



Next-generation Biomass Technology

## Wood Pellet Burners

For domestic applications as well as large installations



From 25 to 1000 kW

# Wood Pellet Burners

## From 25 to 1000 kW

Termocabi's pellet burners are completely automatic and designed to develop a horizontal flame just like burners for traditional fuels (LPG, gas, oil). These burners (SPL model) are powered by wood pellet, a renewable source of energy that provides an ecological and economical solution. The SPL production line includes a total of 11 burners with output power ranging from 25 up to 1000 kW. They are suitable for a wide range of applications such as retrofitting of an existing boiler, hot steam generators, hot air generators, dryers, bread ovens and more.

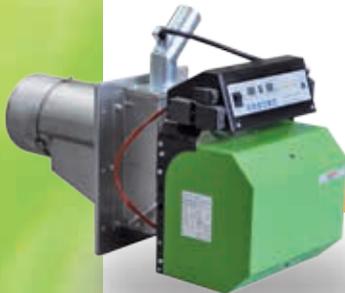
Wood pellet



SPL25



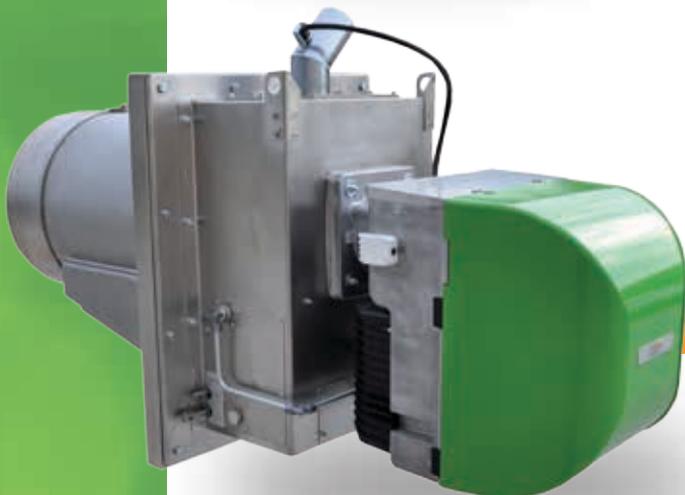
SPL50



SPL100



SPL300



SPL600

Model	Power	
	Min-Max kW	
SPL25	12,5	25
SPL30	17,5	30
SPL35S	20	35
SPL50	25	50
SPL65	30	65
SPL100	50	100
SPL200	100	200
SPL300	150	280
SPL350	150	350
SPL600	300	600
SPL1000	300	1000





SPL35S



Wood pellet

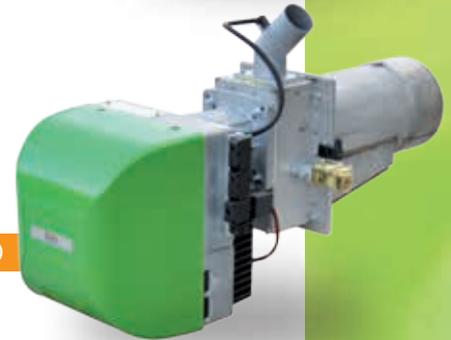
SPL65



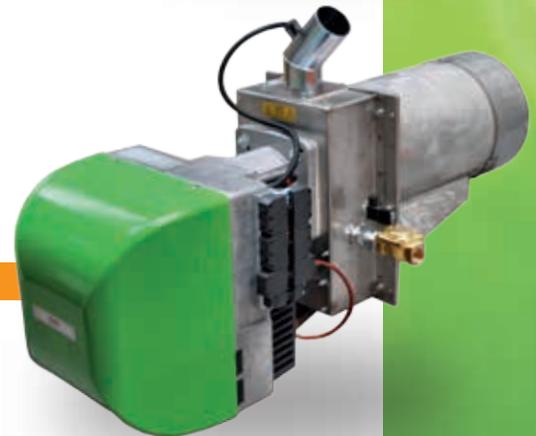
## Main Features:

- 🔥 European certification En15270 for burner models up to 70 kW;
- 🔥 High efficiency (higher than 90%);
- 🔥 Low emission: class 5, lowest emission level according to EN15270;
- 🔥 Quality product with high efficiency and reliability, designed with materials resistant to high temperatures;
- 🔥 Advanced cleaning system of the burner;
- 🔥 Power modulation on 5 levels for precise temperature regulation;
- 🔥 Automatic ignition system;
- 🔥 Can be installed on existing boilers originally designed for other fuel types.

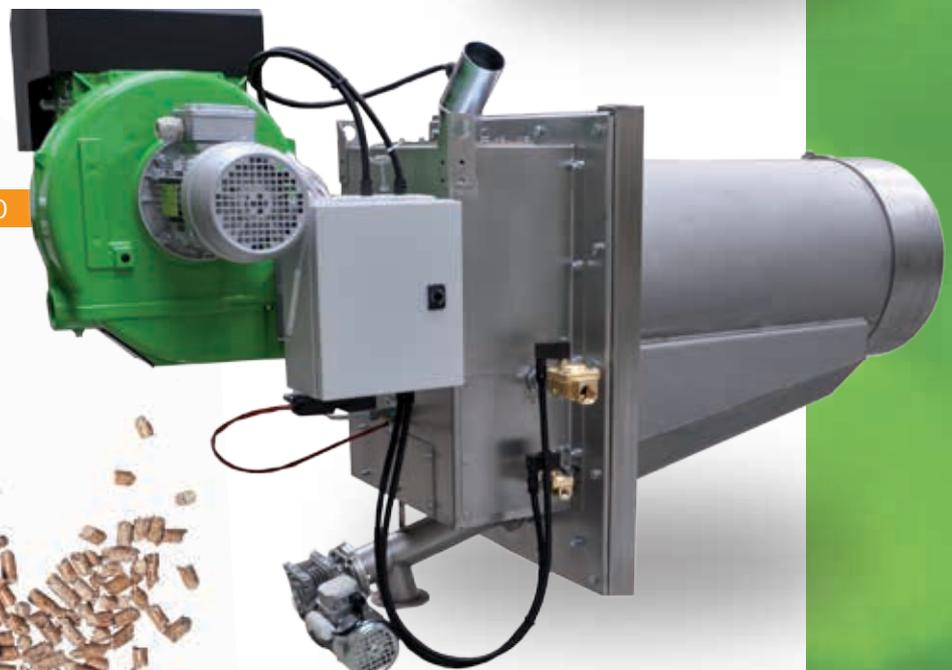
SPL200



SPL350



SPL1000



# Advantages

Pellet di legno

## European Certification EN15270

### **Certification of high efficiency and low emissions.**

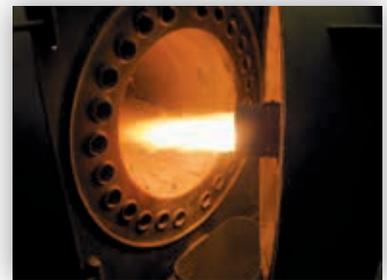
Termocabi's pellet burners with power lower than 70 kW are certified by the German institute "Gastechnologisches Institut". The certification report shows the high efficiency of Termocabi's product, which provides an optimal combustion with low CO and dust emissions in agreement with the best class according to the certification EN15270 (Class 5).



## Reliable

### **Product present and tested on the market since 2002**

In the several years of its presence in the market, Termocabi's burner has been tested, certified and applied on many heat generators. The product is strong with a reliable history.



## Quality and Technology

### **Made with special stainless steel resistant to high temperature**

Termocabi's burners are designed with high technology and high quality:

- Careful and accurate manufacturing procedures;
- Built with resistant materials for a long life span;
- Extensive quality controls to ensure a reliable product.



## Automatic cleaning system

### **For an efficient and performing combustion. Termocabi's burners are equipped with an automatic cleaning system operated through compressed air.**

The stream of air is channeled through diffusers located inside the burner. The high pressure air stream removes the ash collected on the gasification grill. The ash is therefore blown in the combustion chamber of the boiler. This process keeps the burner performing and ensures a more efficient combustion.



## Termocabi's system equipped with all of the accessories

### 1 Pellet stocking tank

Must be located next to the furnace so that the feeding screw can load the pellet into the boiler by gravity. Made of painted steel (on the outside) and galvanized sheet metal (on the inside); it can be equipped with level sensors in case of an installation with an automatic refilling system from an external tank. It is available in two different sizes: 120 Kg and 220 Kg.

### 4 Rotary Valve

Security valve located between the burner and the pellet tank. In case of negative pressure in the combustion chamber, the smoke gas would tend to escape through the feeding tube. The rotary valve isolates the pellet stocking system from the burner preventing the risk of fire. A security thermostat is also located on the feeding tube, which turns off the burner in case the temperature is above a safe threshold.

### 5 Automatic cleaning kit

It is required for keeping the gasification grill clean and therefore to maintain an efficient combustion. The system is completely automatic and it is regulated by the control panel. The system is made of an air diffuser installed inside the burner, an electro valve to adjust the air input.

It is regulated by the control panel and it is possible to installed the air inlet either on the left or right side of the burner based on the opening direction of the boiler door.

### 2 Feeding Screw

Entirely made of carbon steel, the size is designed in order to prevent the pellet from becoming blocked between the spiral and the tube.

It is equipped with a motor controlled by the burner's control panel, which regulates the operational time based on the power required.

### 6 Compressed air tank

Placed between the automatic cleaning kit and the air compressor, it provides the correct amount of air at the appropriate pressure required for the operation of the automatic cleaning kit. The design includes one-way valves to load the air, security valve and a release valve on the bottom.

### 3 Control panel

Electronic panel to control the burner and all installed accessories. Commands are entered through a touch membrane; the operations status and alarms are shown by LED lights. The control panel is extremely user-friendly even for the final customer.

Wood pellet burner  
SPL 200



## Several possible applications

### TRANSFORMATION OF EXISTING INSTALLATIONS

Revalue the existing furnace by replacing existing gas, LPG or oil burner with a pellet burner.



**BEFORE**

LPG, Natural Gas, Wood



**AFTER**

Pellet

### SANITARY WATER AND HOUSE HEATING BOILERS



2 furnaces of 65 kW (France)

## BREAD OVENS



100 kW (Greece)



200 kW (Spain)

Pellet di legno

## HOT AIR GENERATOR



65 kW (Italy)



## DISTRICT HEATING



1000 kW (Italy)



1000 kW (Switzerland)



Next-generation Biomass Technology



**Termocabi burners are entirely manufactured and assembled in Italy.** They generate a horizontal flame and can be installed on boilers originally designed for other fuels. The first quality materials - such as steel for high temperatures - ensure a reliable and extended operational time. The wood pellet SPL burners up to 70 kW were awarded with the European certification EN16270. **High efficiency** (>90%) and **low emission** (class 5 acc. to EN15270) guarantee a **high-quality and technologically advanced product.** Termocabi is constantly striving to **research and develop innovative and fine-quality products.**



-  **Specialized** in the production of biomass burners;
-  Large range of products: 3 lines of burners for a total of **24 models** from 25 to 1000 kW;
-  100 % of our resources invested in researching and developing the best result obtainable;
-  More than 20 years of experience in the combustion field;
-  Product commercialized in more than 17 countries inside and outside the European community;
-  **Quality** focus.

## TERMOCABI SRL

Via Borghisani, 13  
26035 Pieve San Giacomo (CR) - Italy  
Tel. +39 0372 640033  
Fax +39 0372 64439  
termocabi@termocabi.it  
www.termocabi.it