



# TEMSAN

MICRO HYDRO  
POWER PLANT



 1977  
GENERAL DIRECTORATE



## Establishment Of Company

TEMSAN, was established in conformity with the main contract attached to the decision dated 13.11.1975 and no: 7/10907 of the Council of Ministers and started activities in 1977. TEMSAN whose all capital belongs to Republic of Turkey Under secretariat of Treasury is a related institution of Republic of Turkey Ministry of Energy and Natural Resources.

General Directorate of TEMSAN carries out its activities as a state owned enterprise in Yenimahalle ANKARA since 1985.

# Solutions

Long-lasting, Environment and Investor Friendly Applicable Solutions

## engineering and design

The way of the most efficient use of investment is right design and perfect production. Also right design is possible with right team and experiment.

In addition, we provide service for engineering and design in our projects.

**Design**



# Solutions

Long-lasting, Environment and Investor Friendly Applicable Solutions

## vast opportunities for manufacturing

Our company that has comprehensive experience especially in welded and machining manufacturing processes has processing capacity of

**100 tones**

Our company provides service with total production area of **30.000 m2** in Ankara and Diyarbakır

**Production**

# Solutions

Long-lasting, Environment and Investor Friendly Applicable Solutions

## perfect production

Our Personnel who carry authority to be able to control for **PT – MT and UT in EN473 and ISO 9712 standards on Level 2**

Solution partnerships with independent international organizations in quality control processes

**Quality Control**



# Solutions

Long-lasting, Environment and Investor Friendly Applicable  
Solutions

## proper delivery

Installation service, after-sales service and warranty for all systems and supplied equipment in accordance with international standards (IEC, etc)

Installation of mechanical and electrical systems through the use of proper test instruments under control of supervisor

**Erection-Test-Commissioning**

# Solutions

Long-lasting, Environment and Investor Friendly Applicable Solutions



365/7/24

Unlimited support

Response in 24 hours

Spare parts procurement

Skilled response personnel



**After - Sales  
Service**



TEMSAN A.S.  
TÜRKİYE ELEKTROMEKANİK SANAYİİ A.Ş.

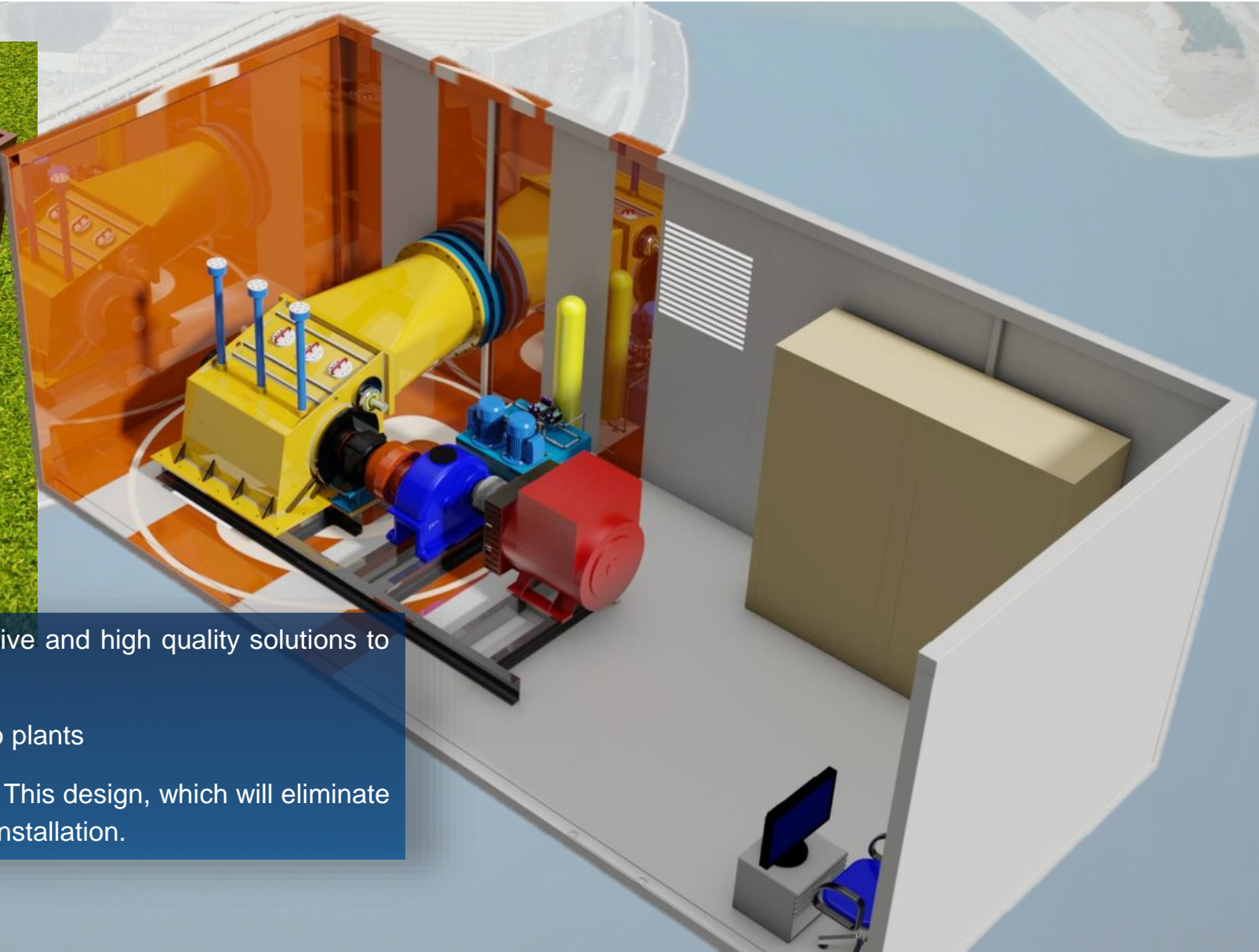
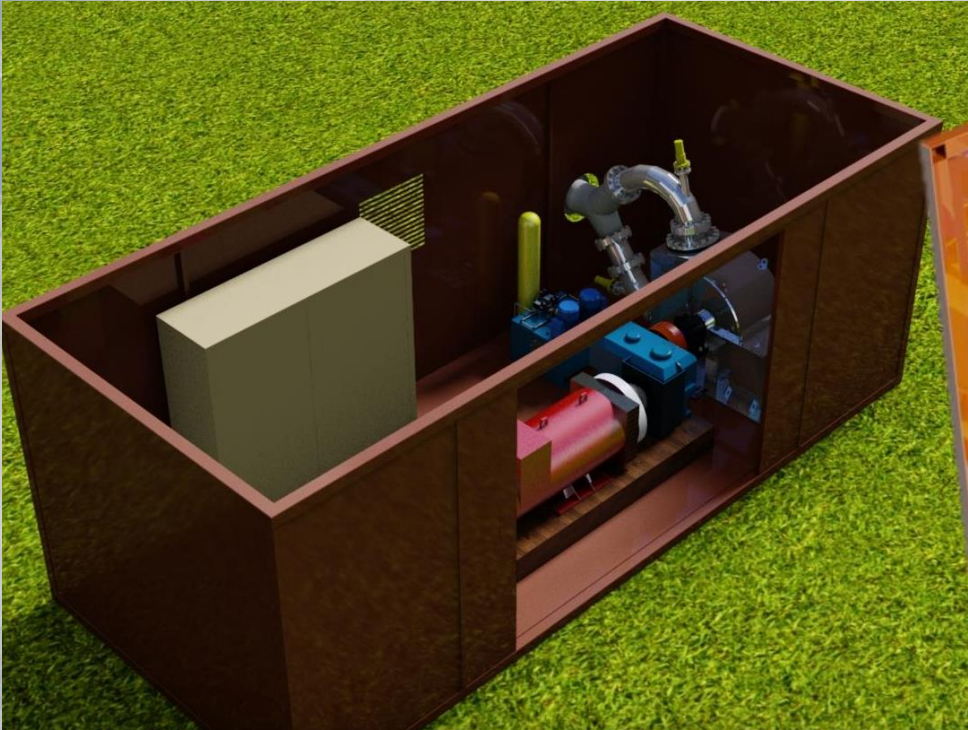
# MICRO - MINI HYDRO

Design, Production, Installation, Test  
And  
Commissioning

TEMSAN







We continue to offer fast, compact, inexpensive and high quality solutions to our investors.

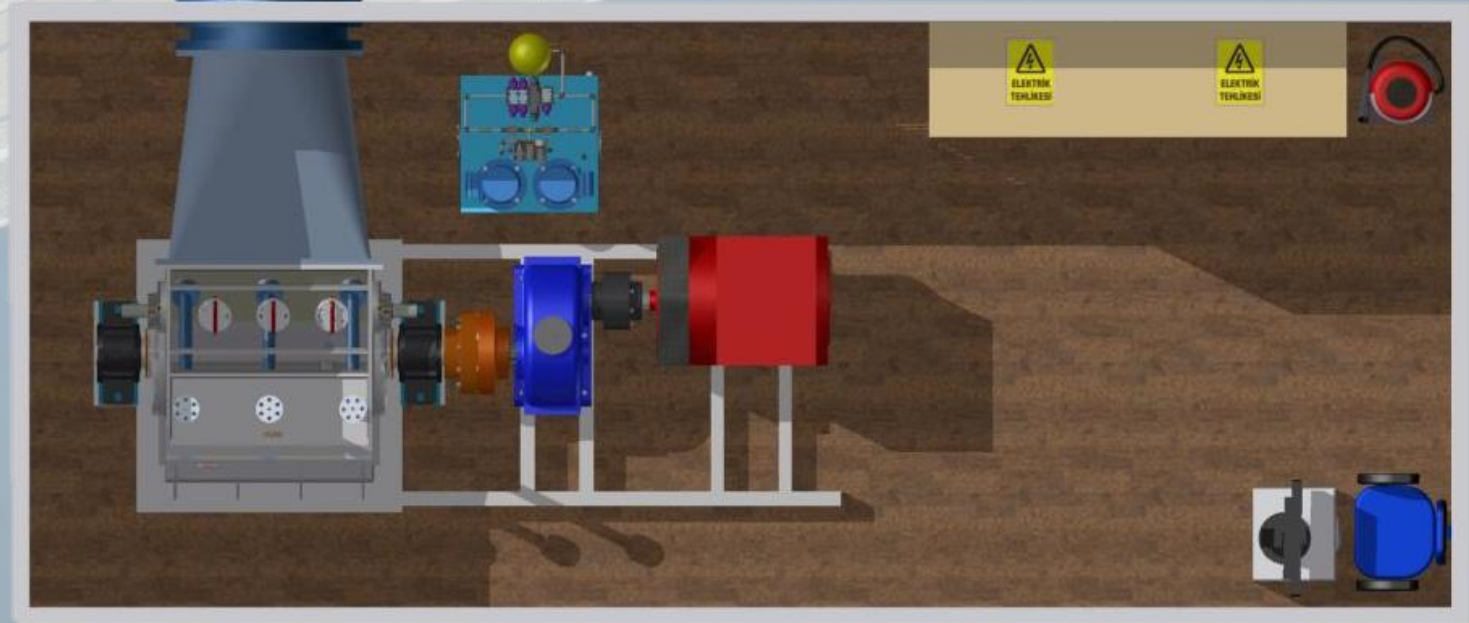
One of these solutions is container type hydro plants

Designed to be used in Micro HEPP projects. This design, which will eliminate your power plant build costs, will save you time for installation.



- Quick Install
- Easy Shipping
- don't need build
- for Steep Land  
and
- Narrow Areas
- for Temporary  
or
- Permanent Projects

0,5kW – 500kW  
and  
for  
Banki  
Pelton  
Francis Type



## Some manufactured



### PELTON TURBINE

Power	: 500 W
Discharge	: 3,7 lt /s
Head	: 23 m
Speed	: 1500 rpm

In the case of operating 5000 hours per year: It produces 2.500 kWh per year.

It meets the energy consumption of 1 houses.



## Some manufactured



### BANKI TURBINE

Power	: 3 kW
Discharge	: 50 lt /s
Head	: 10 m
Speed	: 623 rpm

In the case of operating 5000 hours per year: It produces 15.000 kWh per year.

It meets the energy consumption of 6 houses.

## Some manufactured



### BANKI TURBINE

Power : 4 kW

Discharge : 90 lt / s

Head : 7 m

Speed : 520 rpm

In the case of operating 5000 hours per year: It produces 20.000 kWh per year.

It meets the energy consumption of 6 houses.

## Some manufactured



### BANKI TURBINE

Power : 8 kW

Discharge : 300 lt / s

Head : 5 m

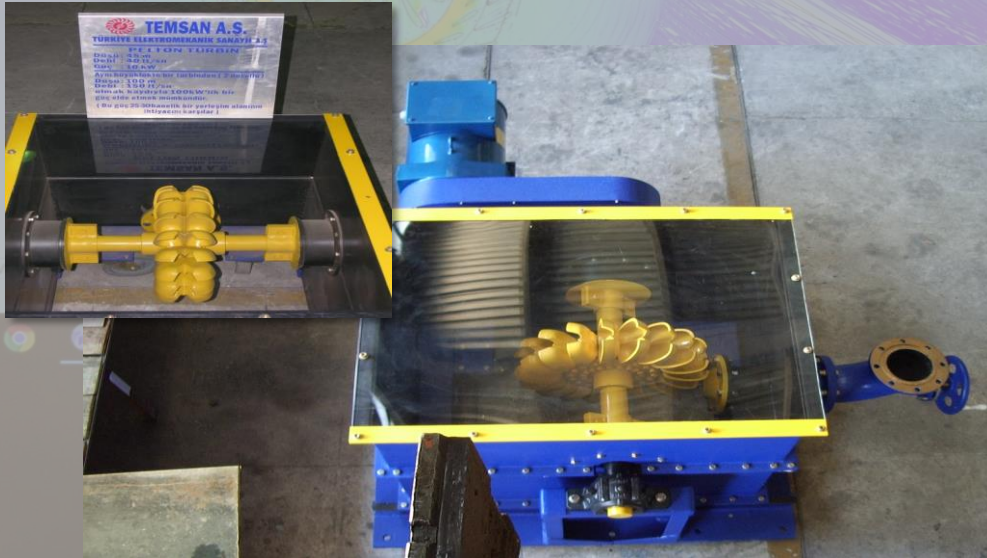
Speed : 220 rpm

In the case of operating 5000 hours per year:

It produces 40.000 kWh per year. It meets the energy consumption of 16 houses.



## Some manufactured



### PELTON TURBINE

Power	: 10 kW
Discharge	: 40 lt / s
Head	: 45 m
Speed	: 632 rpm

In the case of operating 5000 hours per year:

It produces 50.000 kWh per year. It meets the energy consumption of 21 houses.

## Some manufactured



### BANKI TURBINE

Power	: 16 kW
Discharge	: 300 lt / s
Head	: 8 m
Speed	: 376 rpm

In the case of operating 5000 hours per year:

It produces 80.000 kWh per year. It meets the energy consumption of 33 houses.

## Some manufactured



### FRANCIS TURBINE

Power : 37 kW

Discharge : 300 lt / s

Head : 15 m

Speed : 1000 rpm

In the case of operating 5000 hours per year:

It produces 185.000 kWh per year. It meets the energy consumption of 77 houses.



## Some manufactured



### BANKI TURBINE

Power : 41 kW

Discharge : 750 lt / s

Head : 8 m

Speed : 376 rpm

In the case of operating 5000 hours per year:

It produces 205.000 kWh per year. It meets the energy consumption of 100 houses.

## Some manufactured



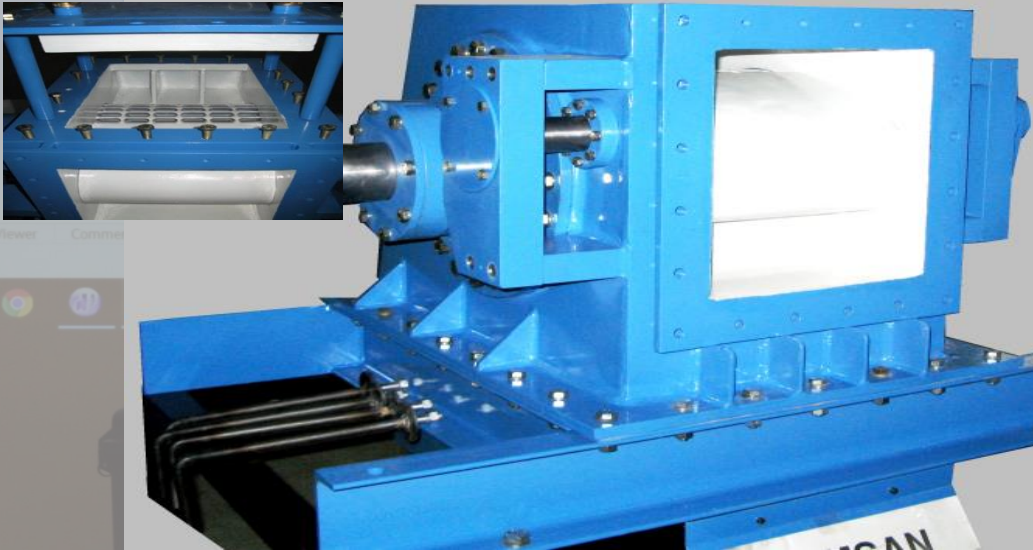
### BULB TURBINE

Power	: 100 kW
Discharge	: 760 lt / s
Head	: 15 m
Speed	: 1000 rpm

In the case of operating 5000 hours per year:

It produces 500.000 kWh per year. It meets the energy consumption of 210 houses.

## Some manufactured



### BANKI TURBINE

Power : 200 kW

Discharge : 600 lt/s

Head : 50 m

Speed : 940 rpm

In the case of operating 5000 hours per year:

It produces 1.000.000 kWh per year. It meets the energy consumption of 400 houses.



## Price List (Approx.)

- 0,5 - 20 kW System : 2.000 - 30.000 USD.....Delivery Time : 20 - 45 Days  
20 - 50 kW System : 30.000 - 50.000 USD.....Delivery Time : 45 - 75 Days  
50 - 100 kW System : 50.000 - 120.000 USD.....Delivery Time : 75 - 90 Days  
100 - 500 kW System : 120.000 - 300.000 USD.....Delivery Time : 90 Days

- Value added tax is not included.
- These prices includes
- Turbine, Generator, Control
- Ex works Ankara/TÜRKİYE
- Assembling cost is not included.

Note: These turbine types and rated powers are designed due to rated flows and heads. If your head and flow different please contact us for new prices.

[temsansan@temsansan.gov.tr](mailto:temsansan@temsansan.gov.tr)

# Contact

## General Directorate and Factories



**TURKISH ELECTROMECHANICS INDUSTRY  
GENERAL DIRECTORATE**  
Çamlıca Mahallesi 145. Cadde No:16  
Yenimahalle  
ANKARA / TURKEY



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# Contact

## General Directorate and Factories



### ANKARA FACTORY

Çamlıca Mahallesi 145. Cadde No:16/A  
Yenimahalle  
ANKARA / TURKEY



### DİYARBAKIR FACTORY

Dökmetaş Mahallesi Elaziğ Bulvarı No:429  
P.K. 124  
DİYARBAKIR / TURKEY



[www.temsan.gov.tr](http://www.temsan.gov.tr)







**TEMSAN**

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POWER PLANT

Thank You For Your Trust In Our Company And Hope For Your Valuable Orders