ALTYAPI ZEMİN





Ground improvement and geotechnical solutions

About us

WHO WE ARE

On every project it delivers, Altyapı Zemin İyileştirme A.Ş. is committed to completing the works to a high standard, quickly and with quality. With more than 30 years of experience, it develops site-specific solutions that meet programme and cost targets.

Our multidisciplinary engineering team approaches geotechnical projects from a contractor's perspective and assesses every solution for buildability on site. With Chartered Engineering expertise, the company also provides geotechnical consultancy in Türkiye and abroad.



JFZ Engineering – Drilling · Trabzon

Our extensive fleet is configured for a wide range of ground improvement and foundation works. An in-house machine depot and spare-parts stock allow fast response to breakdowns and keep lost time to a minimum.



Machine depot · Assembly of the BG 30 V rig

History

Projects and geotechnical solutions applied



DRILLING

Founded

The company was founded in Trabzon as JFZ Engineering – Drilling, starting out with a skid-mounted D500 rig drilling on the Black Sea Coastal Highway.

SITE INVESTIGATION

Niğde Grand Mosque

Boreholes and in-situ tests beneath the historic structure.

DRILLING

Araklı–Konakönü Road

Ground investigation boreholes along the road alignment.



GROUTING

Giresun Bridge Piers

First grouting works.

TUNNEL GROUTING

Tirebolu T2 Tunnel

Ground-strengthening grouting along the tunnel alignment.



GROUND ANCHORS

Ground anchors for deep excavations and slope stability.

WICK DRAIN (PVD)

Vertical drains to accelerate consolidation in soft, saturated soils.

History

Projects and geotechnical solutions applied



BORED PILES

Northern Marmara Motorway

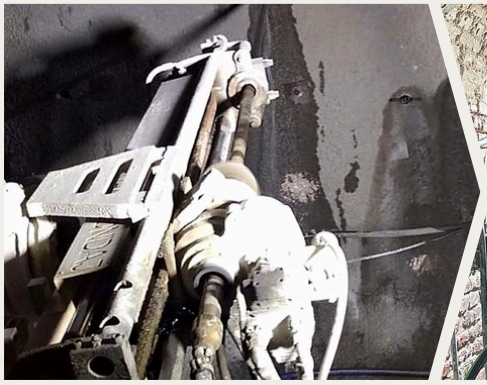
First bored piling works – viaduct foundations and slope piles.



DEEP SOIL MIXING (DSM)

Ankara–İzmir HSR · Salihli – Eşme

First deep soil mixing works. Both DSM and bored piles were executed on the project.



IN-TUNNEL GROUTING

Salihli – Eşme Tunnels

Strengthening grouting from inside the Ankara–İzmir HSR tunnels.



COMPACTION GROUTING

Haydarpaşa Station Restoration

Compaction grouting against soil liquefaction as part of the restoration.



DEEP SOIL MIXING (DSM)

Delice–Çorum HSR

With 5 DSM sets built through fleet investment, a total of 600,000 m of DSM was executed under embankments and bridge approaches.



MACHINE FLEET

Machine Depot

The company's machine depot became operational.



INTERNATIONAL

Albania Branch

The Albania branch opened and work began on the Durrës Yacht Marina project.

Deep soil mixing (DSM)

5 DSM sets

DSM DRILLING RIGS

- **BAUER BG 34 H** #3570
- **BAUER BG 34 H** #3674
- **BAUER BG 30 V** #2811
- **BAUER BG 30 V** #2791
- **BAUER RTG 25 S**

PUMPS AND EQUIPMENT

- **Tecniwell TW 400**
- **Tecniwell TW 352**
- **Eurodrill RHP 15**

BINDER DSM batching plant and silos

FIELD TESTS PIT · Load test · Coring · Datalogger

REFERENCE PROJECTS



KIRIKKALE · DELICE 2025–2026

Kırıkkale (Delice) – Çorum HSR

Ground improvement under embankments and bridge approaches

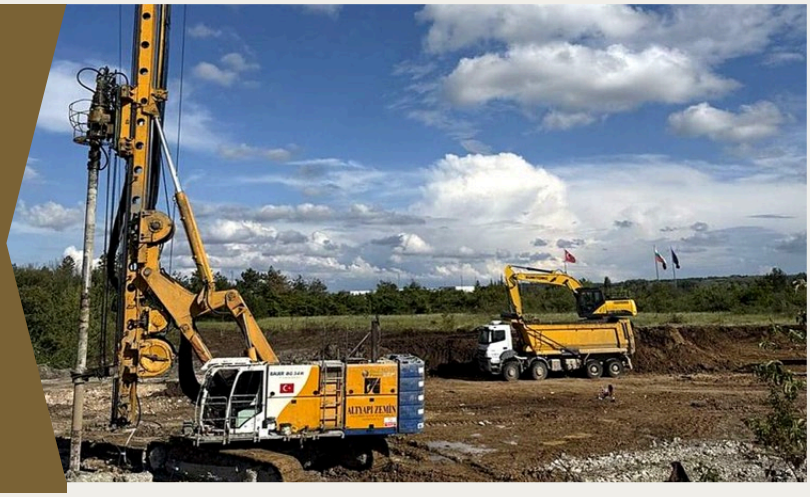
600,000+ m DSM

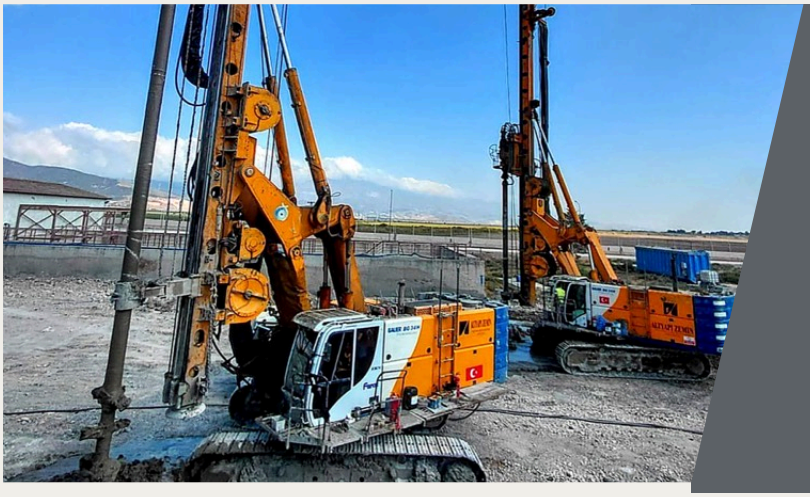
EDIRNE · KAPIKULE 2024–2025

Halkalı–Kapıkule Railway Line

Ground improvement under railway embankment

180,000 m DSM





HATAY 2024–2025

Hatay Airport Road

Ground improvement under road embankment

100,000 m DSM

Grouting works

18 drilling rigs **13** pumps

DRILLING · HYDRAULIC

Diamec 262	**Diesel hydraulic**	**Grout mixing plant**
ES400	**D750**	**Hydraulic piston pump**
ERD400	**D500**	

PLANT AND PUMPS

DRILLING Vertical / inclined · B-rod / NQ / HQ / PQ

QUALITY CONTROL Flowmeter · Pressure gauge · Computerised, automatic, calibrated plant · Plant for bentonite and chemical mixes

FIELD TESTS Water pressure test · Coring · Vs velocity measurement

REFERENCE PROJECTS

MANISA · SALIHLI 2022–2025

Salihli–Eşme Tunnels

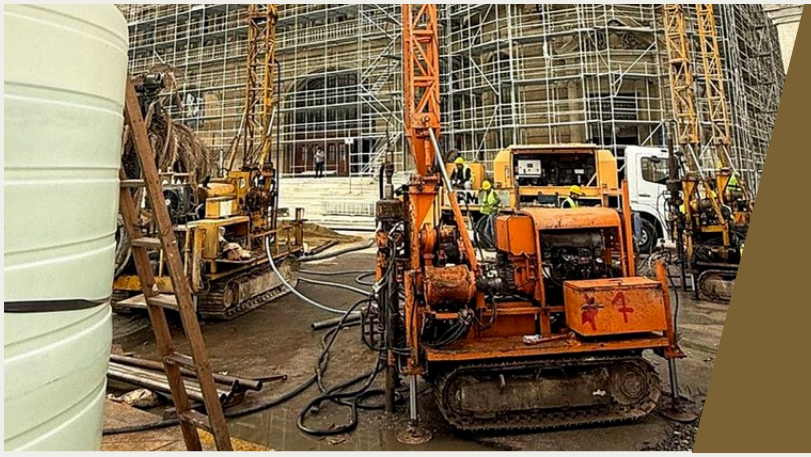
PROBLEM Voids between the tunnel lining and the ground

SOLUTION Contact grouting from inside the tunnel

QUALITY CONTROL Water pressure test

230,000 m grouting





ISTANBUL · KADIKÖY 2025–2026

Haydarpaşa Station

PROBLEM Strengthening the foundations of a historic building

SOLUTION Compaction grouting beneath the foundations

QUALITY CONTROL Vs wave velocity measurements

60,000 m grouting



ALBANIA · DURRËS 2026

Durrës Yacht Marina

PROBLEM Reducing building settlement

SOLUTION Sub-foundation grouting by inclined drilling

QUALITY CONTROL Inclined coring

120,000 m grouting

Bored piling

6 piling rigs

PILING RIGS

- **BAUER BG 34 H** #3570
- **BAUER BG 34 H** #3674
- **BAUER BG 30 V** #2811
- **BAUER BG 30 V** #2791
- **BAUER RTG 25 S**
- **SANY SR285**
- **SANY 60 t crawler crane**

METHOD Kelly · CFA

QUALITY CONTROL TESTS PIT (pile integrity) · Pile load test · Datalogger records

REFERENCE PROJECTS

MARMARA 2017–2019

Northern Marmara Motorway

Viaduct foundations and slope bored piles

210,000 m bored piles





KIRIKKALE 2022–2023

Roketsan

Bored pile works · BAUER BG 34 H

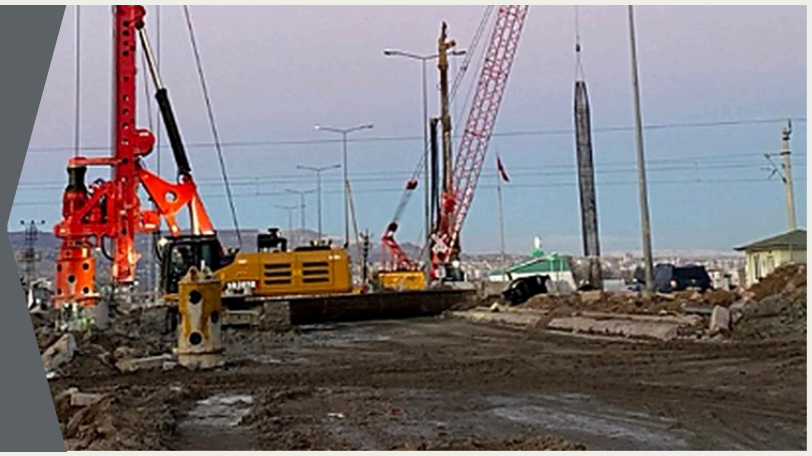
65,000 m bored piles

KAYSERI 2021–2022

Kayseri Tram Line

Secant bored piles for underpass shoring

85,000 m bored piles





Certificates

ISO 9001:2015
Quality Management System

ISO 14001:2015
Environmental Management System

ISO 45001:2018
Occupational Health and Safety Management System

Memberships

CORPORATE

Foundation Contractors Association

INDIVIDUAL

Chamber of Civil Engineers

Chamber of Geological Eng.

Chamber of Geophysical Eng.

Chamber of Mechanical Eng.

Soil Mech. & Geotech. Society

ICE · Chartered Engineer (CEng)

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ALBANIA

Tirana branch

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