EN

PAINTING



Tecflam

THERMAL SOLUTIONS



For over 25 years, we have been supporting **industrial painting professionals** with **reliable, tailor-made thermal solutions**. We design and manufacture burners engineered to integrate seamlessly into production processes, improving quality, operational continuity, and plant efficiency. Each solution is **developed through careful analysis** of application requirements and configured according to power, dimensions, and equipment, in full compliance with industry standards.

Our long-standing experience and constant focus on innovation make **Tecflam** a reliable partner for those seeking technical expertise, engineering support, and performance-oriented solutions.

Tecflam

THERMAL SOLUTIONS

Colour industry

In the painting industry, the most widespread and well-established method for heating process air used in drying and curing cycles is the use of duct burners.

These burners offer several advantages for process applications, including faster time to reach setpoint temperature, greater accuracy in temperature control, and therefore excellent final product quality. Burners are sized according to customer specifications and are supplied fully wired and tested. They consist of a burner body, combustion chamber, gas valve train, mounting flange for installation on the system duct, electrical control panel and junction boxes for operation and control.

Main applications of Tecflam burners in this sector include:

- Industrial liquid paint / powder coating plants
- Spray booths
- Preparation areas
- Degreasing lines
- Drying ovens
- Air handling units (AHU)

Key factors for optimal results:

- Temperature uniformity and control
- High modulation ratio (up to 1:30)
- Energy savings
- Low emissions of dust and combustion by-products
- Low noise levels
- Dedicated technical support
- Strong system and application know-how

Thanks to these elements, Tecflam is able to deliver reliable and efficient solutions.

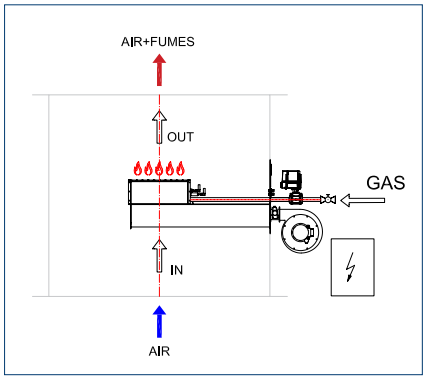
VDP - VDPE series



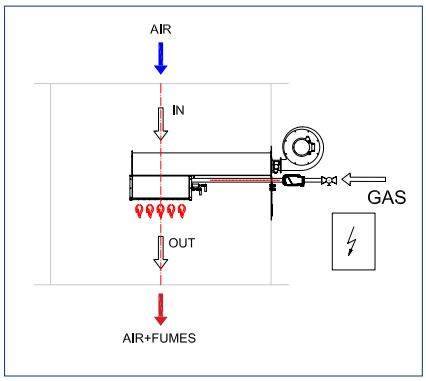
These are the most widely used models. The combustion body, from where the flame develops, is installed inside the process duct, centrally positioned.
They are complete with combustion air fan, gas valve train, and control panel.
This model features a flame inside the duct, flowing in the same direction as the process air, plate-mounted installation, and instrumentation (including the fan) installed externally to the duct.

Modulation ratio: up to 1:20
Thermal power: from 70 kW to 2 400 kW
Operating temperature: various versions available, **up to 220 °C**

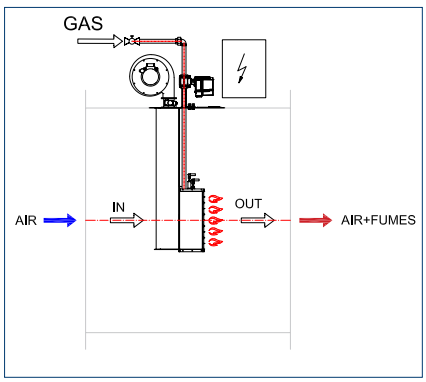
Possible installations:



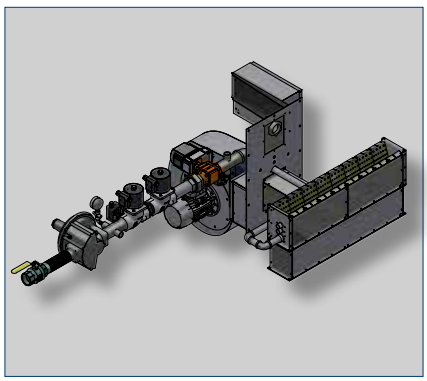












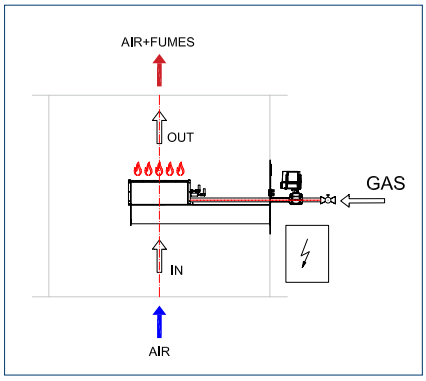
VDPS - VDPSE series

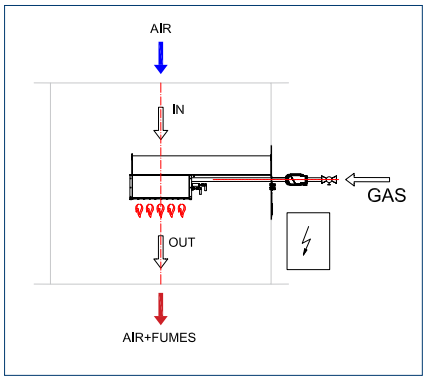


Similar to the VDP/VDPE models, but without a combustion air fan. In this configuration, combustion occurs using a portion of the process air.
This solution is particularly suitable for specific applications or plant requirements, allowing for a more simplified system configuration.
Compared to the fan-assisted version, operation is more sensitive to process air variations and requires more precise tuning during commissioning. Air must be clean and with a normal oxygen content. Pressure drop across the system is also higher than in fan-equipped versions.

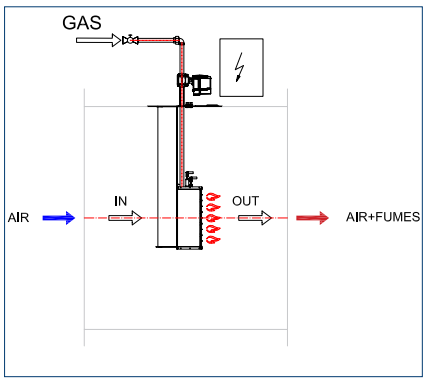
Modulation ratio: up to 1:20
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Operating temperature: various versions available, **up to 220 °C**

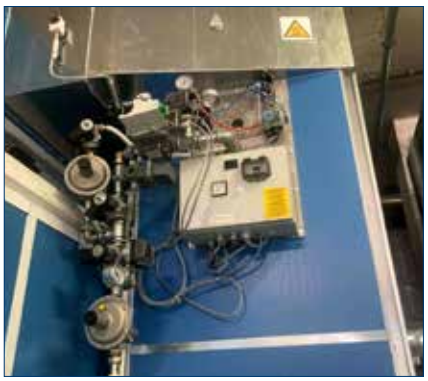
Possible installations:

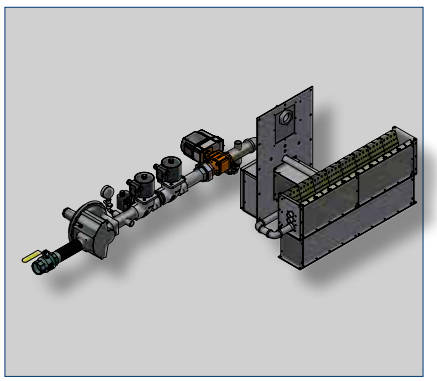




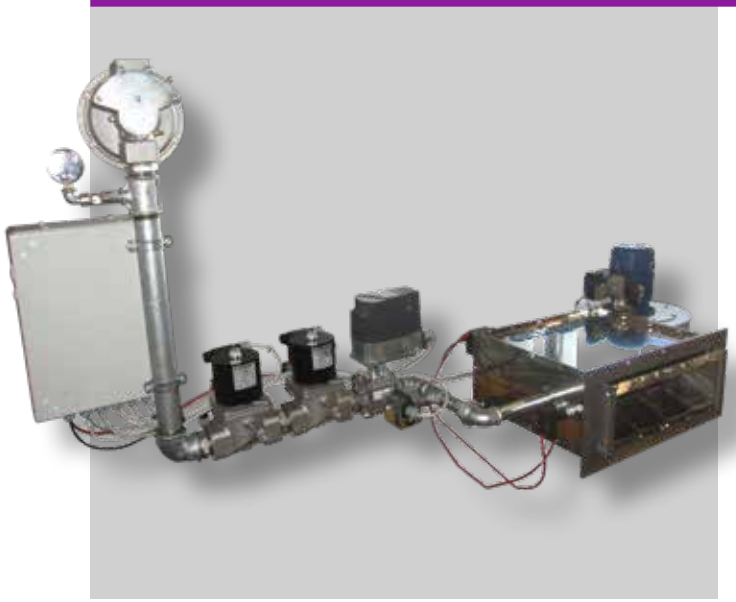








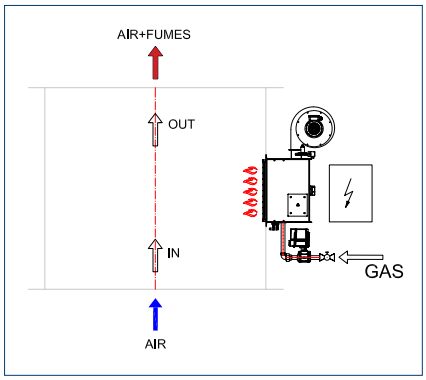
VDM - VDME series



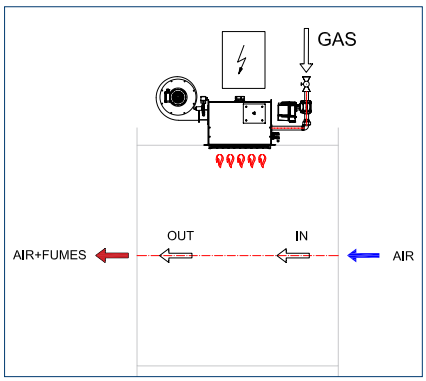
Burners with the main characteristic that the entire burner body is located outside the process duct, with only the flame entering inside. Installation often features a flame perpendicular to the process air flow.
The burner is mounted to the duct via a metal flange and is generally used in systems with multiple low-power burners.

Modulation ratio: up to 1:20
Thermal power: from 70 kW to 2 400 kW
Operating temperature: various versions available, **up to 220 °C**

Possible installations:











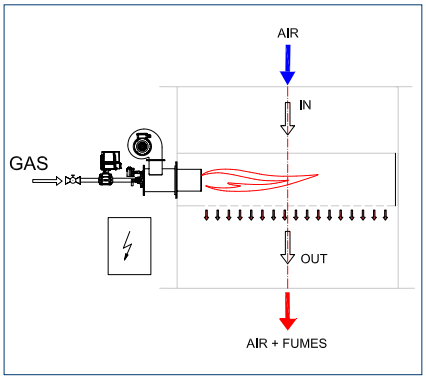
VDMR series



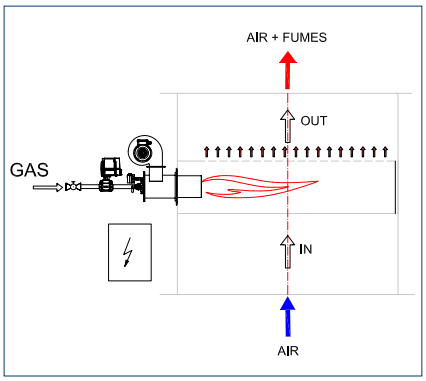
Duct burners with an external body and flame developing inside the duct. The combustion body design allows for a wide modulation range. The flame shape can be described as cylindrical, similar to traditional forced-air burners.
These burners are often used with the flame developing inside a diffuser tube.

Modulation ratio: up to 1:30
Thermal power: from 90 kW to 1 750 kW

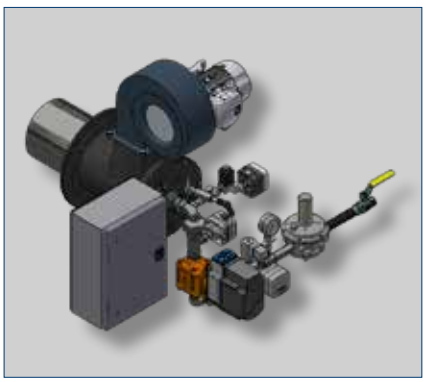
Possible installations:



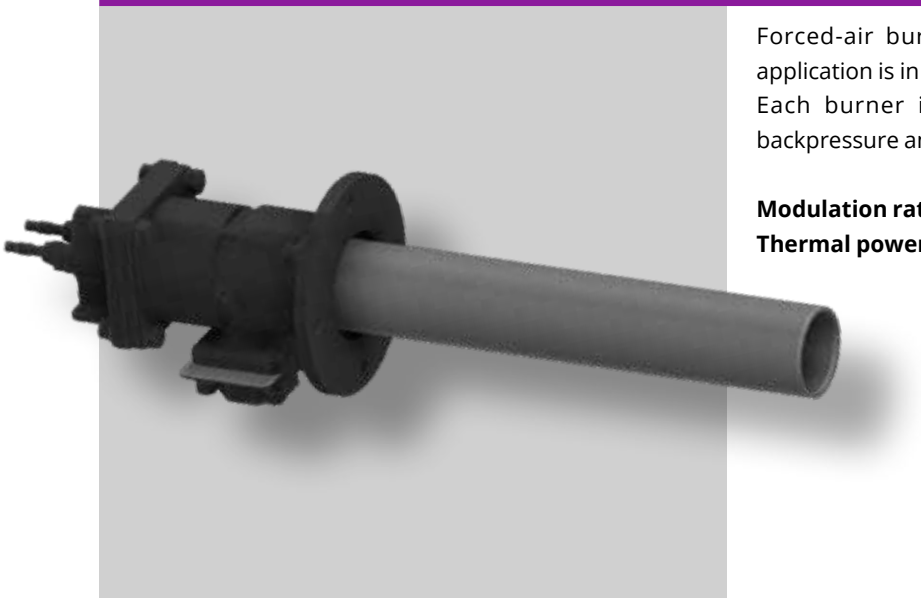








R series

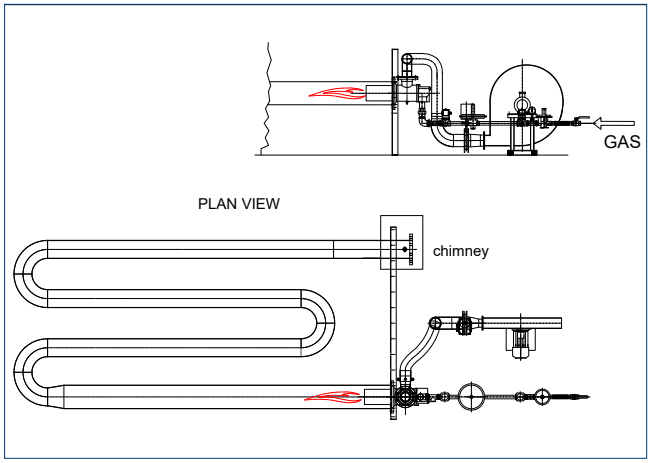


Forced-air burners with separate head. Their typical application is in radiant tubes for degreasing tanks.
Each burner is designed according to the required backpressure and tank layout.

Modulation ratio: up to 1:5
Thermal power: from 20 kW to 2 000 kW









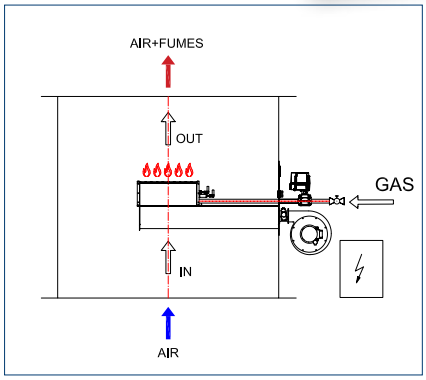
VDC series

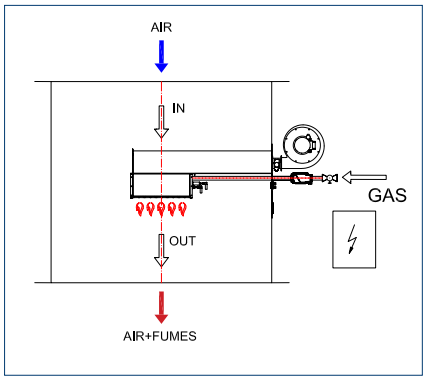


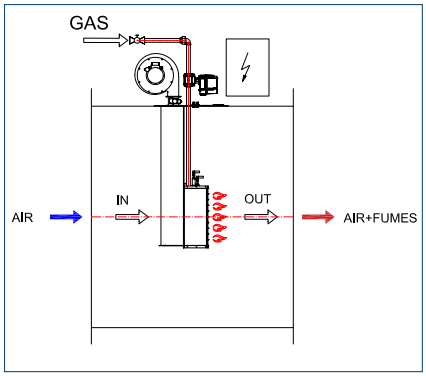
Duct burners complete with a section of formed sheet metal duct, with rectangular or square cross-section, manufactured according to customer specifications.
The duct housing the combustion body can be made of galvanized steel or stainless steel and can be supplied, upon request, with external insulation and steel cladding.

Modulation ratio: up to 1:20
Thermal power: from 70 kW to 2 400 kW
Operating temperature: various versions available,
up to 220 °C

Possible installations:













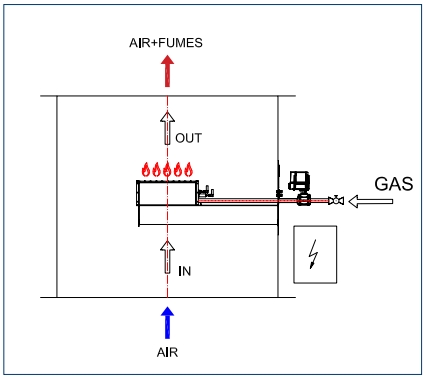
Serie VDCS

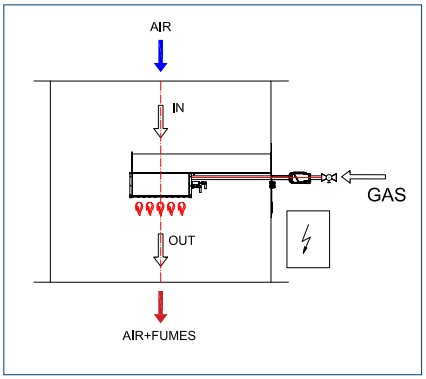


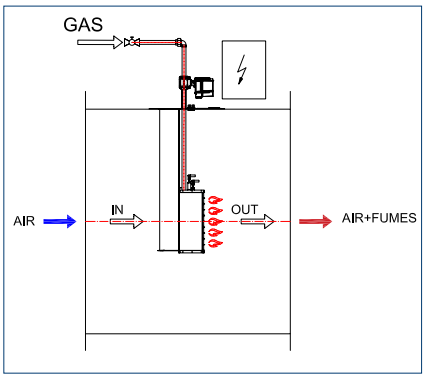
A model similar to the VDC series, but without a fan: combustion air is drawn directly from the process airflow. The duct can be manufactured in various materials and, upon request, with external insulation. Operation is sensitive to variations in the process air and requires careful adjustment during commissioning. The air must be clean, with a normal oxygen content. The pressure drop (Δp) is higher than in the fan-assisted version.

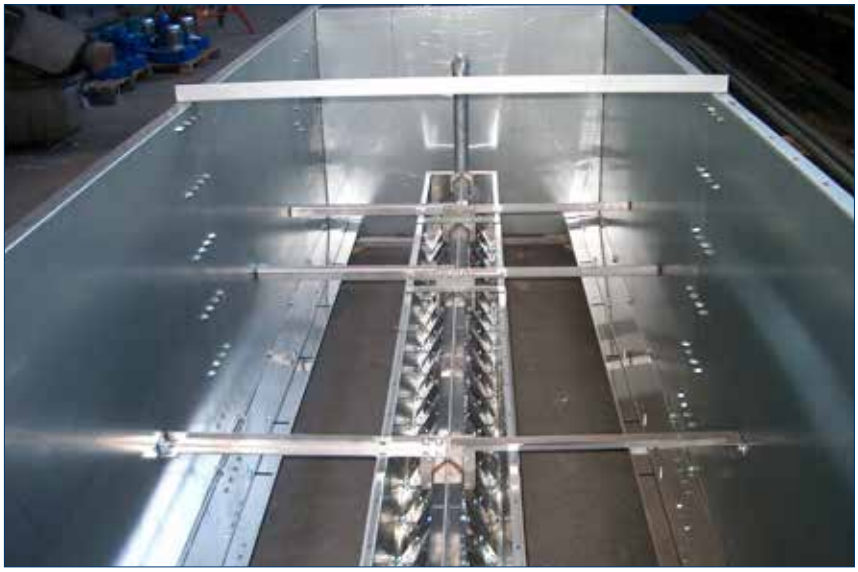
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Possible installations:



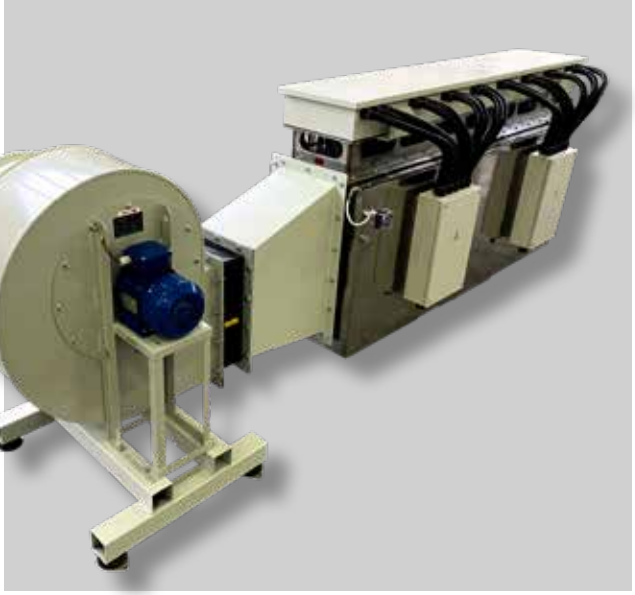








E-HAG



We also manufacture electrical hot air generators, where there is a section of process air duct of which are installed the electrical heater elements and the electrical junction box for the electrical cabling. The scope of supply includes the electrical control panel. Depending on the request and type of application, the channel section is made of galvanized steel or stainless steel.
The electrical management of the generator is designed to have the widest modulation range, even 0÷100 %; if necessary, it is possible to create a version managed via PLC for advanced integration into automation systems.
The system can either be under negative or positive pressure, i.e.: the process air can either be aspirated through the heater elements by the process air fan or the air can be pushed through the heater elements from behind.

Power range: 20 kW – 6 000 kW
Range of exit temperature: 50 °C - 500 °C
Electrical power supply:
110 Vac, 230 Vac, 400 Vac, 690 Vac

OPTIONAL

- **Gas meters**
- **Gas pressure reduction units**
- **Electrical panels with simplified interface, HMI**
- **Communication modules for Modbus, Profinet, Profibus**
- **Remote control**
- **Special configurations**



Tecflam

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Company with quality management system according to UNI EN ISO 9001:2015

Company with environmental management system according to UNI EN ISO 14001:2015

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