

# ORC APPLICATION INDUSTRIAL PROCESS

Petrochimical Industry
Glassworking
Food Industry
Metalworking Industry
Ceramics
Paper Industry



\*Outdoor solution



\*Indoor solution

## **ULH Series**

Solution to exploit **low-temperature thermal sources**.

Available in a power range from 30 to 100 kWe.

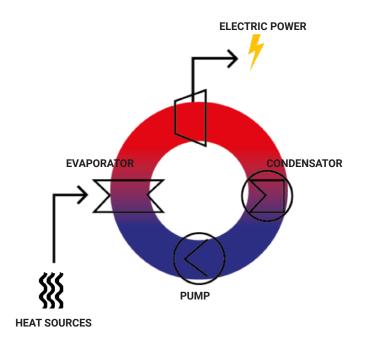
## **LT Series**

Solution for small-scale primary power generation.

Available in a wide range of models ranging from 75 to 495 kWe.

# ORC TECHNOLOGY

# **TECHNICAL NOTES**



#### **ULH SERIES**

Thermal Energy Input	350 - 1200 kWt
Electric Power Output	30 - 100 kWe
System Efficiency	8,50 - 9,10 %
Weight (incl. working fluid)	~3.100 - 6.500 Kg
Interfaces	Hot water (≥95°C)

#### LT SERIES

Thermal Energy Input	550 - 2909 kWt
Electric Power Output	75 - 495 kWe
System Efficiency	13,60 - 17,00 %
Weight (incl. working fluid)	~4.000 - 21.500 Kg
Interfaces	Pressurized Water (≥160°C) Diathemic Oil (225°C)

# **ADVANTAGES**

## SIZE ADAPTABLE

The small dimensions and power rating make them ideally suited for a distributed installation capable of intercepting heat.

### **GREEN**

Use of safe/green, non-toxic, non-flammable and ozone-friendly working fluid. No atmospheric emissions.

## **SYSTEM RELIABLE**

Simplification of retrofitting to existing systems, making the system reliable and allowing unparalleled recovery efficiency.

# **CASE STUDY**

Model: Zuccato Energia ZE-500-LT Net power production: 481,80 kWe Electricity Selling Price: 80,00 €/MWh

Note: Energy Efficiency Certificates (known as TEE) are negotiable securities valued at 250€ for each TOE saved (TOE= Tonne of Oil Equivalent, equivalent to 5,347 kWh)

ROLLING MILL

#### Revenue from Electricity

250.536,00 €/y

Annual electric power production: 3.131,70 MWh/y

Revenue from Incentives

146.250,00 €/y

The ORC plant allows saving 585 TOE per year

Pay-Back Time 3,74 years

#### **GOALS OF THE COMPANY**

Profit of Investment - ORG



**Environment - friendly** 

585 ▲

TOE (Tonne Oil Equivalent) SAVED



