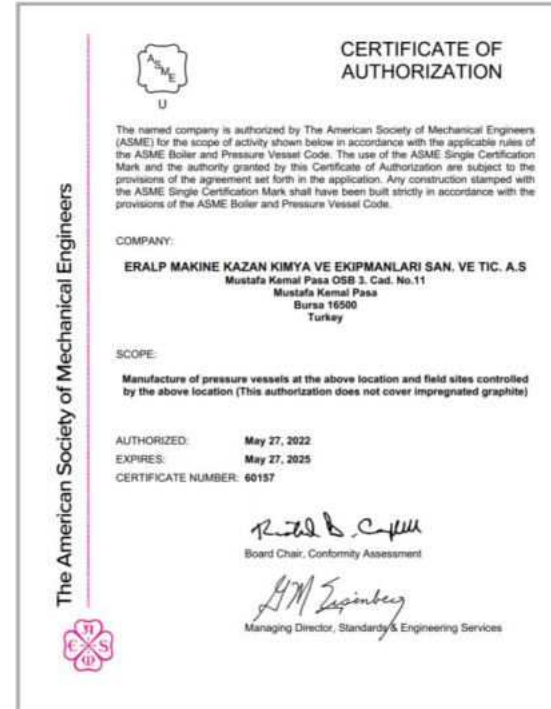
CERTIFICATES



ISO 9001 / 2008



ASME – S STAMP



ASME – U STAMP



EN ISO 3834-2

CERTIFICATES



AD 2000 MERKBLATT HP0



EAC



**EN 13084
STACK CERTIFICATE**



2014 /68 EU

 Since 2008 ,Eralp has own material laboratory which is the first and only one in their sector, in Turkey



Tests

Destructive Tests

- Tensile Test
- Compression Test
- Impact Test
- Hardness Test
- Macro Examination

Non Destructive Test

- Ultrasonic test
- Magnetic Test
- Penetrant Test
- Paint thickness measurement

LABORATORY EQUIPMENT



WATER TUBE BOILER

- * D Type and Corner Type Water Tube Boilers
- * Request above 300 ton/h steam capacity be evaluated by engineering team.
- * EN 12952 or ASME standarts
- * Compact Design
- * Low NOx



90 ton/h 55 bar 450°C Superheated Water Tube Steam Boiler

WATER TUBE BOILER

* Design of the boiler enables easy installation and reduces installation time.



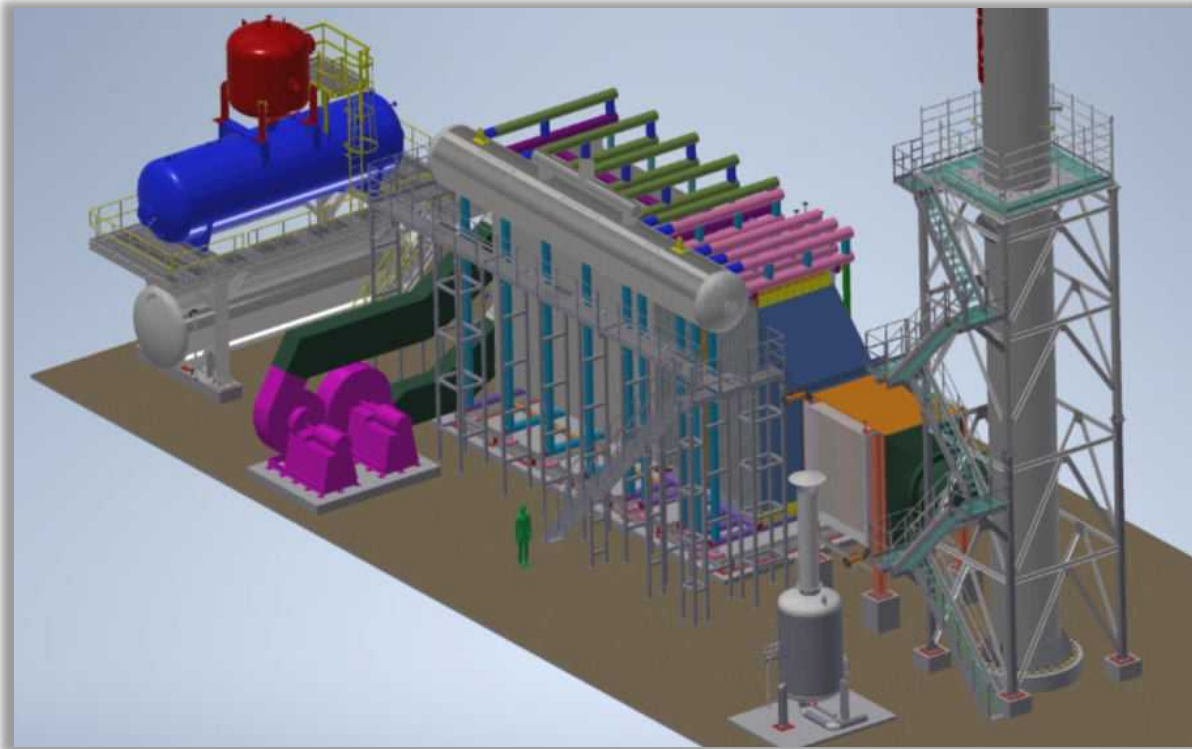
Installation of 90 ton/h 55 bar 450°C Superheated Water Tube Steam Boiler

WATER TUBE BOILER



120 ton/h 16 bar 400°C Superheated Water Tube Steam Boiler Transportation

WATER TUBE BOILER



120 ton/h 16 bar 400°C Superheated Water Tube Steam Boiler System

MANUFACTURING OF FURNACE STEEL PRODUCTION SYSTEMS AND COMPONENTS



MANUFACTURING OF FURNACE STEEL PRODUCTION SYSTEMS AND COMPONENTS

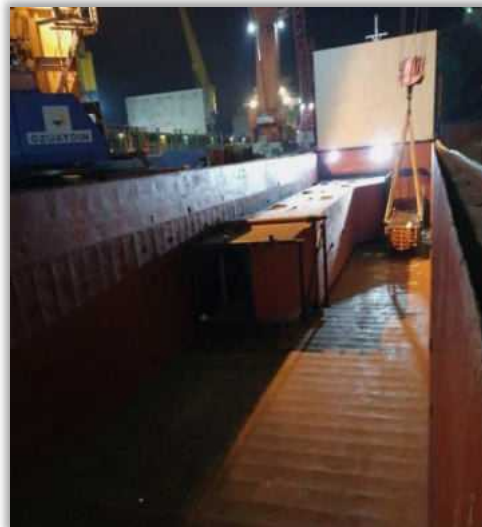


NH₃ REACTOR & ECONOMISER

Eralp has manufacturing ability with its spiral tube bending machine up to 6 meter diameter and qualified staff for NH₃ reactors/ La Mont Boilers and Economisers.



WASTE TO ENERGY BOILER SHIPMENT FROM GEMLIK FREE ZONE



STAINLESS STEEL SECTION

Eralp has a separate stainless steel area including separate machinery and stainless steel material stock area for stainless steel manufacturing.



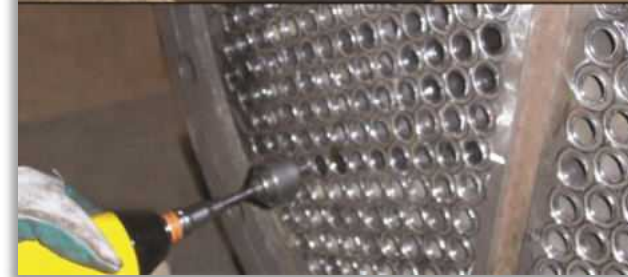
HEAT EXCHANGER

We design and manufacturing heat exchanger for Power plant, Chemical Industry and Refineries according to ASME and EN 13445 Standards.



120 ton weight Sulpuric Acid Process Heat Exchanger

HEAT EXCHANGER



SLUDGE INCINERATION PLANT

Location	: Bursa / TURKEY
Boiler Quantity	: 2 pcs
Capacity	: 400 ton/day
Pressure & Temperature	: 42 bar 460 °C
Sludge Calorific Value	: 3.600 kcal/kg
Sludge Dryness	: 22% -26%
Electricity Production	: 2,5 MWe



First and only one boiler system which has firing %25 dryness content sludge in TURKEY

WATER TUBE WASTE HEAT RECOVERY BOILER - SLUDGE INCINERATION PROJECT

Boiler Quantity	: 2 pcs
Heating Surface	: 1.200 m²
Pressure	: 42 bar
Temparture	: 460 °C Superheated Steam
Fuel	: %25 Dryness Sludge
Capacity	: 200 ton/day x 2
Type	: Vertical Type Water Tube
Product	: WHRB



INCINERATORS – WET SLUDGE FIRED PROJECT



BIOMASS POWER PLANT

Location	: KINIK / İZMİR
Electricity Capacity	: 7,15 MW
Boiler Type	: Fluidized Bed Steam Boiler
Steam Capacity	: 35 Ton/h x 40 bar
Steam Temperature	: 450°C
Fuel	: Biomass

 **The First Twinfluid Fluidized Bed Boiler in Turkey**



BIOMASS POWER PLANT



RECIPROCATING GRATE BOILERS



MEMBRANE WALL / PANEL MANUFACTURING



Eralp is the biggest panel manufacturer in Turkey with 4 panel welding machines

DRUM MANUFACTURING



HEAT RECOVERY STEAM GENERATOR (HRSG)



Bundle Manufacturing for Power Plants

HIGH FREQUENCY WELDED FIN TUBE



First and only manufacturer of High Frequency welded fin tube since 2008 in Turkey



- * Max 24 mt manufacturing
- * ½ " - 5 " Diameter
- * Carbon steel , Low and High Alloy Manufacturing
- * Serrated and Solid Type Manufacturing
- * 80.000 mt/month manufacturing capacity



HIGH FREQUENCY WELDED FIN TUBE



BENDED FIN TUBE



WASTE HEAT RECOVERY BOILER AFTER TURBINE



12 ton/h steam production is achieved after Taurus 60 turbine

WASTE HEAT RECOVERY BOILER AFTER TURBINE



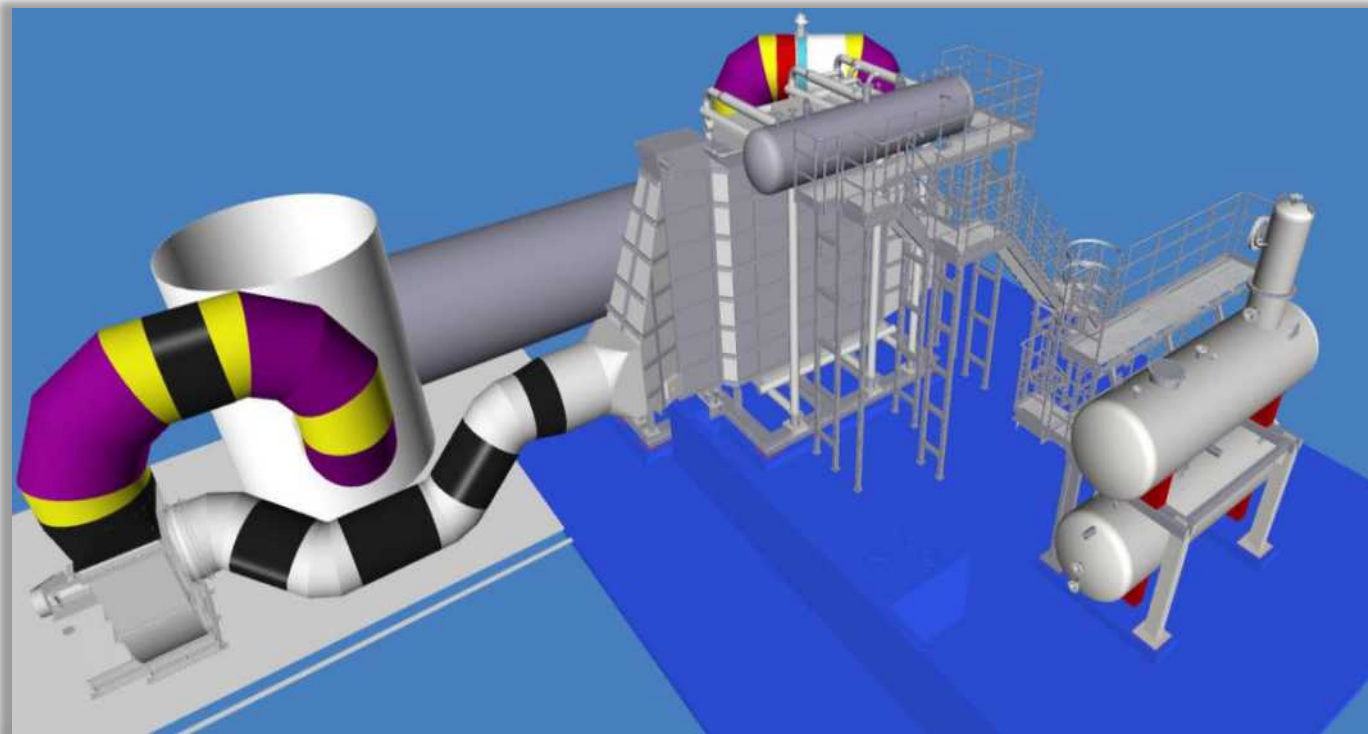
1.Boiler after Turbine : 5.800 kg/h x 16 Bar
2.Boiler after Turbine : 2.700 kg/h x 3 Bar

WASTE HEAT RECOVERY BOILER AFTER GAS ENGINE



WHRB after 3 MW Gas Engine

WASTE HEAT RECOVERY BOILER AFTER FURNACE IN IRON & STEEL INDUSTRY



**Waste Recovery after
Furnace in Iron & Steel Industry**

Waste Heat Flow	: 19,89 kg/s
Flue Gas Inlet Temperature	: 420 °C
Boiler	: WHRB
Boiler Type	: Water Tube
Steam Capacity	: 10,4 ton/h
Thermal Capacity	: 6.748 kW
Flue Gas Outlet Temperature	: 175 °C
Pressure	: 10 Barg

SHELL TUBE STEAM BOILER

Location : Egypt
Capacity : 30 ton/h
Pressure : 8,5 bar Saturated Steam
Fuel : Naturel Gas + Fuel Oil
Type : 3 pass

- * High efficiency
- * Fast start up
- * Long life
- * Low Nox
- * Turn Key solution



SHELL TUBE STEAM BOILER



Turn-key Boiler Room Projects

SHELL TUBE BOILER



Total efficiency was calculated %98,4 in 2005 by Third Party, ISKAV. The boiler had reported the highest efficiency in Turkey as boiler system and take place in the literature.



10 ton/h 10 bar Steam Boiler System with 2 economisers

THERMAL OIL HEATER

We design and manufacture Thermal Oil heater up to 18MW depending on process requirement since 1992.



ORC BOILERS



5,5 MW MERSIN PROJECT



3 MW ITALIA PROJECT



3,2 MW BURSA PROJECT



4,8 MW BULGARIA PROJECT

SPOOL MANUFACTURING



ECONOMISER

For increase efficiency after boiler or furnace, it is necessary to use economiser which exchange waste heat to water with using high frequency welded fintube. Total efficiency can increase % 5 - %7 with using economiser.



DEARATOR SYSTEMS & FEED WATER TANKS



STACK / CHIMNEY



HOT FORMED CORRUGATED FURNACE



AERATED CONCRATE PLANTS

Turn Key solution for Aerated Concrete industry with

- Steam Boiler
- Autoclaves
- Steam Accumulator



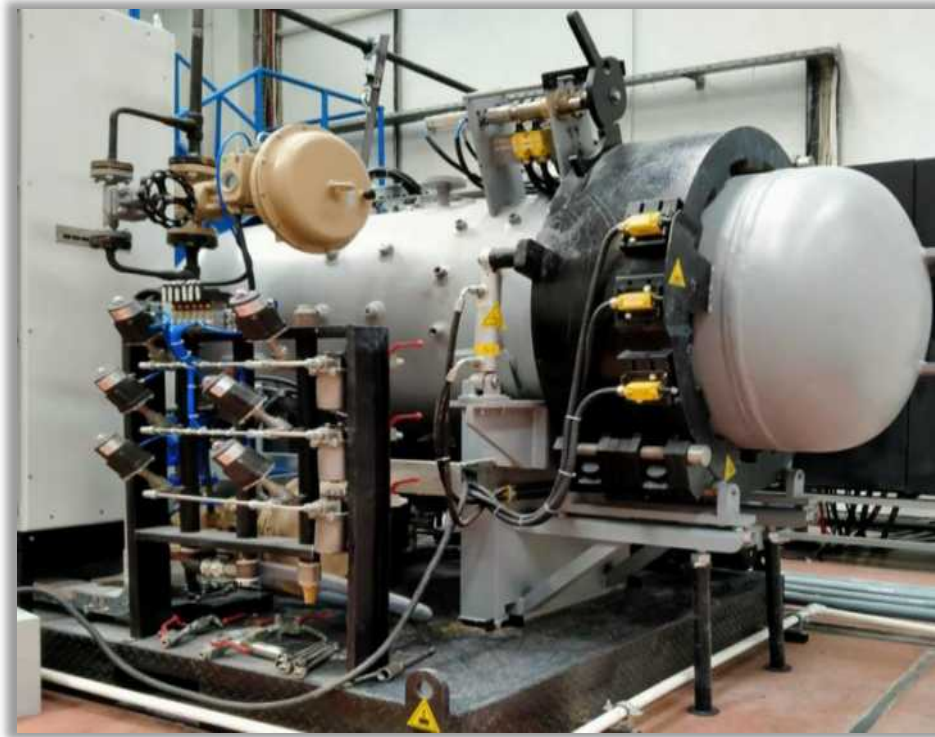
20 Ton/ h x 20 Bar Steam Boiler



Ø 2.900mm x 16 bar x 45 mt Autoclaves



COMPOSITE AUTOCLAVES



**70 Bar Operating Pressure, 260°C
Composite Autoclave**



**20 Bar Operating Pressure, 400°C
Composite Autoclave**

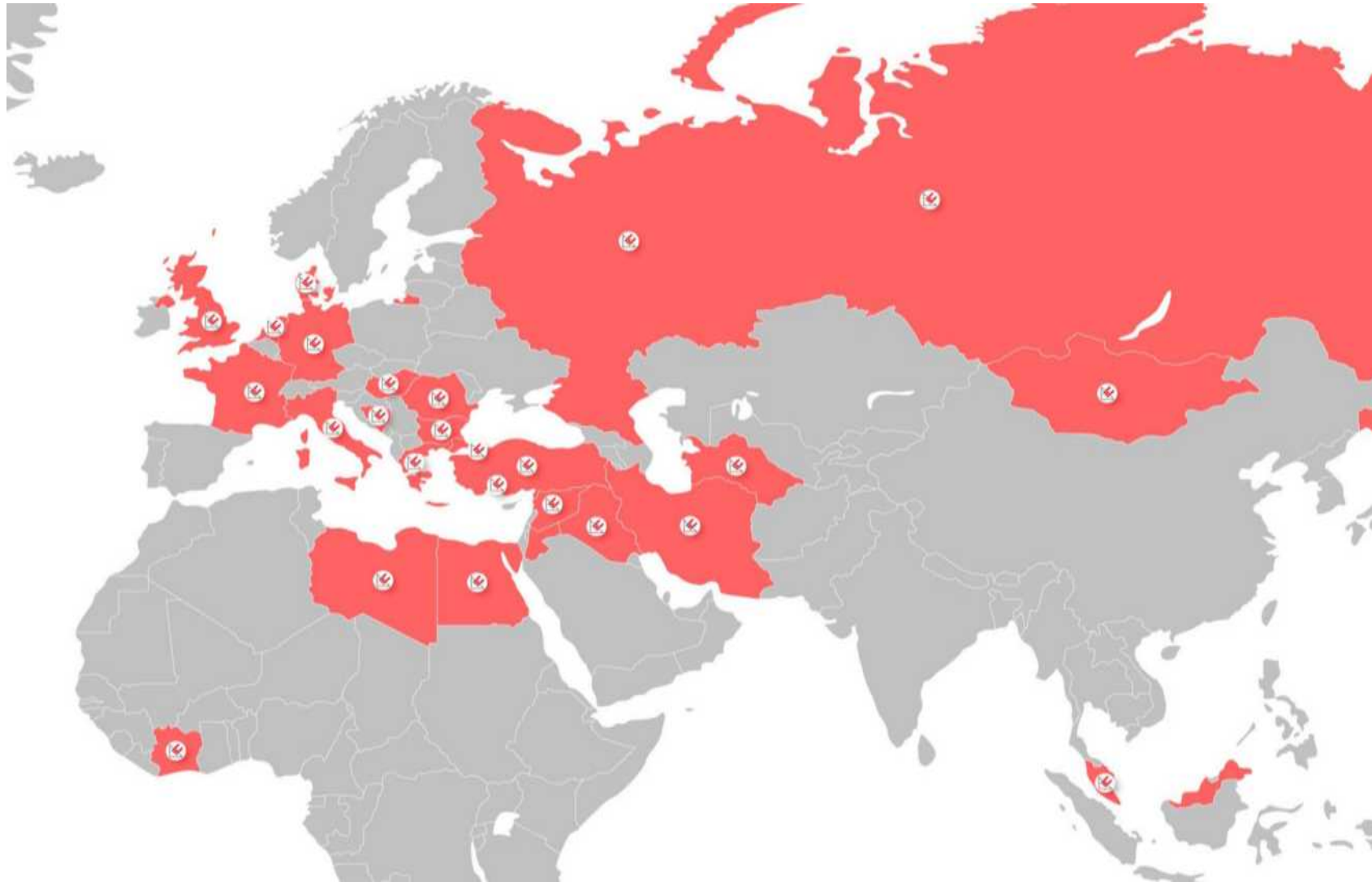
GLASS LAMINATION AUTOCLAVES



RUBBER CURING AUTOCLAVES



ERALP PRODUCTS in the WORLD




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THANKS

Thank you for your attention