



ECO burner is a boiler for civil use, industrial application, agricultural processes and local heating grid.

It is especially deemed for thermal medium-power devices natural gas fed (diesel, LPG, methane, mains gas).

ECO burner may be used:



FOR CIVIL AND COMMUNITY USE
(local heating grid, hotels, condominiums and buildings)



IN THE AGRICULTURAL AND BREEDING SECTORS
(greenhouses and drying devices)



IN THE INDUSTRIAL SECTORS
(heating of plants and buildings, drying devices used at sawmills, production processes for which heated water or heated temperature are required)

HOW ECO burner WORKS:

ECO burner uses the gasification process: a kind of gas "extraction" from wooden-based biomass.

During ECO burner functioning process, biomass reaches a temperature up to roughly 900/1,000° centigrade thus transforming the wooden chips into syngas which generates thermal energy while it burns.

The ECO burner operating system is fully automatic: it is managed through a touch panel on board where the customer can set the working conditions, regulating the temperature process, the primary, secondary and exhaust gases circulation or locking, and other parameters.

ECO burner can generate more of 100 kW of thermal power.



OAK



PEACH PITS



CANE RESIDUE



ALMOND SHELLS



HAZELNUT SHELLS



GRAPEVINE SHOOTS



TOBACCO STALKS



FORESTRY WASTE



CORN STALKS



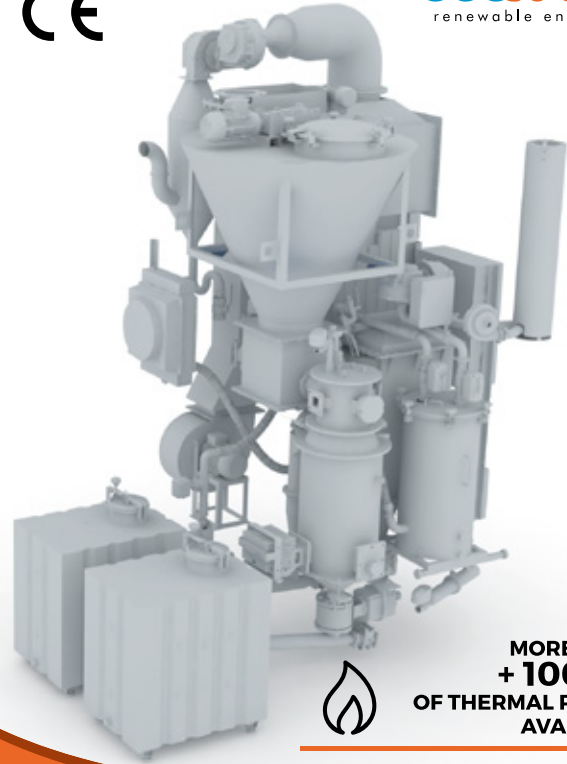
APRICOTS PITS



TECHNICAL SPECIFICATIONS

This system is characterized by:

- **very high efficiency**
(up to 85% -95%, depending on the use of heat);
- **very low impact exhaust emissions;**
- **easy maintenance.**



**MORE THAN
+ 100kW
OF THERMAL POWER
AVAILABLE**

ECO burner APPLICATION FIELDS

Energy potential of **ECO burner** makes the system especially suitable for heating solution in small buildings, agricultural companies and other applications.

ECO burner can be used:

- to **replace traditional boilers conventional fuels fed** (diesel, LPG, methane, mains gas) with this innovative system maintaining the same thermal power, however, just using vegetable waste. It allows a **costs decreasing of the raw materials**, in addition to advantages for the environment due to its use.
- in **combination with burners conventional gas/diesel fuels fed.**

! Cluster installation available: multiple installation for more thermal power (200 kWp, 300kWp...).

HOW ECO burner CAN BE POWERED

ECO burner can be powered by a wide range of materials: from the processing waste of wooden industry to the wooden scraps of forests, from pruning to agricultural residuals.

BIOMASS FEATURES

Size	1,50 - 3,00 cm (G10-G30) including briquettes
Moisture	15% - 25%
continuous tested biomass	24h
CE - Conformity	Si
Variety of biomass materials being tested	Forest, grapevine and trimming wastes, coconut, nut, hazelnut, chestnut and almond shells, olive kernels, apricot and peach pits, tobacco and corn stalks, cane chips

TECHNICAL FEATURES CE

Available continuous power	100 kW thermal power - 24 kCal/s
Sound level (silenced gen set)	67dB(A) a 7 m
Max Continuous Operation	24 hrs.
CE - COnformity	Available and applicable
Consumption @100%	350 g/kWh
Start up Time	15 - 90 min
Dimensions and weight	Height 3,00m x length 1,80m x width 1,80m Weight 1,400kg

ENERGY PARAMETERS

7,500	hours per year	number of working hours of the burner
biomass consumption [calculated in kilos]		
Maximum hourly consumption		35,0 kilos per hour
7,500 hours per year		255,000 kilos per year
Thermal energy production		
100	kWh/t	thermal energy produced each hour
750,000	kWh/t per year	overall amount of thermal energy produced each year

