



- Electrical Powered Thermal Oil Heaters

PRODUCT INFORMATION



Thermal Oil Boilers are critical systems that meet the need for high-temperature heating in industries such as textiles, food, chemicals, and plastics. The electricity consumption of these systems constitutes a significant part of operating costs. Electricity generated from solar/wind energy offers an environmentally friendly and economical solution to reduce these costs.

Why Thermal Oil Systems Powered by Renewable Energy?

- Protection against high electricity costs
- Reduction of carbon footprint
- Opportunity to benefit from government incentives
- Long-term investment return

İsimsan is capable of manufacturing thermal oil boilers powered by electricity, with capacities ranging from 10 kW up to 160 kW. Thanks to İsimsan's user-friendly design features, systems can be configured with redundancy and PLC control. Safety is ensured through flow switches, while remote operation is made possible via mobile applications (using VNC) for start/stop functions. Additionally, monitoring through HMI screens, viewing alarms, and similar operations can be carried out with ease.



CERTIFICATIONS

İsimsan manufactures in full compliance with the following international directives and regulations:

- CE 2006/42/EC – Machinery Directive
- CE 2014/29/EU – Pressure Equipment Directive
- CE 2014/68/EU – Pressure Equipment Directive
- ATEX Product Group 2014/34/EU – Zone assessment available upon request

İsimsan is proudly certified in:

- Quality Management (ISO 9001)
- Environmental Management System (ISO 14001)
- Welding Technology and Inspection (ISO 3834 & ISO 14731)

PRODUCT INFORMATION



Global Average Payback Period for Solar PV Systems (2026 Data)

Sector	Monthly Consumption (kWh)	Solar PV System Cost (per kW)	Total System Cost (100 kW)	Payback Period
Textile	15.000	€300–€350	€30.000–€35.000	5–7 years
Food Production	10.000	€280–€330	€28.000–€33.000	6–8 years
Chemical	20.000	€320–€370	€32.000–€37.000	4–6 years
Plastics	12.000	€290–€340	€29.000–€34.000	5–7 years

Key Assumptions
Exchange rate: 1 EUR ≈ 1.08 USD
Electricity price (global average): €0.13–€0.16 per kWh
Solar irradiation: Based on regions with relatively high sun exposure (e.g., Southern Europe, parts of Asia, Latin America).
System efficiency: Standardized for modern PV installations in 2026

Application Advantages

The electrical components of thermal oil boilers (pumps, control systems, resistors) can be powered by solar and wind energy.

For systems operating intensively during daytime hours, direct use of solar energy is possible.

With storage systems, nighttime operation can also be supported.

By utilizing renewable energy to supply electricity, businesses operating electric thermal oil boilers achieve a production model that is both environmentally responsible and economically efficient.

Take the step today to reduce your energy costs, meet your sustainability goals, and secure long-term savings with this transformation.



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PRODUCT DETAILS

SPECIFICATIONS

Shape: Rectangle

Material: Carbon steel S235JR

Surface: Painted / Galvanized

Pipe Material: Carbon steel, P grade

Fuel: Electricity

Maximum Temperature: 315 – 350 °C

Pump Pressure: Max. ~ 6 bar

External Control Panel: Boiler external control panel



OPTIONAL

- Manual Control System
- Steam Generation System with Thermal Oil
- Deaerator
- Spare Oil Pump



CAPACITY (KW/H)

CAPACITY RANGE FOR EACH UNIT : 10-160 KW (EXPANDABLE WITH ADITIONAL UNITS)





WORLDWIDE SUPPORT

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