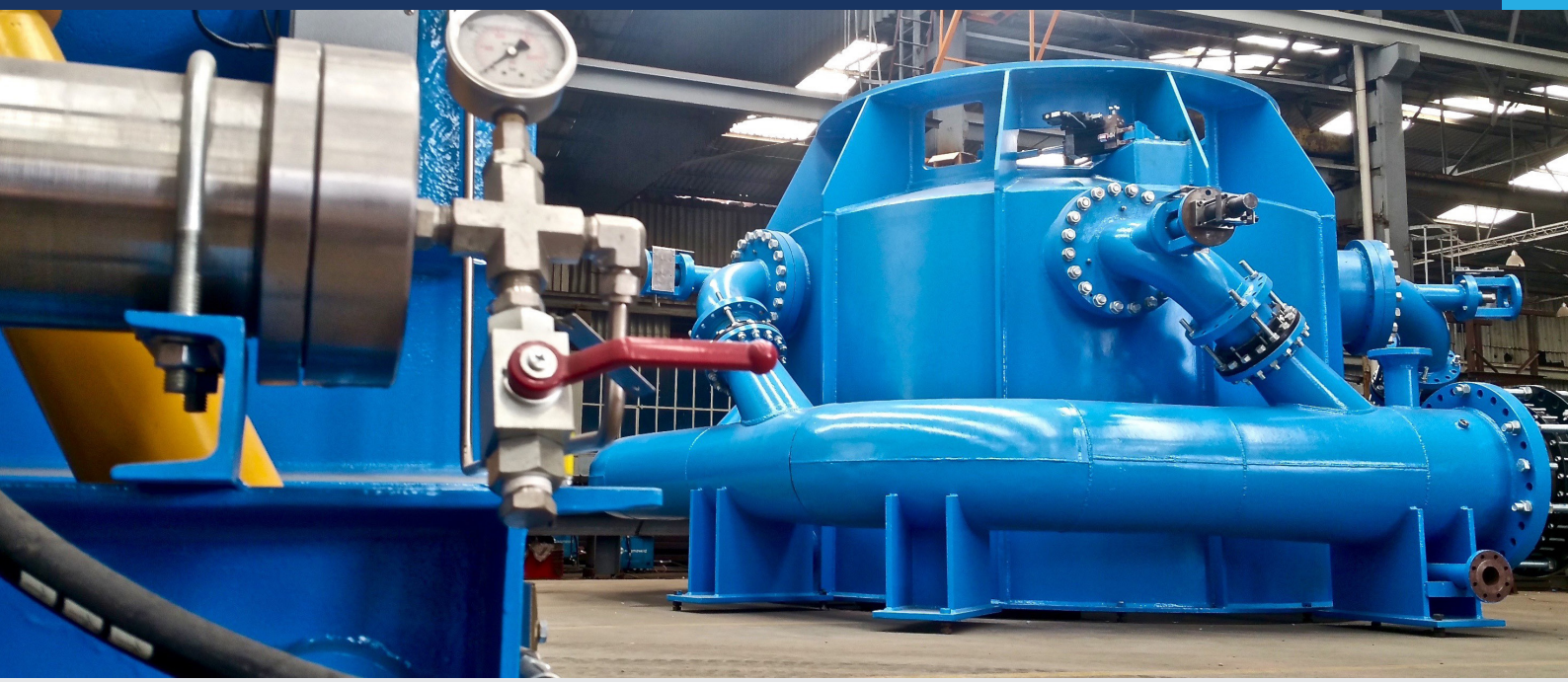
CASE STUDY

DEREICI HEPP, Turkey



KEY STATISTICS

Customer: Gun-Tas Enerji Elektrik Uretim A.S
Net Head: 333 m
Flow: 2400 l/s
Turbine type: Vertical 5 Jet Pelton
Power: 7 MW
Runner Diameter: 950 mm
Speed: 750 rpm

SCOPE OF SUPPLY

950 mm P346 vertical 5 jet Pelton Turbine
Penstock connection pipe
Main inlet valve, 700mm class 300 ball valve
Main inlet valve bypass system
Hydraulic pressure unit
Closed loop cooling water system
Synchronous generator 7825 kVA, 6300V, 50Hz
Delivery to project site
Installation, commissioning, start up and testing

The Dereici HEPP is a conventional run of river project developed and constructed by Gün-Taş Enerji Elektrik Üretim A.Ş (part of the Yapi-tek Group). The project is located in the Trabzon district of Turkey.

The unit is a vertical 5 jet Pelton unit with hydraulically actuated externally mounted hydraulic spear valve actuators. Speed control is carried out using a hydraulically operated deflector mechanism. The unit was chosen to provide the highest annual energy production based on the available flow.

The supply of the turbine-generator unit for the project was caried out by Gilkes Elektromekanik Sanayi Ve Ticaret A.S. a joint venture company formed by Gilbert Gilkes & Gordon Ltd (Gilkes UK) and Marbeyaz Makina Sanayi A.S (part of the Yapitek Group of companies). The joint venture company was formed for the sourcing and production of turbines and ancilliary equipment in Turkey for the local and international markets.

This is one of the first projects with 100% domestic production in Turkey, which allows the project developer to receive the enhanced Feed in Tariff offered by the Turkish government for locally made equipment. The enhanced tariff gives an increase of 18% to the base tariff.

CONTACT
Email: hydro@gilkes.com Tel: 01539 720028 Fax: 01539 732110
www.gilkes.com
Gilbert Gilkes & Gordon Ltd, Canal Head North, Kendal, Cumbria LA9 7BZ. Registration No.173768 London

GILKES
ELEKTROMEKANIK SANAYI VE TICARET A.Ş.

CASE STUDY
DEREICI HEPP, Turkey

Generator during factory testing

Machining of Runner

Gilkes Elektromekanik Sanayi Ve Ticaret A.S.

- Formed as Joint Venture Company between Gilbert Gilkes & Gordon Ltd (Gilkes UK) and Marbeyaz Makina Sanayi A.S
- Focus is on supplying full electro-mechanical packages in Turkey and neighbouring countries
- Goal is to manufacture and procure all equipment in Turkey
- All Sales & marketing carried out in Turkey
- Gilkes UK Role – Tendering, design, supervision of assembly, installation, commissioning, start up and testing
- Marbeyaz Role - All manufacturing and procurement within Turkey. Logistics and sitework
- Holder of TSE Certification for local manufacture to obtain FIT incentive
- Currently developing a new range of standard compact turbines for water municipality projects

Transporting to site

Transporting to site

CONTACT
Email: hydro@gilkes.com Tel: 01539 720028 Fax: 01539 732110
www.gilkes.com
Gilbert Gilkes & Gordon Ltd, Canal Head North, Kendal, Cumbria LA9 7BZ. Registration No.173768 London

GILKES
ELEKTROMEKANIK SANAYI VE TICARET A.Ş.