



SUGIMAT

Efficient Engineering Solutions

BIOMASS AND WASTE-TO-ENERGY

INDEX

1. Products	4
• Fuels	5
• Combustion systems	6
• Biomass plants	7
2. ORC	8
3. R + D + i	9
4. Sectors	10
5. Clients	11

3

Efficient Engineering Solutions

Sugimat is a family business with more than 40 years of experience in the heat generation and specialized in the development of custom projects.

We are dedicated to the design, construction and installation of turnkey energy solutions with steam, hot water, molten salts and thermal oil boilers through the use of renewable energies and fossil fuels.

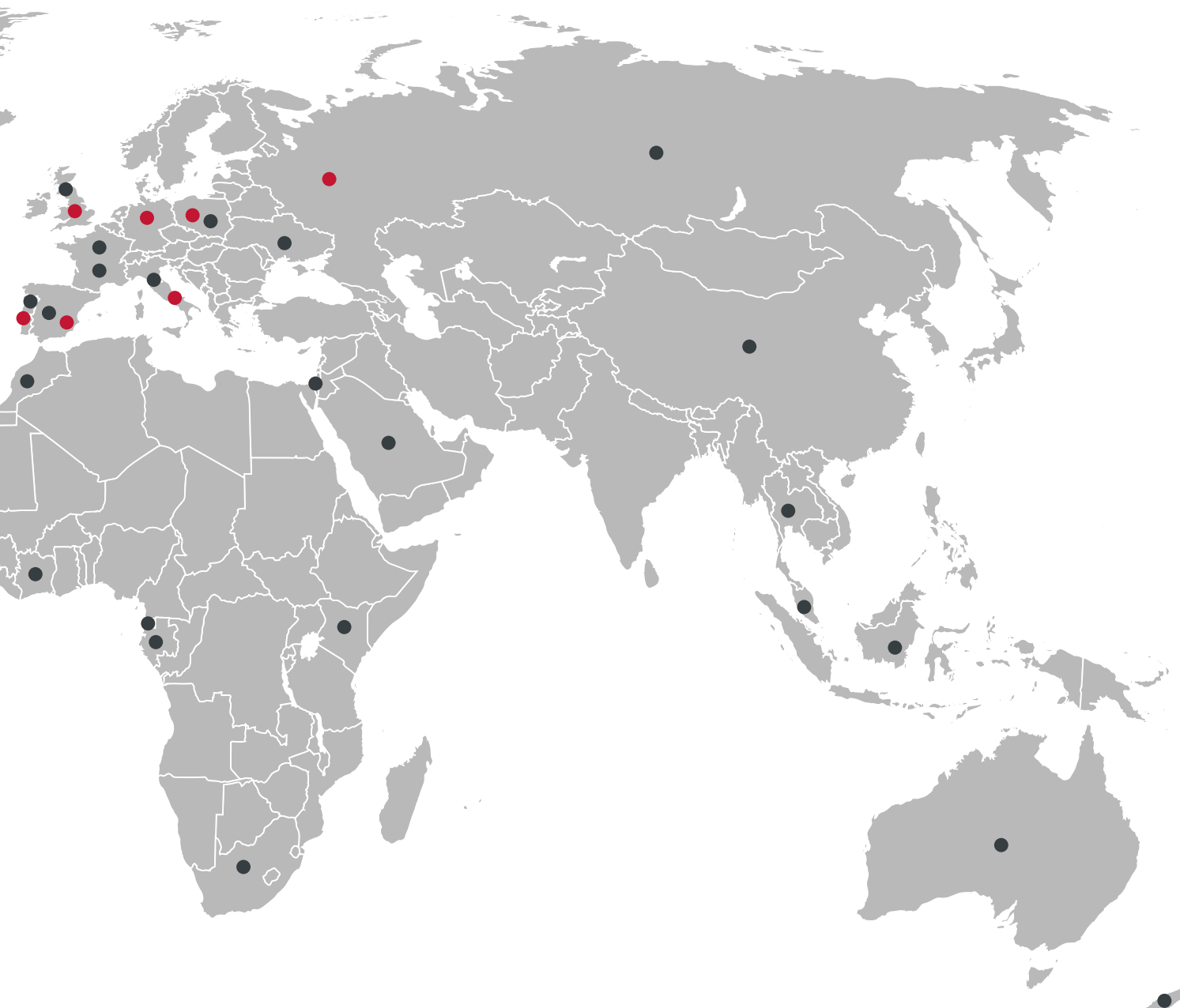
We have more than 3,000 installations spread across 28 different countries in sectors as diverse as chemical, solar thermal and biomass.

- 9 International offices
- References in 28 countries



COMMITMENT

We listen to our clients and work to find the best solution tailored to their needs.



Hallmarks

QUALITY

- ISO 9001/2015
- Asme Stamps U, S and R
- Directive 2014/68/UE of Pressure Equipment

INNOVATION

We have an R + D + i department with more than 20 engineers and a combustion laboratory.

VERTICAL INTEGRATION

Since 1978 we have developed turnkey projects adapted to the needs of each client.

PRODUCTS

Fluids



Water / 180°



Steam / 450°



Oil / 400°



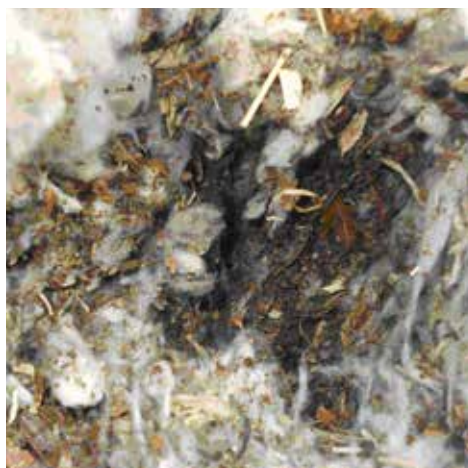
Salts / 550°

Biomass combustion plant with vertical adiabatic chamber and dust injection – 12 MW
France

1.

PRODUCTS

Fuels



BIOMASS

Dust
MDF
Pine Bark
Poplar
Chips
Shavings
Pruning waste
Cotton waste
Rice husk
Wood pellet
Straw
Marc
Olive marc
Olive stones

WASTE-TO-ENERGY

Sewage sludge
RDF
Wood grade C / D
Meat flours
Cereal straw
Chicken manure
Cow and pig manure

Combustion systems

We develop the ideal combustion system for each project according to the technical specifications and fuel characteristics.

These systems can use both biomass and waste suitable for waste-to-energy.

- Underfeed stocker
- Mechanical grate
- Travelling grate
- Dust Injection
- Fluidised bed



Biomass plants



Biomass combustion plant with vertical adiabatic chamber – 12 MW - France

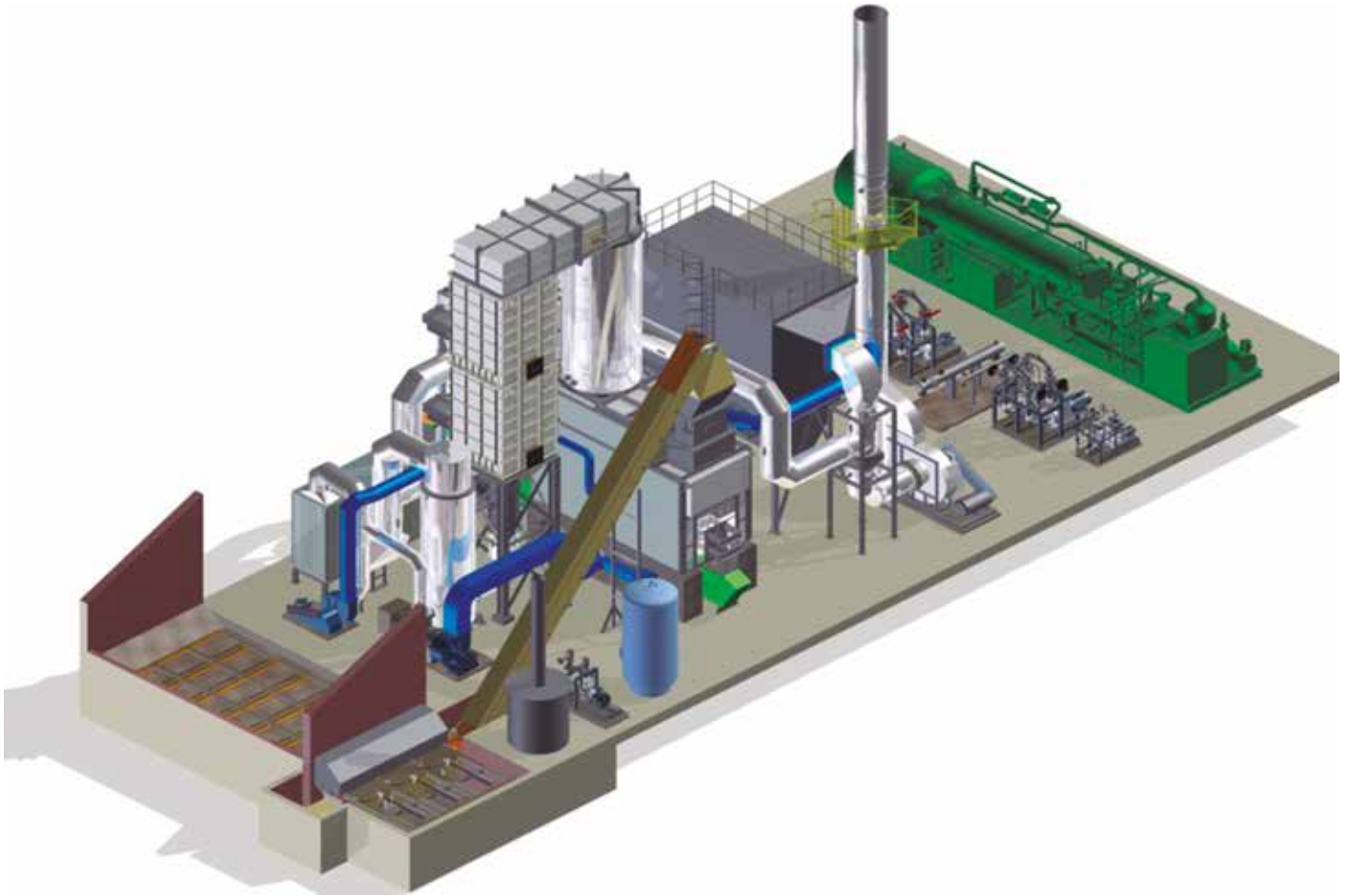
Hot gas generators
4MW - Spain



2.

ORC - ORGANIC RANKINE CYCLE

ORC



9

Sugimat develops heaters for cogeneration systems through ORC turbines (Organic Rankine Cycle).

The main advantages of this technology are low working pressure and low maintenance of the turbine which, due to the technical characteristics, runs at low rpm.

Possibilities of the equipment

- CHP generation (Combined Heat and Power): hot water and power generation
- Trigeneration through CHP and absorption machine
- Trigeneration through CHP and absorption chiller

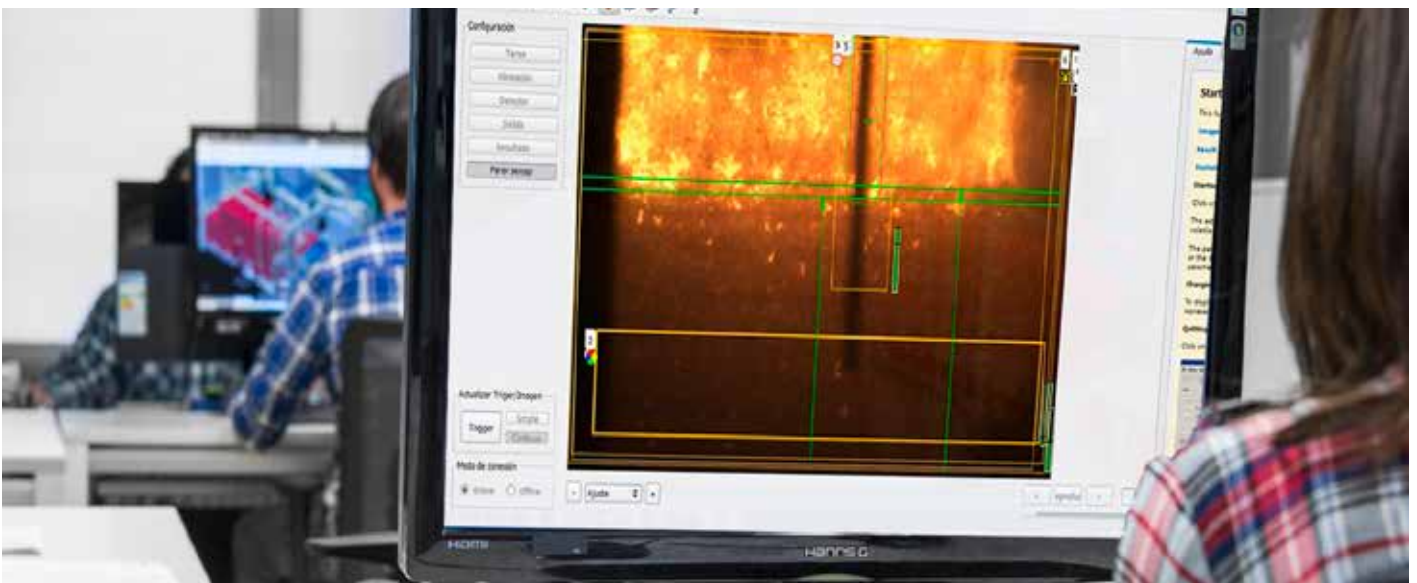
Computer vision

In Sugimat we satisfy the industry demands for biomass combustion boilers. For this, we use innovative control technologies such as our computer vision system, which processes the images of the furnace in real time, adapting the combustion parameters to the optimum point.

Our R+D+i Department has been responsible for developing the project.

Advantages of the system

- More efficient processes
- Fuel adaptability
- Less staff in shifts
- Cost savings
- Reduction of technical stops
- Decrease in faults

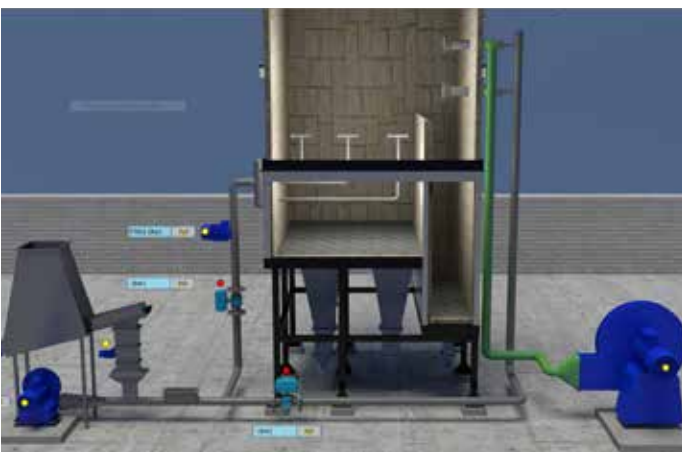


10

Fluidized bed

Our commitment to R + D + i enables us to offer an alternative technology to those industries producing waste that can be used for waste-to-energy.

The fluidized bed system achieves the combustion of this waste with a maximum of 50% ash content and humidity up to 70%.



4.

SECTORS



5.

CLIENTS



INTERNATIONAL OFFICES

France

sales.france@sugimat.com

Germany

sales.germany@sugimat.com

Italy

sales.italy@sugimat.com

Poland

sales.poland@sugimat.com

Portugal

sales.portugal@sugimat.com

Russia

sales.russia@sugimat.com

UK

sales.uk@sugimat.com

USA

sales.usa@sugimat.com

HEADQUARTERS (SPAIN)

C/ Colada d'Aragó s/n

46930 Quart de Poblet (Valencia)

sales@sugimat.com

Tel.: +34 96 159 72 30

www.sugimat.com

