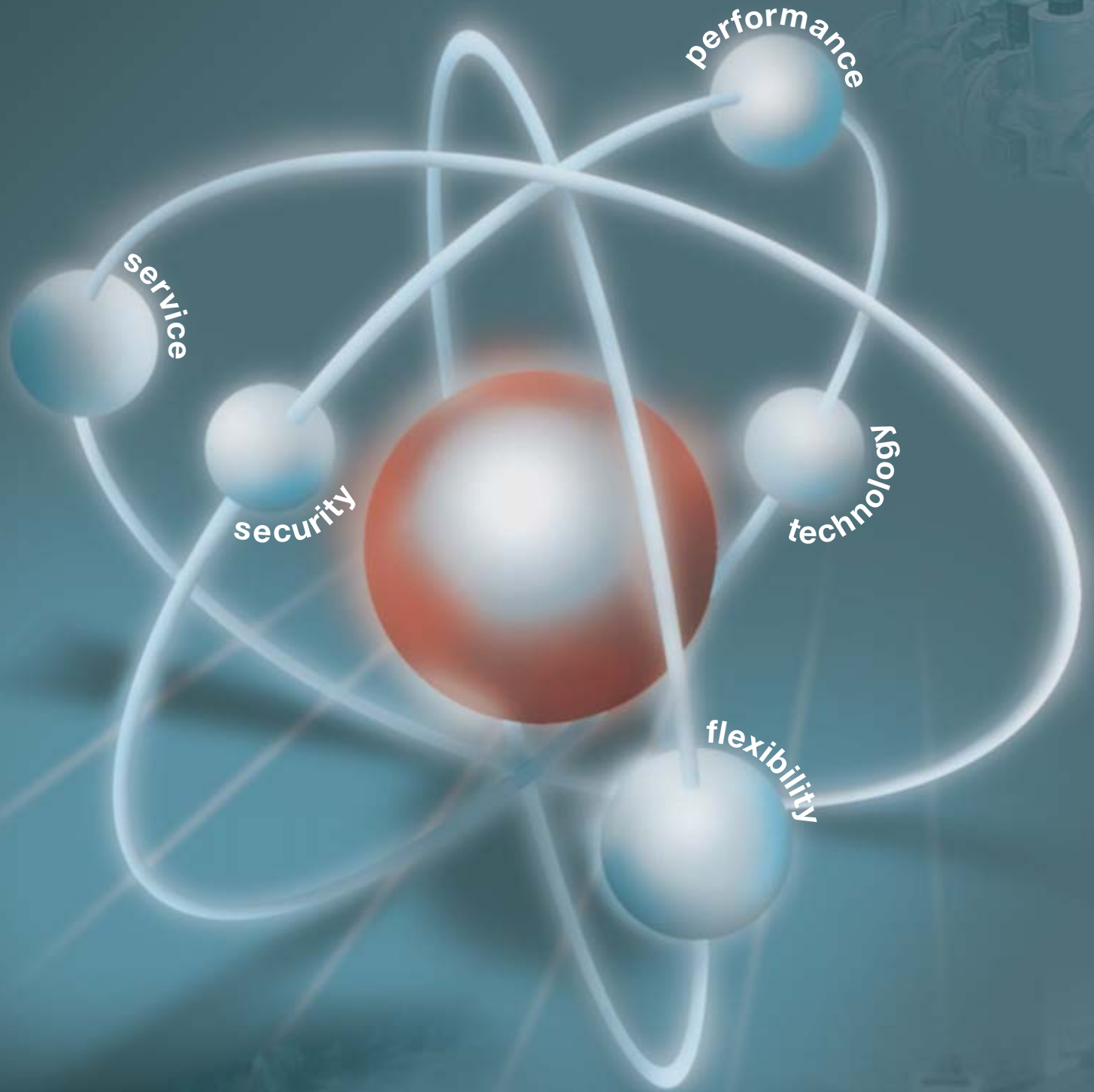


made in Italy

industrial burners





5

highes

flexibility
technology
performance
security
service



“Customer satisfaction”

Customer satisfaction, the company mission since its foundation in 1972, has brought CIB UNIGAS into the ranks of the leading industries in burner design and construction. CIB UNIGAS has always demonstrated a marked predilection for product technological development, especially in medium and high power applications, with constant commitment to the creation of a widespread and carefully-trained customer service technical assistance network.

While offering one of the most complete ranges of burners available with over 1,000 different models starting from 14 kW power, the company's main market segment and most strategically important area of activity regards industrial steam production systems and large-scale centralised heating or remote-controlled heating systems.

Innovative technological capacity consolidated in thirty years of experience combined with know-how capable of ensuring innovative and dynamic development over time let CIB UNIGAS satisfy any client request at all through one of the most universally acclaimed range of products for natural gas, L.P.G, town gas, light oil, heavy oil, dual fuel, biogas, bio-Diesel, and crude oil burners of up to 67,000 kW power.

The capability for product personalisation and the production of any type of burner to client specification confirm the leading role that CIB UNIGAS has come to play alongside the leading burner manufacturers in Europe and anywhere else in the world.

flexibility

Keeping a constant eye on the market is another indispensable CIB UNIGAS commitment in acquiring the awareness required to satisfy even the most unusual client requests.

The extraordinary flexibility of its productive structure and organisation lets CIB UNIGAS respond quickly with the right product specifications demanded by the market time after time.

Both reliable standard-series production and creative design in constantly meeting the latest market demand distinguish the CIB UNIGAS collective effort.



fuels

Natural gas

Available on request:

- L.P.G.
- Waste gas
- Biogas
- Town gas
- G25

Kerosene

Light oil

Oil

Waste oil

Crude oil

the industrial burner range



Monobloc burners low and medium output



Monobloc burners high output



Burners with separate fan



Burners for asphalt oven TPBY models



Register burner URB

filling every need



complementary systems

The use of combustion air pre-heated by exhaust gas through heat exchangers (for air temperatures up to 200°C)

The use of special combustion systems to create flames with variable shape and/or particularly short flames

Low NOx (CO, NOx, ...) emission combustion heads

Electronic air/fuel ratio control

Mechanical or air atomization (air and/or steam)

1:10 turn-down ratio

Gas pressure reducing stations


Oil pumping and heating systems

Separate electric control panels

Automatic burner retraction systems for stand-by mode

Special voltages and frequencies (110 Volt, 60 Hz, ...)

IPxx Electric Protection ratings

Construction 

examples of main applications

Hot Water Generators (for Heating, Remote-controlled heating, ...)

Steam generators

Diathermic oil-fired boilers

Hot air generators

Industrial processes

Dryers

Asphalt treatment systems

Urban Waste Incinerators

Civil systems (for schools, hospitals, theaters, cinemas, ...)

technology

2 Proudly aware of its role as a leader in the design and construction of burners with high technological content, CIB UNIGAS dedicates top priority to product development and the achievement of the objectives posed by safety, environmental protection, and fuel efficiency standards.

low NOx burners

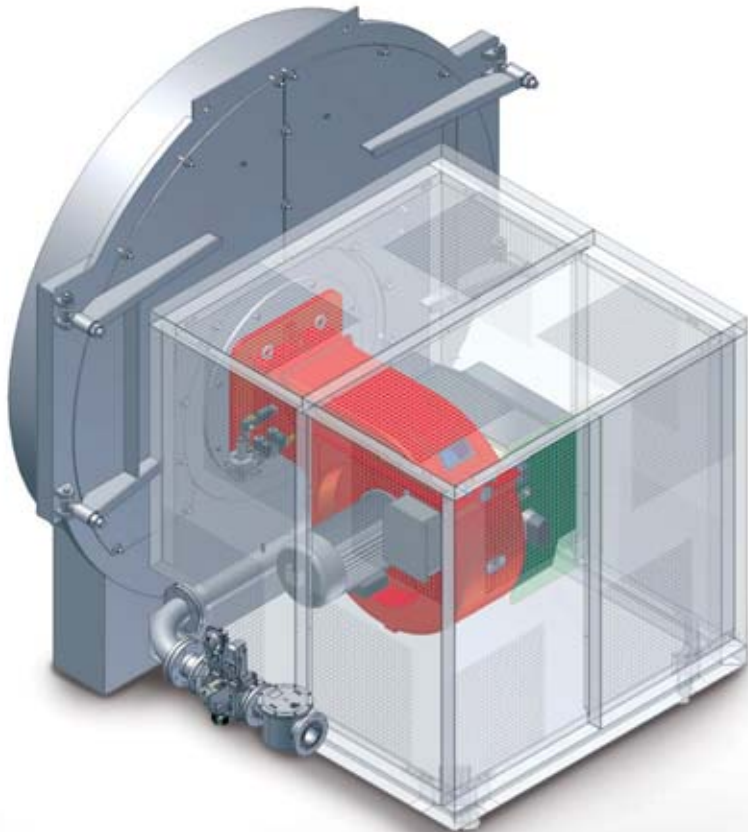
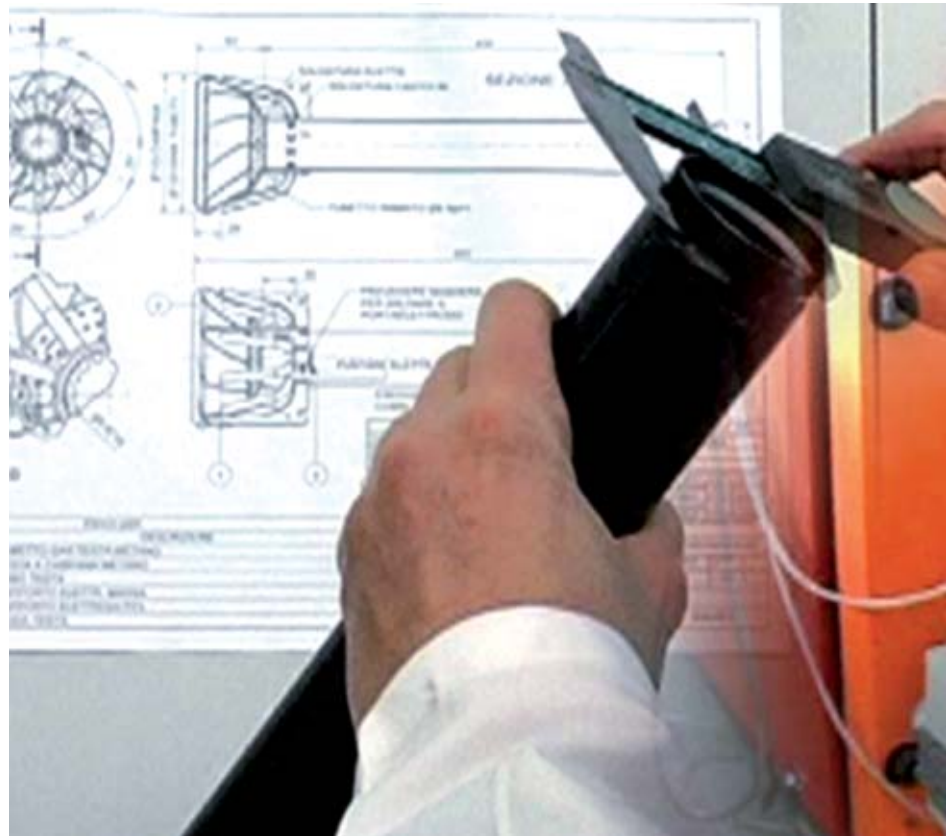
Special combustion heads that reduce the emission of NOx and CO to well below even the most restrictive regulations can be supplied on request.

The installation of these heads propels the burner into a future in which atmospheric emissions will be subject to even greater control and restriction all over the world.

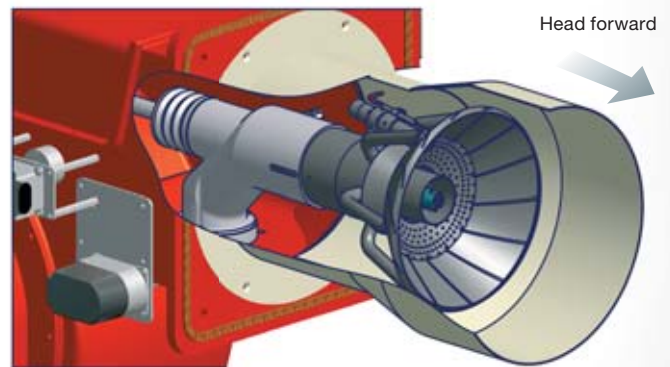
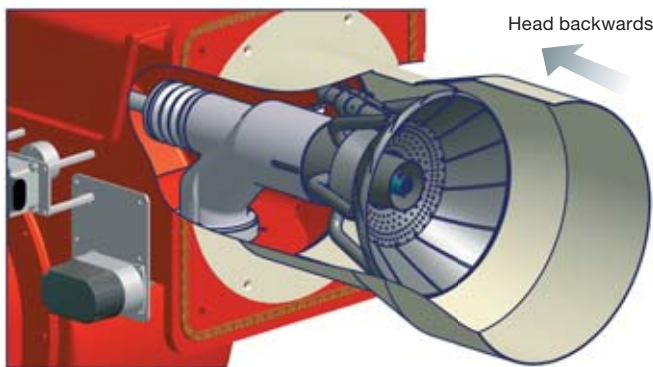
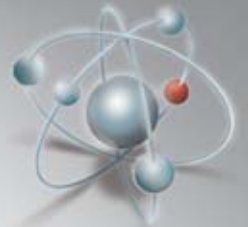
research and development

CIB UNIGAS S.p.A. constantly conducts research for technical solutions that allow clients to apply various types of burner according to specific needs.

New product research and development can also be conducted at specific client request.



men, investments for the future



movable combustion head burners

This technical solution permits the achievement of a modulation ratio of 1:10 by adjusting the combustion head into the blast tube's truncated cone section. This keeps the air/gas mixing speed constant even with the changing thermal load.

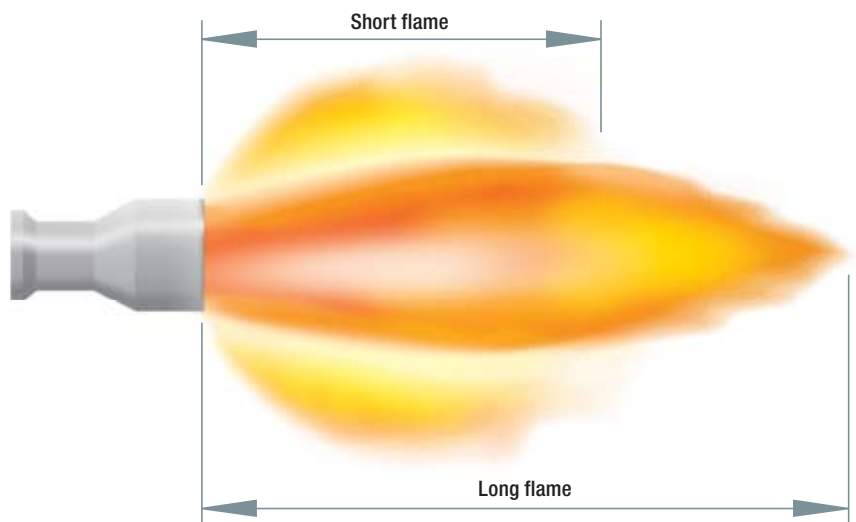
performance

3

CIB UNIGAS manufactures burners that burn any type of fuel for many types of application.

The correct choice of burner during the design stage and matching to any type of boiler, allows the achievement of extremely elevated performance in terms of efficiency, fuel consumption and emission levels.

The company's modern laboratory and research center permits the constant development of new solutions and the improvement of existing products through the use of the latest technologies in performance control and optimisation.



CIB UNIGAS produces burners whose flame can be adjusted according to combustion chamber dimensions.

One particular series of this burners (model VS), can be installed on boilers whose combustion chamber length is shorter than normal.



a concrete result of our research

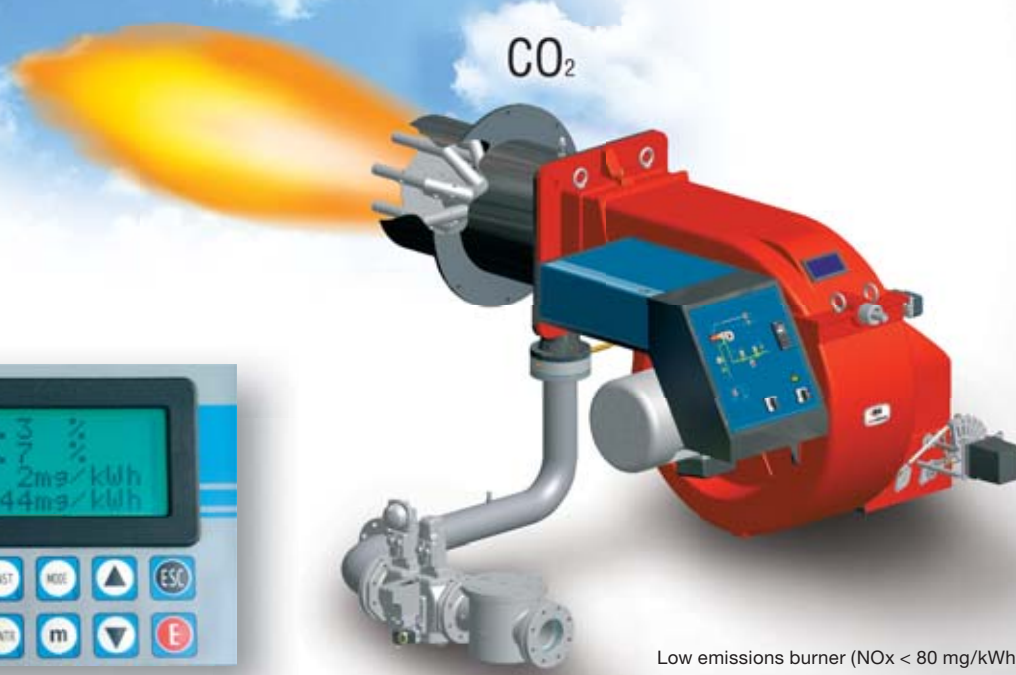


Low NOx

O₂

Low CO

CO₂



Low emissions burner (NOx < 80 mg/kWh)



security

4

CIB UNIGAS has been certified to ISO-9001 Standards that ensures total quality in design, construction, assembly, testing and service since 1995.

All our gas burners are provided with the CE Mark by laboratory testing conducted by two of European most authoritative inspection and testing agencies: GASTEC (Holland) and TÜV (Germany).

The use of components built by the most qualified European constructors lets CIB UNIGAS safely affirm that the company meets the highest standards in the production and control processes adopted for its products and services in terms of security as well.



final test

In order to ensure that its products enter the market absolutely free from any defect at all, CIB UNIGAS S.p.A., has developed a series of procedures that control the various phases of the production process.

Inspections, tests, and control operations are conducted during product acquisition, on incoming materials, and all throughout the production process at the company's own Research and Development Laboratory.

All finished products are 100% tested at the end of the line by specially trained technicians.



top commitment for safety and quality



CIB UNIGAS S.p.A. was certified to UNI EN ISO 9001 Standards (now UNI EN ISO 9001:2008) in 1995 by one of the most prestigious combustion product and process test institutes: TÜV. CIB UNIGAS S.p.A. has also certified its products in several nations worldwide.

service

5

CIB UNIGAS is a service-oriented company that has always considered customer assistance to be one of its biggest strengths and provides clients with pre-sales assistance in selecting the right burner for every type of application.

Quick, flexible and efficient commercial service in filling and shipping orders within the terms agreed is combined with a widespread post-sales service network for assistance in the first firing, adjustment, and maintenance of the burners throughout the territory.

With over two-hundred authorised Technical Assistance Services in Italy and presence in 30 other nations around the world through exclusive dealers capable of ensuring prompt product technical assistance, CIB UNIGAS has all the cards in hand for effective commercial penetration in all the leading markets in the world.



training courses

CIB UNIGAS S.p.A. organises training courses for its network of technical engineers every year. Training is provided by instructors with extensive experience in the field of burners who also conduct similar courses for company clients abroad.

Numerous courses are held in many nations around the world where CIB UNIGAS S.p.A. distributes its products.

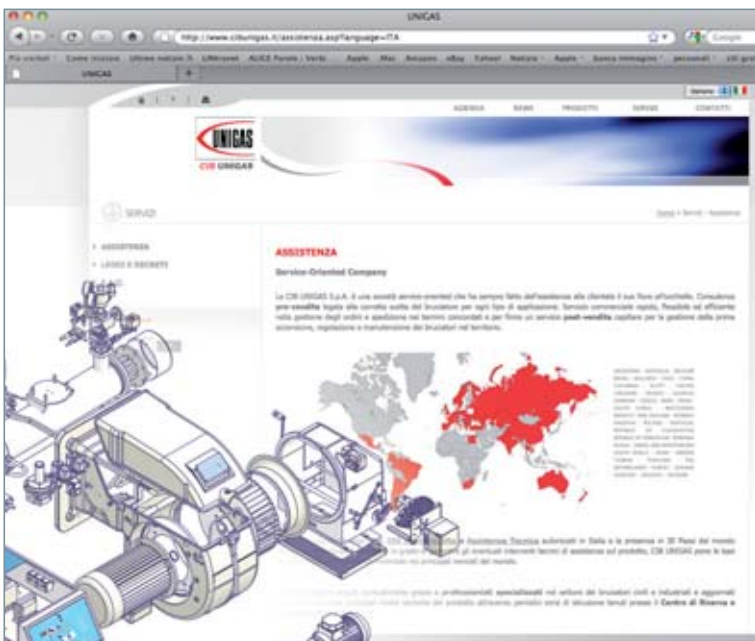




first: customer care



● Main sale points and technical assistance.



after sale service

CIB UNIGAS has expanded its technical assistance network with over 200 authorised national technical assistance services and its own exclusive dealers for the rest of the world.

All clients are carefully followed by professionals specialised in the civil and industrial burner sector and constantly kept up to date on the latest technological product innovations through regular training courses conducted at the company's Research & Development Center.

Both the capacity to stand by clients in all phases prior to purchase through consultation in choosing the correct product and reliable post-sales services guarantee the ongoing success of CIB UNIGAS around the world.

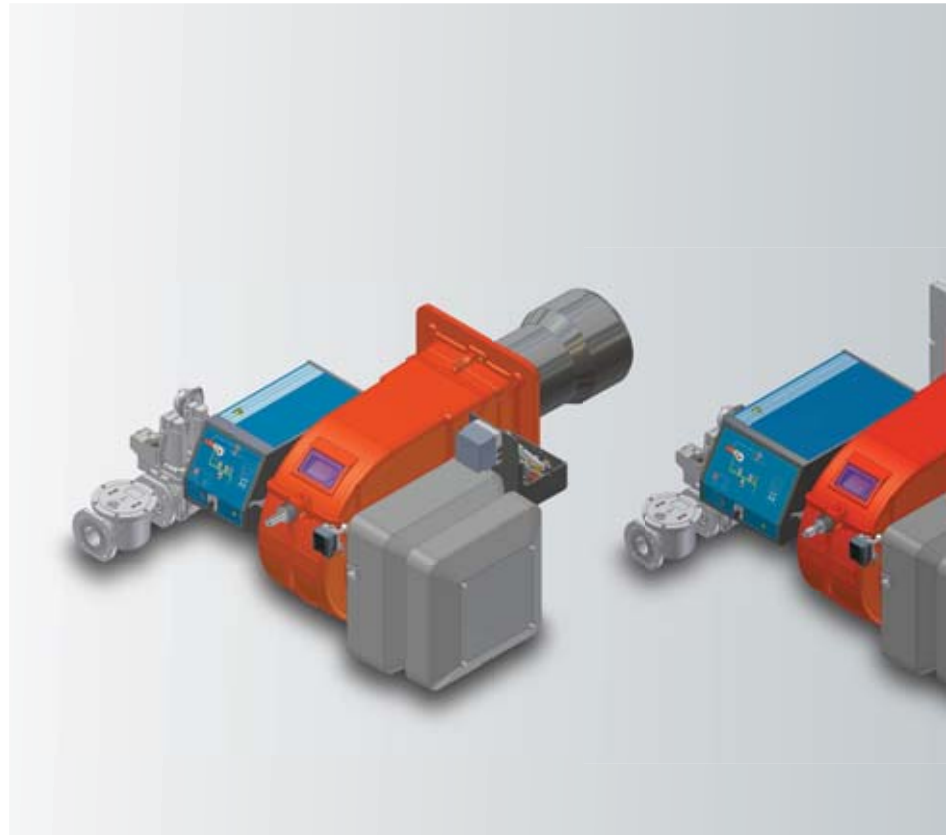
A series of burners to satisfy

This complete range of burners from 14 kW to 67 MW output is capable of meeting every request in the need for low-environmental impact, high output sources of heating devices.

The applications developed so far and others to be developed in the future are numerous and run from simple use in the production of heat for heating and/or hot water to be utilised in systems like waste incinerators, steam generators, diathermic oil-fired boilers, and special application upon customer's request.

Suited to use with any type of liquid or gaseous fuel at all, the burners can be used to burn high viscosity combustion oils, waste gas, refinery gas, and other special fuels.


The possibility to customise burners upon specific client requests makes production remarkably versatile and adaptable to any needs at all.



production line


MONOBLOCK series



		<i>(from 288 kW up to 13 MW)</i>							
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SHORT-FLAME series



		<i>(from 480 kW up to 13 MW)</i>							
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HEADS series



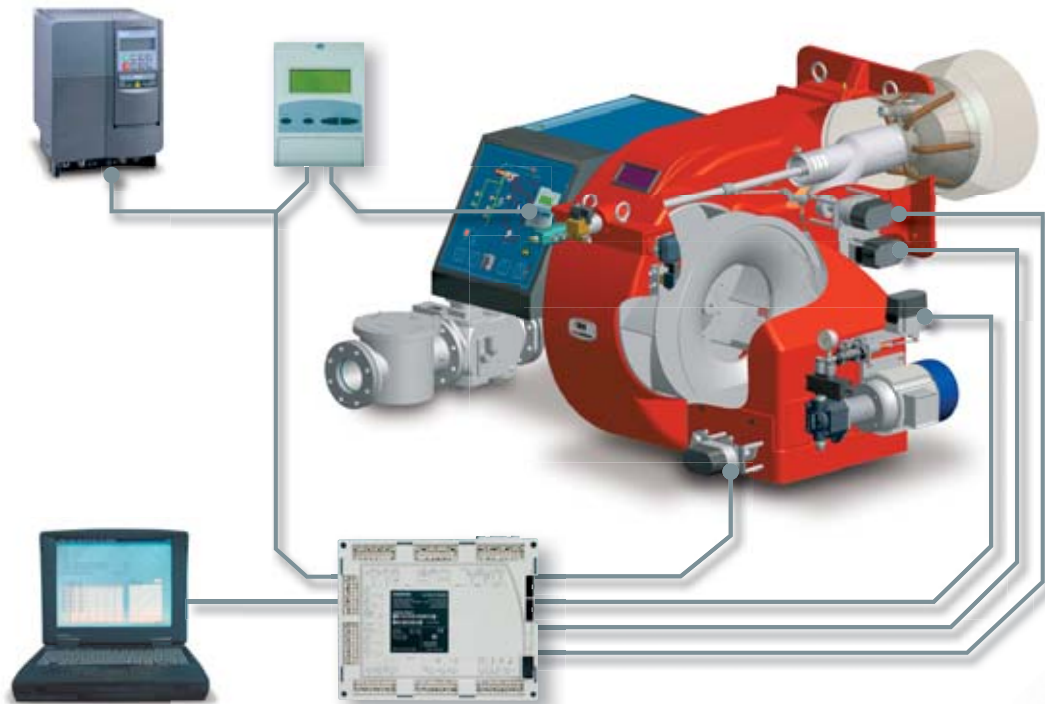
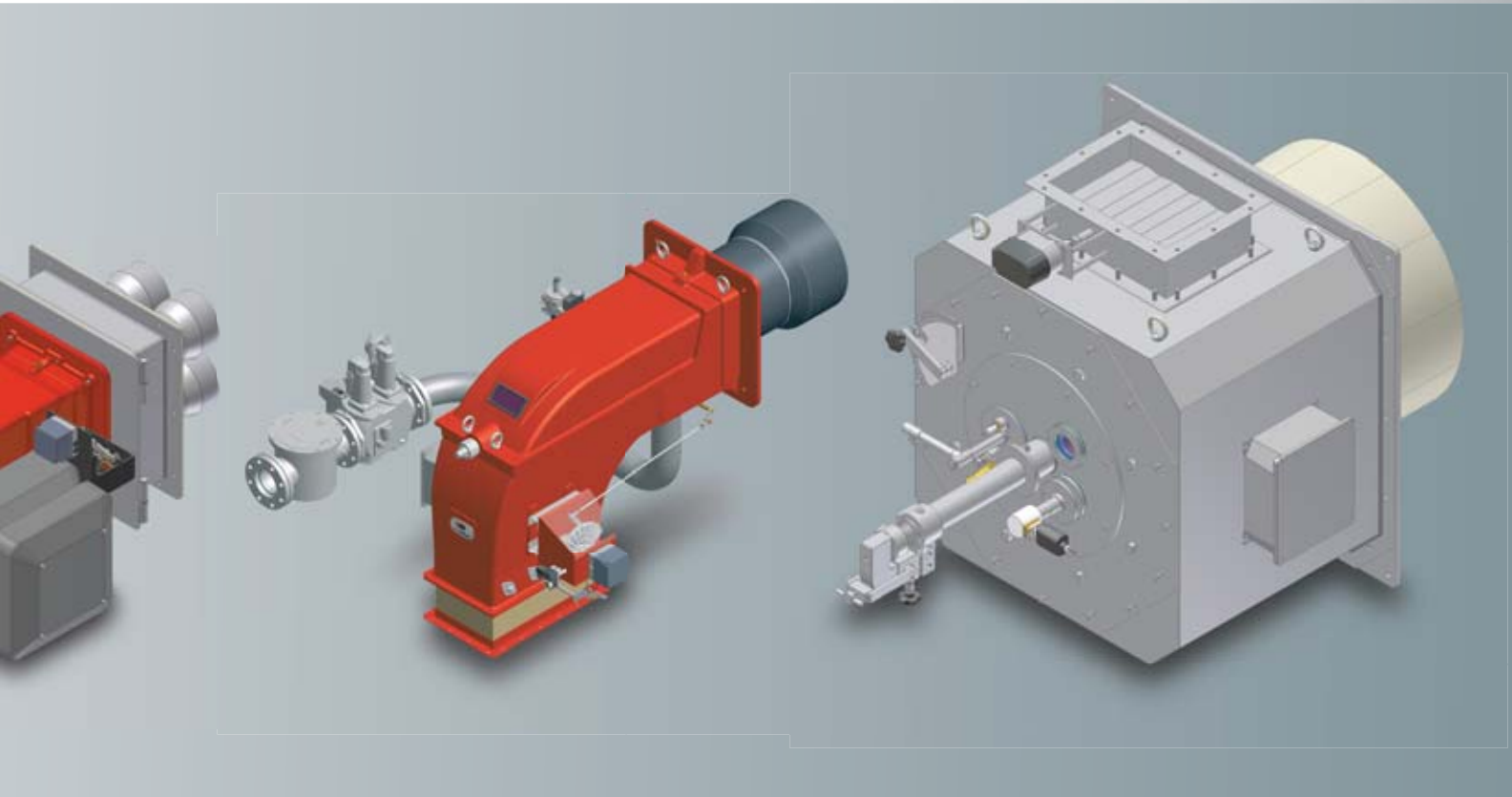
		<i>(from 320 kW up to 19 MW)</i>							
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URB series



								<i>(from 5 up to 67 MW)</i>	
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any requests



Computerized system for the control of the right mix air/fuel, head movement, of Oxigene percentage in the fumes, and motor revolutions.

This system allows the remote supervision, via BUS, of the working.

R-TP series

R series

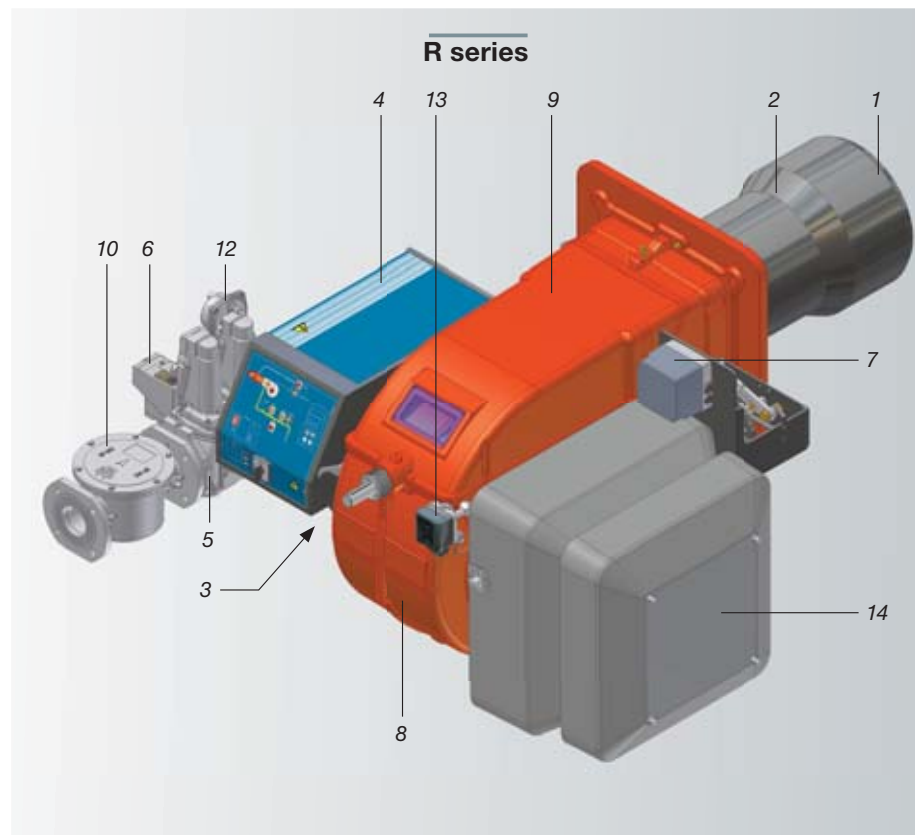
Monoblock burners

This type of burner is distinguished by its built-in fan.

The power range runs from 2,670 to 13,000 kW.

This Series can be constructed in:

- "Mechanical" version, in which the servo-control is connected to a set of linkages that create the right air/gas mixture when adjusted as required;
- "Electronic" version, in which the control box synchronises all the various elements that are involved in the adjustment of the air/gas ratio creating an extremely precise adjustment system.



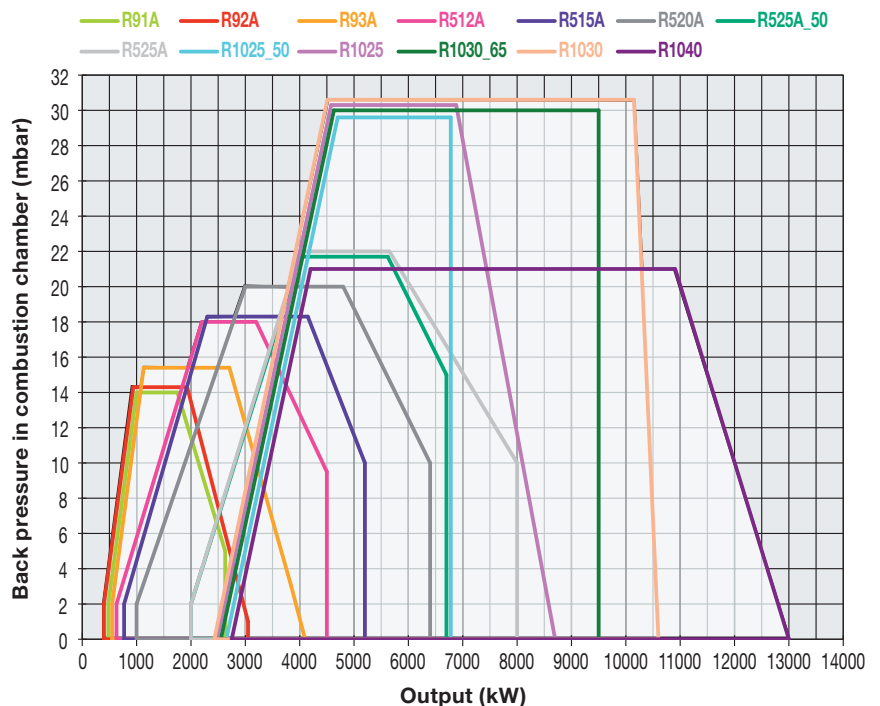
TP series

Burners with separate fan

The power range runs to 19,000 kW.

The supply can be completed with the following optionals:

- Centrifugal fan;
- Combustion air inlet from either above or below;
- Heated combustion air supply up to 200°C;
- Mechanical or electronic air/fuel ratio adjustment;
- Control of oxygen levels through continuous movements of the linkages;
- Remote mounting electric control panels (console type, cabinet type, or wall-mounted).



Type	R91A	R92A	R93A	R512A	R515A	R520A	R525A	R1025	R1030 DN65	R1030	P1040
Min output kW	480	480	550	600	770	1.000	2.000	2.550	2.550	2.550	2.550
Max output kW	2.670	3.050	4.100	4.500	5.200	6.400	8.000	8.700	9.500	10.600	13.000

gas burners

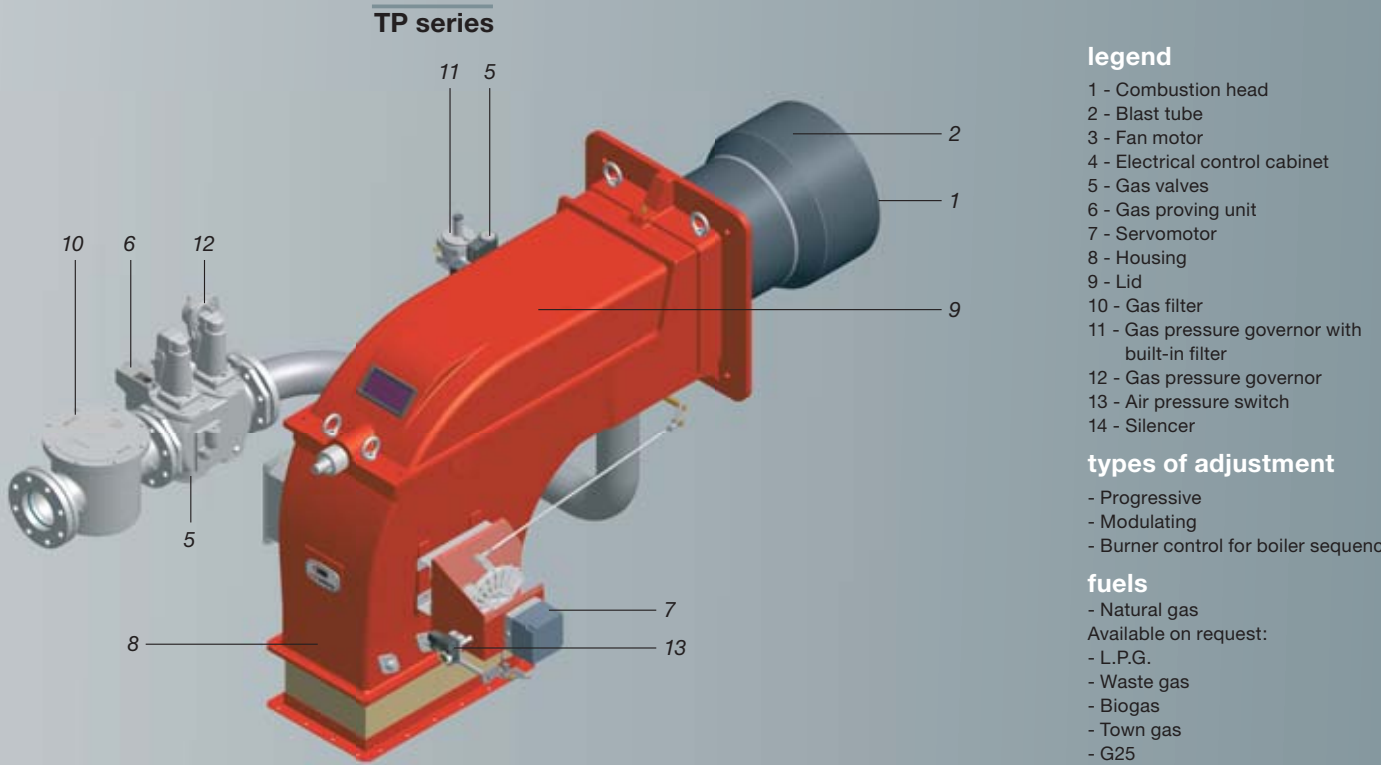
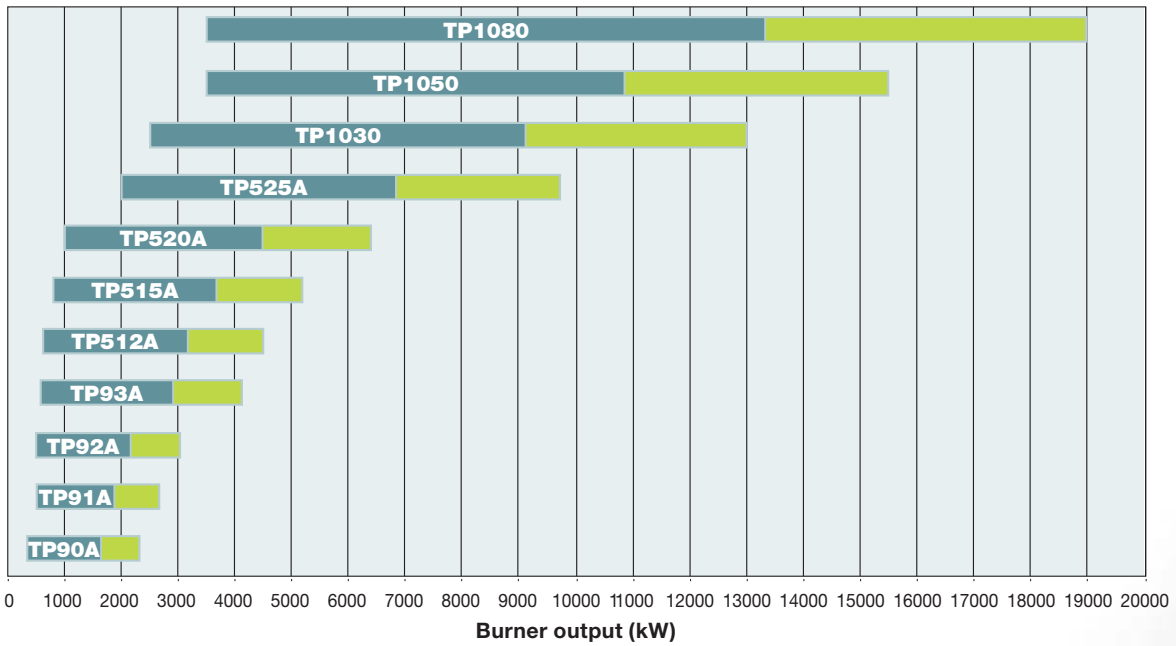


Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Type	TP90A	TP91A	TP92A	TP93A	TP512A	TP515A	TP520A	TP525A	TP1030	TP1050	TP 1080
Min modulation output kW	320	480	480	550	600	770	1.000	2.000	2.500	3.500	3.500
Min output for matching range kW	1.610	1.869	2.135	2.870	3.150	3.640	4.480	6.825	9.100	10.850	13.300
Max output kW	2.300	2.670	3.050	4.100	4.500	5.200	6.400	9.750	13.000	15.500	19.000

RX-TLX series

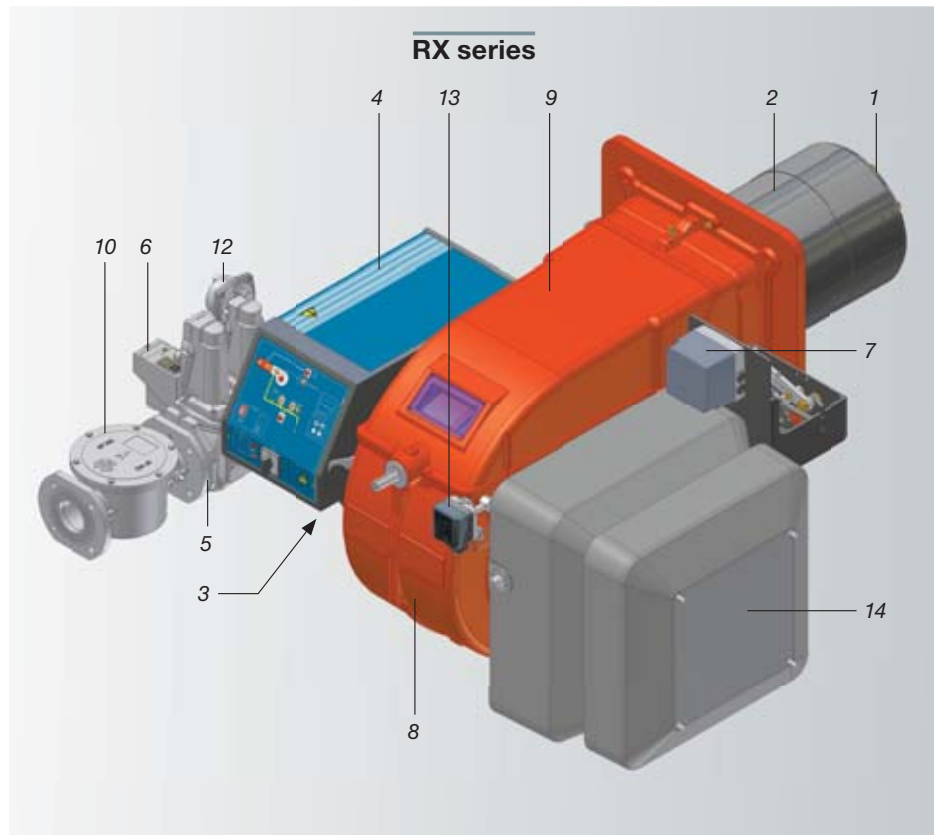
RX series

Monoblock burners

This series of burners was designed to use a mechanical or electronic fuel combustion system indifferently, with or without inverter, with or without oxygen control, and fully meets all reliability and efficiency needs.

The extreme flexibility of the new low environmental impact combustion head, through balanced air/gas distribution, can achieve a homogeneously distributed flame along the entire combustion chamber axis.

The aluminium die-cast burner houses all the regulation components, a synoptic panel to display the various operating phase and a newly designed air inlet able to reduce noise levels under those currently on the market.



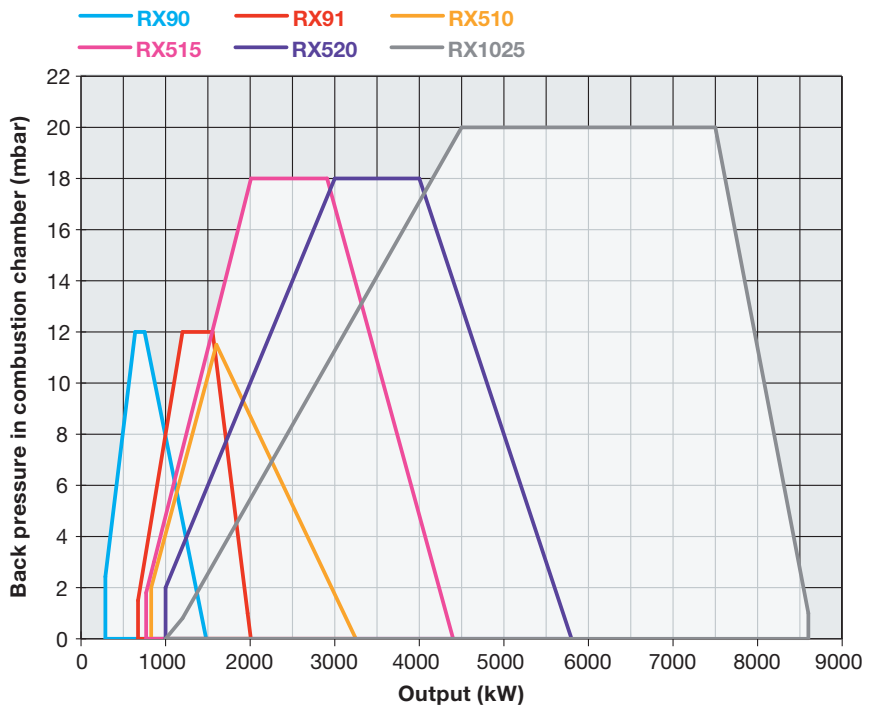
TLX series

Burners with separate fan

Like the monobloc series, this range with separate fan is also characterised by the use of a low pollution emission head. The separate fan, the low emission combustion head, the possibility of an optional continuous residual oxygen control plus the various available accessories make this series extremely flexible.

The range can be completed with:

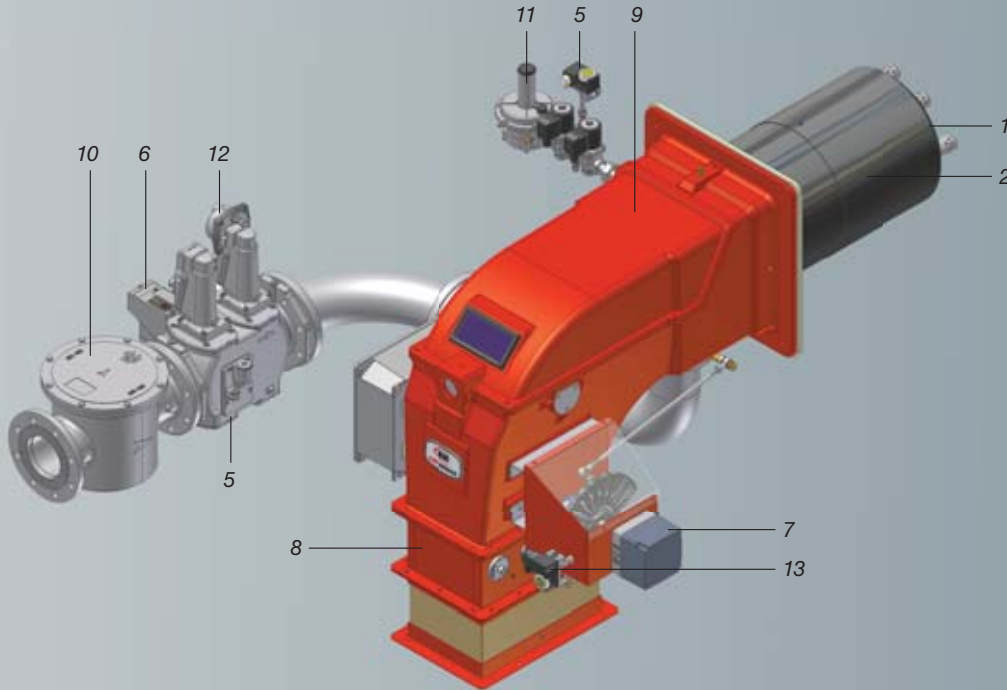
- Centrifugal fan;
- Combustion air inlet on 4 sides;
- Heated combustion air supply up to 200°C;
- Oxygen level control with continuous system regulation;
- Separate electric control panels, console type, cabinet type, or wall-mounted;



Type	RX90	RX91	RX510	RX515A	RX520A	RX1025
Min output kW	288	674	800	770	1.000	1.000
Max output kW	1.480	2.008	3.250	4.400	5.800	8.600

Low Nox gas burners

TLX series



legend

- 1 - Combustion head
- 2 - Blast tube
- 3 - Fan motor
- 4 - Electric panel
- 5 - Gas valves
- 6 - Leakage control
- 7 - Servocontrol
- 8 - Volute
- 9 - Lid
- 10 - Gas filter
- 11 - Gas pressure governor with built-in filter
- 12 - Gas pressure governor
- 13 - Air pressure governor
- 14 - Silencer

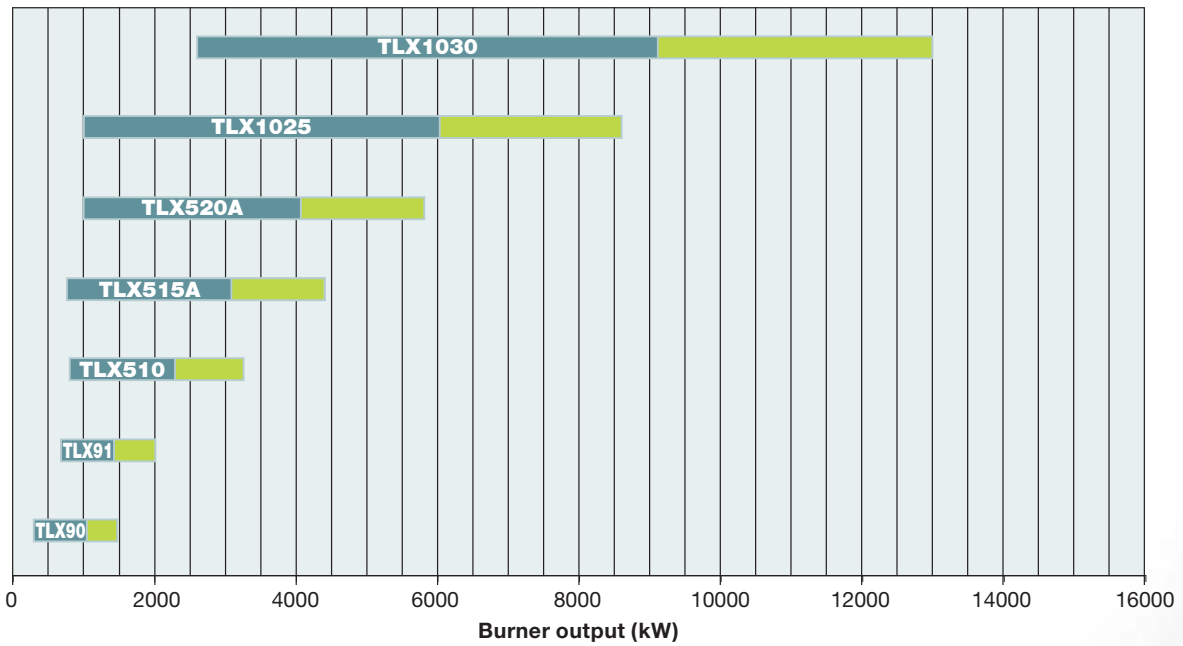
types of adjustment

- Progressive
- Modulating
- Burner control for boiler sequence

fuels

- Natural gas

Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Type	TLX90	TLX91	TLX510	TLX515A	TLX520A	TLX1025	TLX1030
Min modulation output kW	288	674	800	770	1.000	1.000	2.600
Min output for matching range kW	1.036	1.406	2.275	3.080	4.060	6.020	9.100
Max output kW	1.480	2.008	3.250	4.400	5.800	8.600	13.000

RG-TG series

RG series

Monoblock burners

This Series utilises a by-pass nozzle that provides a 1:3 ratio adjustment range.

The load is varied by either adjusting a variable cam installed in a regulator that varies the pressure of the fuel on the nozzle's return line and consequently the flow rate, or through the use of an electronic cam capable of synchronising all the various elements, such as air and light oil.

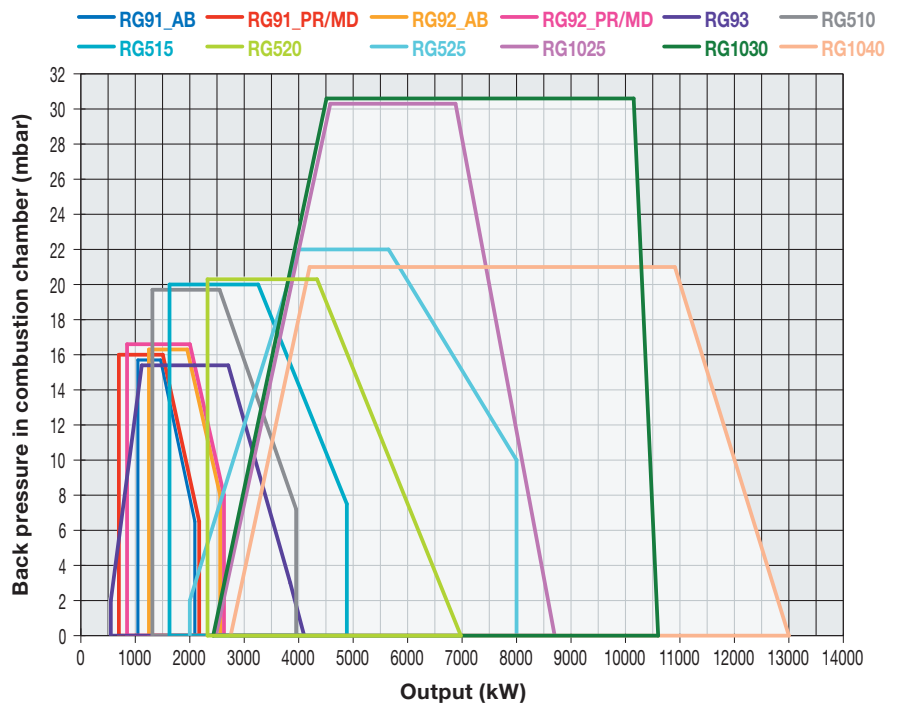
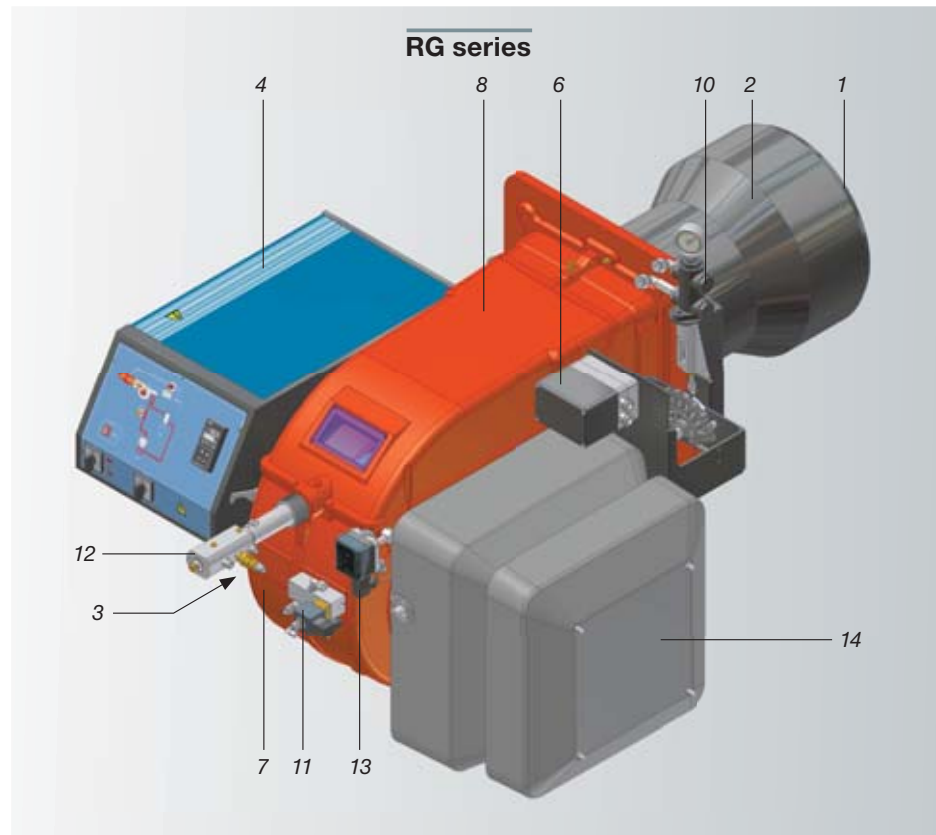
TG series

Burners with separate fan

The burners in this series have been designed for application in conditions in which monobloc burners cannot be used.

The supply can be completed with the following optionals:

- Centrifugal fan;
- Pump unit for oil;
- Combustion air inlet from either above or below;
- Heated combustion air supply up to 200°C;
- Mechanical or electronic air/fuel ratio adjustment;
- Control of oxygen levels through continuous movements of the linkages;
- Remote mounting electric control panels (console type, cabinet type, or wall-mounted).



Type	RG91	RG92	RG93	RG510	RG515	RG520	RG525	RG1030	RG1040
Min output kW	698	849	550	1314	1628	2.326	2.000	2.550	2.550
Max output kW	2.093	2.558	4.100	3.953	4.884	6.977	8.000	10.600	13.000

light oil burners

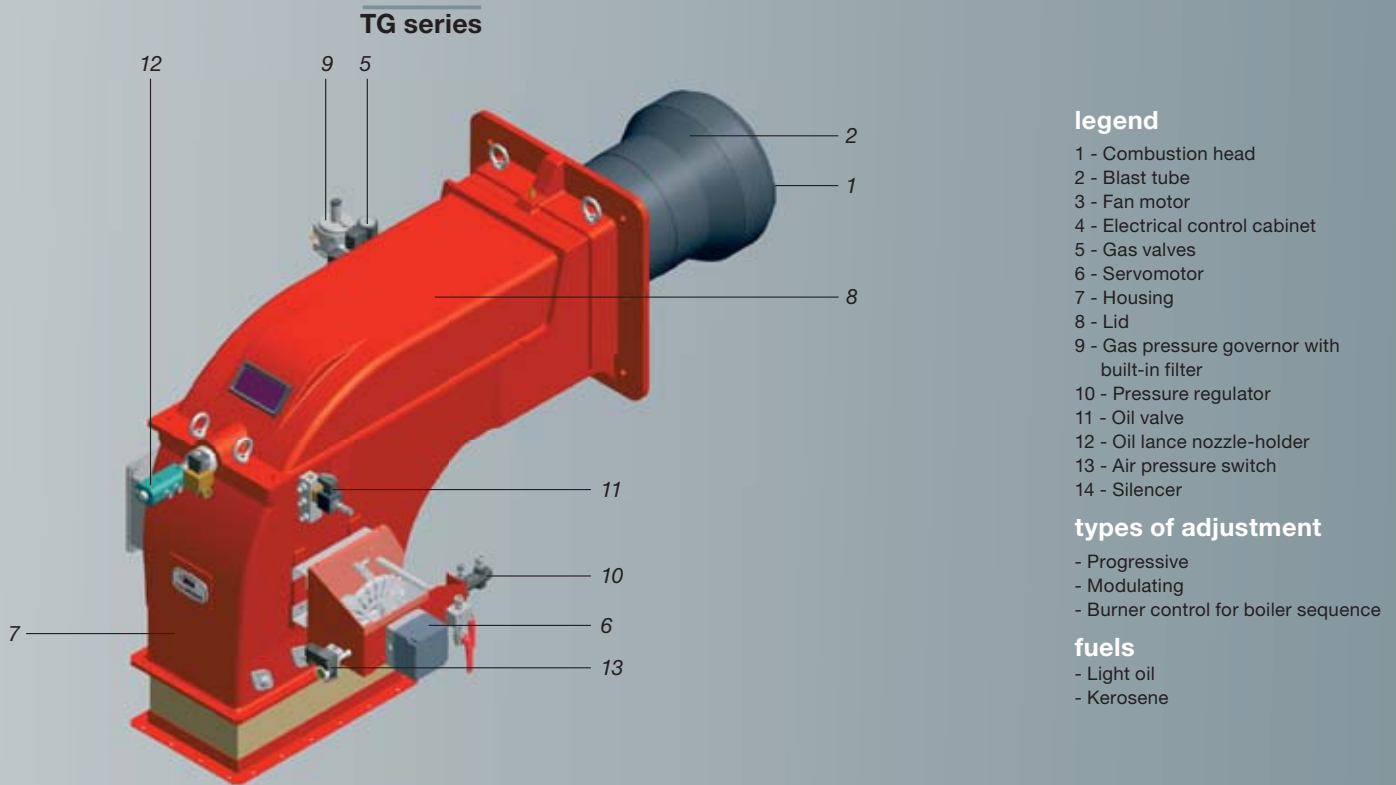
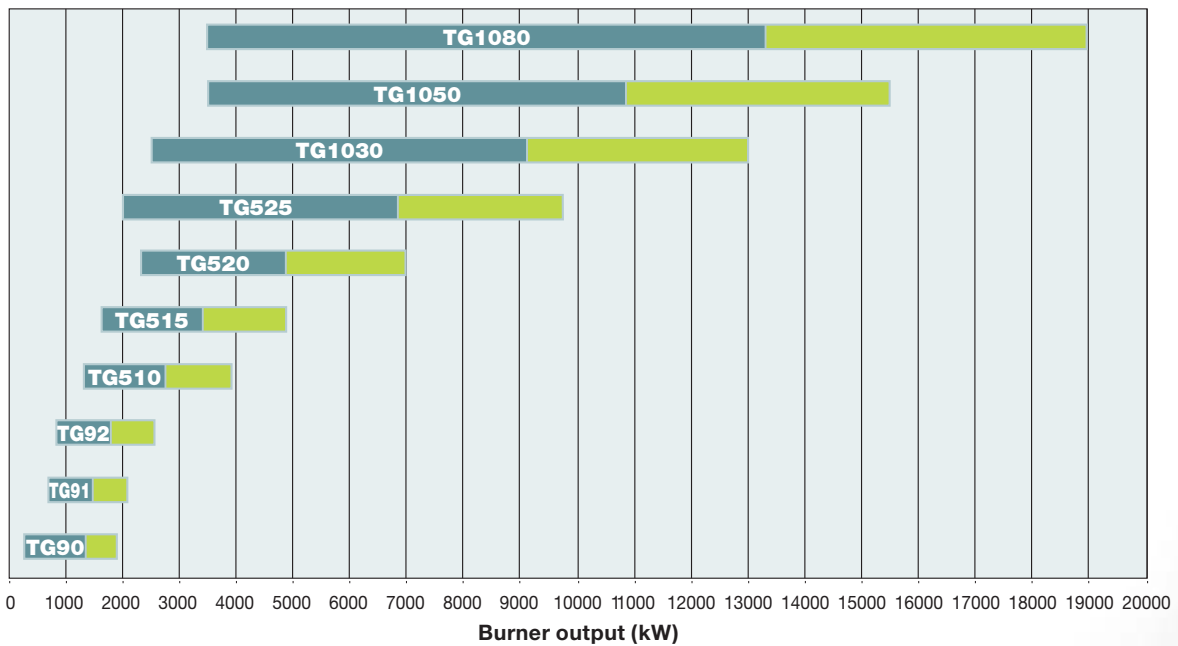


Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Type	TG90	TG91	TG92	TG510	TG515	TG520	TG525	TG1030	TG1050	TG 1080
Min modulation output kW	264	698	849	1.314	1.628	2.326	2.000	2.500	3.500	3500
Min output for matching range kW	1.330	1.465	1.791	2.767	3.419	4.884	6.825	9.100	10.850	13300
Max output kW	1.900	2.093	2.558	3.953	4.884	6.977	9.750	13.000	15.500	19000

RN-TN series

RN series

Monobloc burners with mechanical atomization

These burners are available for viscosity levels of up to 400 cSt at 50°C (50°E at 50°C).

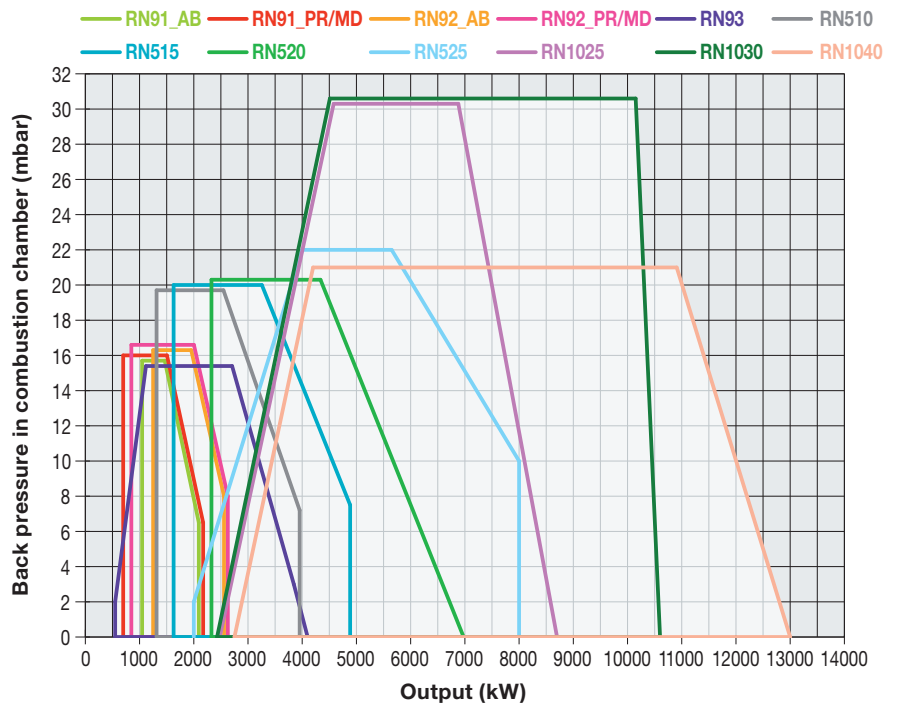
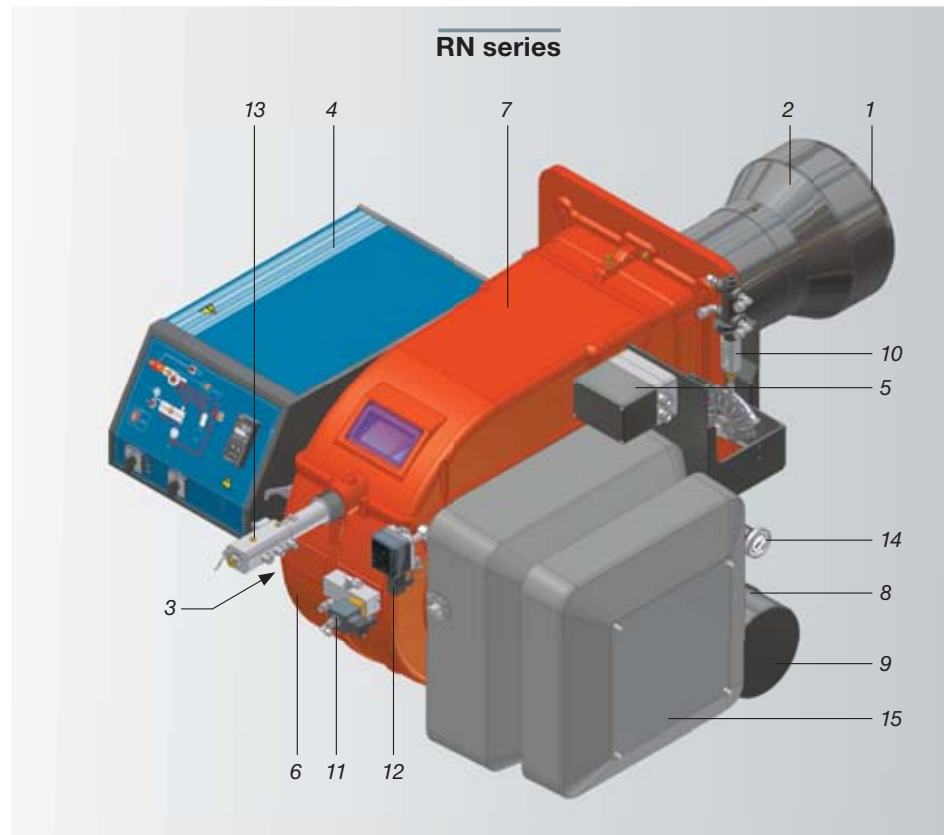
The particular viscosity of the fuel and the need to keep the oil fluid has required the installation of a pre-heater equipped with armoured electrical elements with low heat load to avoid the carbonisation of the oil when it comes into contact with the elements.

TN series

Mechanical atomization burners with separate fan, pump unit, and pre-heating system

The supply can be completed with the following optionals:

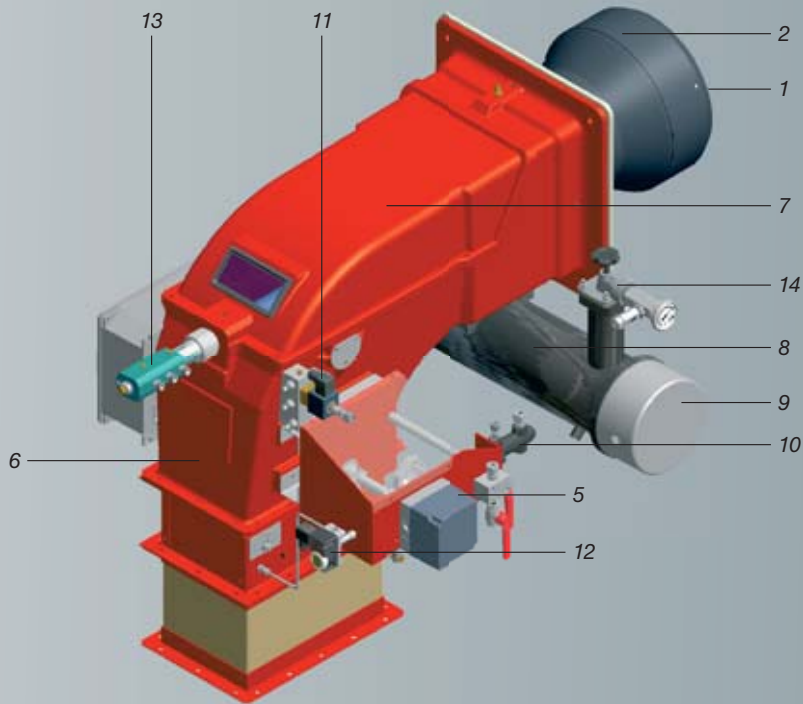
- Centrifugal fan;
- Pump unit for oil;
- Electric, steam, or combined electric/steam fuel oil pre-heating unit;
- Combustion air inlet from either above or below;
- Heated combustion air supply up to 200°C;
- Mechanical or electronic air/fuel ratio adjustment;
- Remote mounting electric control panels (console type, cabinet type, or wall-mounted).



Type	RN91	RN92	RN93	RN510	RN515	RN520	RN525	RN1030	RN1040
Min output kW	698	849	550	1314	1628	2.326	2.000	2.550	2.550
Max output kW	2.093	2.558	4.100	3.953	4.884	6.977	8.000	10.600	13.000

oil burners

TN series



legend

- 1 - Combustion head
- 2 - Blast tube
- 3 - Fan motor
- 4 - Electrical control cabinet
- 5 - Servomotor
- 6 - Housing
- 7 - Lid
- 8 - Heater tank
- 9 - Electrical resistances
- 10 - Pressure regulator
- 11 - Oil valve
- 12 - Air pressure switch
- 13 - Oil lance nozzle-holder
- 14 - Self-cleaning filter
- 15 - Silencer

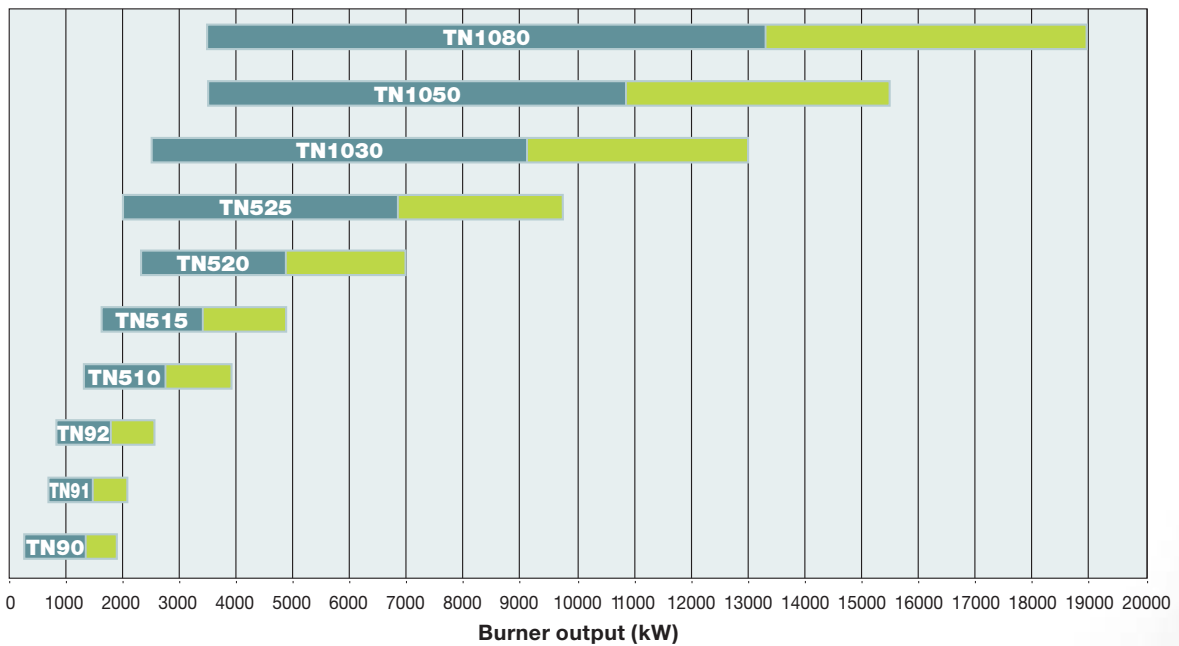
types of adjustment

- Progressive
- Modulating
- Burner control for boiler sequence

fuels

- Heavy oil
- Waste oil
- Crude oil

Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Type	TN 90	TN 91	TN 92	TN 510	TN 515	TN 520	TN 525	TN 1030	TN 1050	TN 1080
Min modulation output kW	264	698	849	1.314	1.628	2.326	2.000	2.500	3.500	3.500
Min output for matching range kW	1.330	1.465	1.791	2.767	3.419	4.884	6.825	9.100	10.850	13.300
Max output kW	1.900	2.093	2.558	3.953	4.884	6.977	9.750	13.000	15.500	19.000

PBY-TPBY series

PBY series

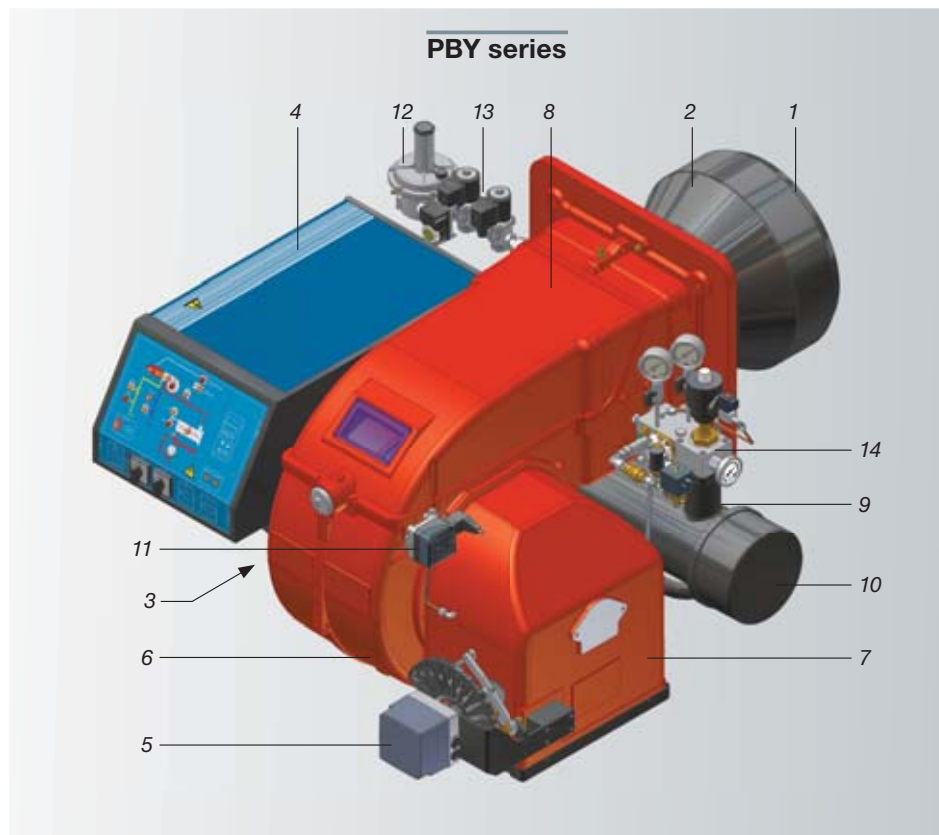
Monoblock burners

This special series of combustion oil burners with viscosity up to 4000 cSt at 50°C (530°E at 50°C), including special fuels such as waste oil, crude oil, etc., was designed to use compressed air or, alternatively, steam as a fuel atomization fluid to improve combustion efficiency over traditional atomization systems.

These burners are equipped with a low pressure nozzle that limits overall atomization system wear.

All burners are progressively regulated and come complete with electric panel, combustion fuel motor-pump unit to be installed separately by the user and automatic nozzle cleaning at the end of the operating cycle.

The burners are ignited by a gas pilot burner fuelled with methane gas or LPG.



TPBY series

Burners with separate fan

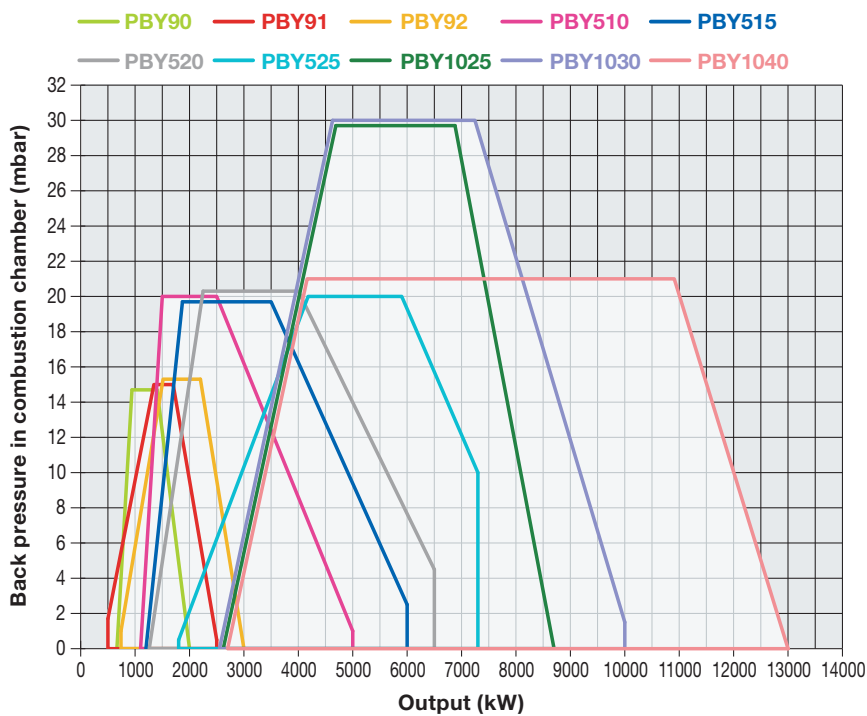
Like the monobloc series, these burners are also characterised by a low pressure atomization system.

The power range runs to 19,000 kW.

They are especially designed to be used in application where monobloc burner conditions are not met.

The supply can be completed with the following optional accessories:

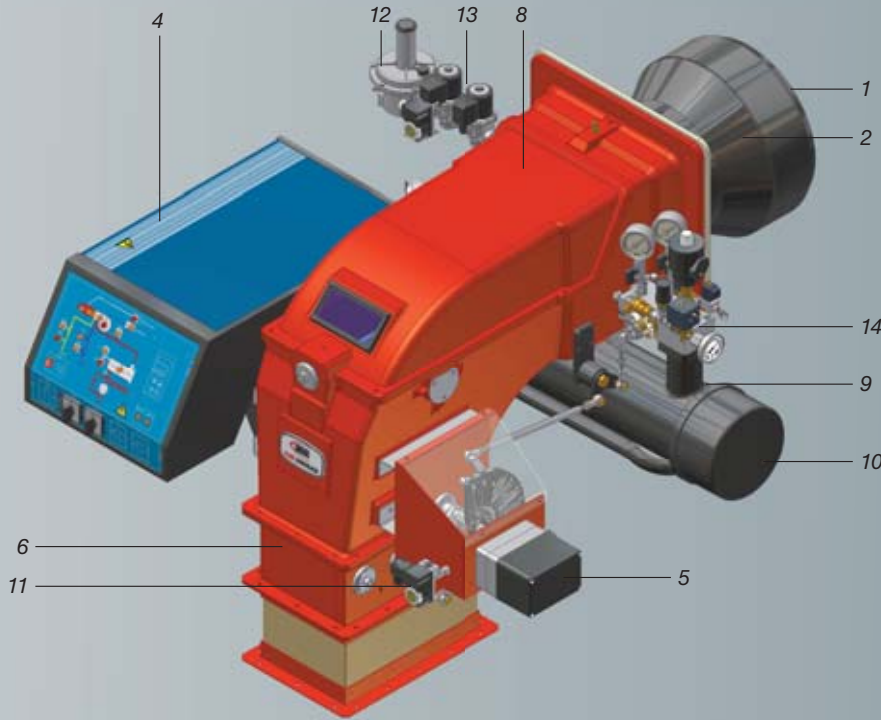
- Centrifugal fan;
- Combustion air inlet from either above or below;
- Heated combustion air supply up to 200°C;
- Separate electric control panels, console type, cabinet type, or wall-mounted.



Type	PBY90	PBY91	PBY92	PBY510	PBY515	PBY520	PBY525	PBY1025	PBY1030	PBY1040
Min output kW	670	500	700	1100	1200	1200	1800	2550	2550	2550
Max output kW	2000	2500	3000	5000	6000	6500	7300	8700	10000	13000

high viscosity combustion oil burners

TPBY series



legend

- 1 - Combustion head
- 2 - Blast tube
- 3 - Fan motor
- 4 - Electric panel
- 5 - Servocontrol
- 6 - Volute
- 7 - Air inlet
- 8 - Lid
- 9 - Pre-heating tank
- 10 - Electric resistances
- 11 - Air pressure switch
- 12 - Gas pressure governor with built-in filter
- 13 - Gas valves
- 14 - Distributor

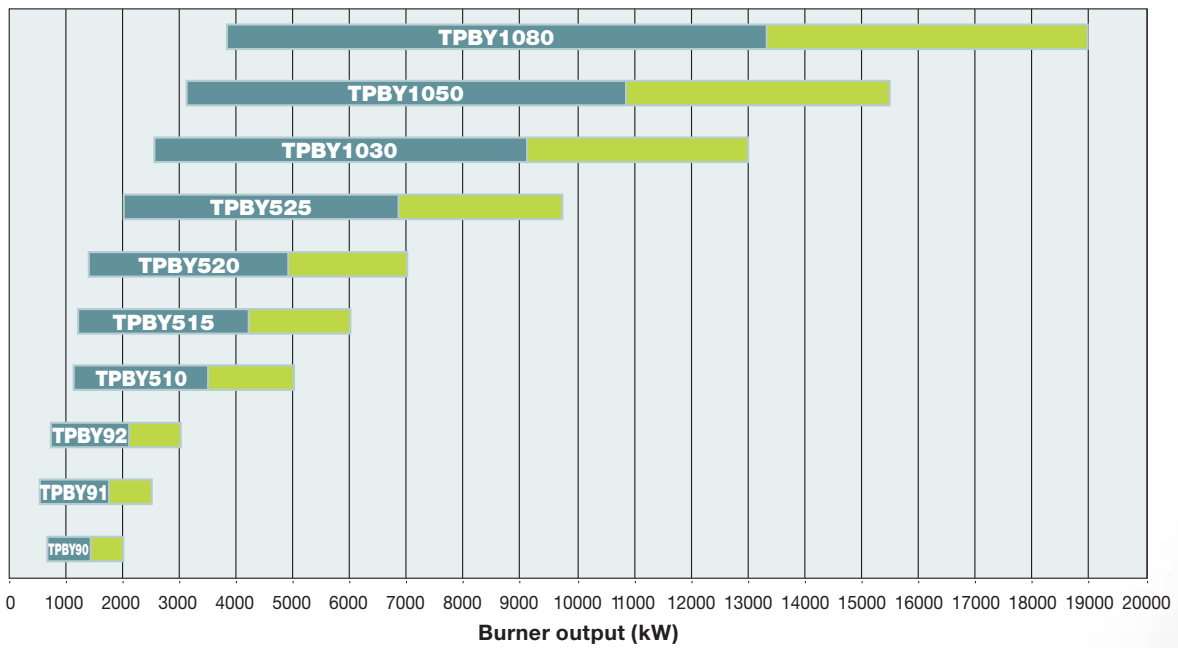
types of adjustment

- Progressive
- Modulating
- Burner control for boiler sequence

fuels

- Combustion oil
- Waste Oil
- Crude Oil

Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Type	TPBY90	TPBY91	TPBY92	TPBY510	TPBY515	TPBY520	TPBY525	TPBY1030	TPBY1050	TPBY1080
Min output kW	670	500	700	1100	1200	1400	2000	2550	3100	3800
Min output for matching range kW	1400	1750	2100	3500	4200	4900	6825	9100	10850	13300
Max output kW	2000	2500	3000	5000	6000	7000	9750	13000	15500	19000

HR-HTP series

HR series

Monoblock burners

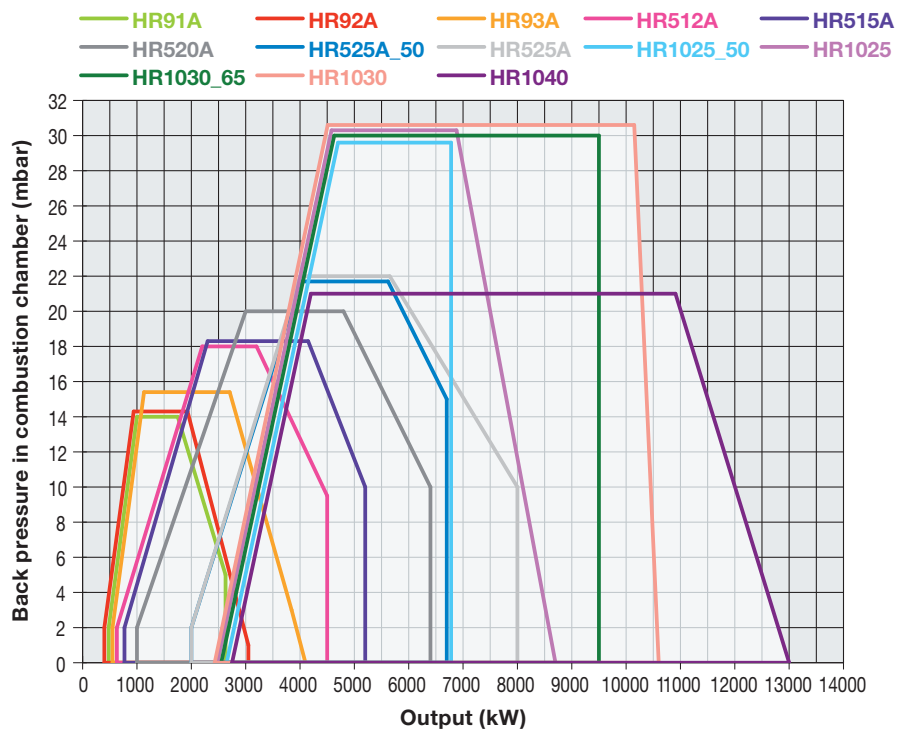
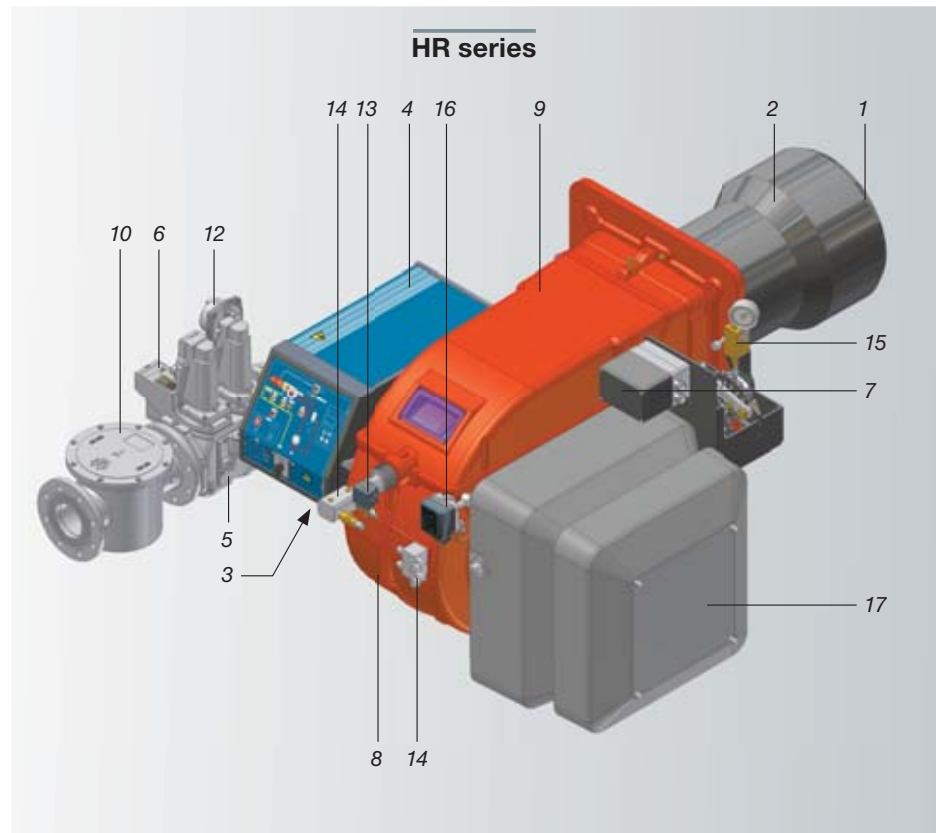
These dual fuel gas/light oil burners integrate to perfection the mechanisms used for gas burners with those for light oil burners through the use of an independent electric motor for the control of the light oil pump.

HTP series

Burners with separate fan

The possibility to use two fuels separately and their easy maintenance puts this product in a class of its own. The supply can be completed with the following options:

- Centrifugal fan;
- Pump unit for oil;
- Combustion air inlet from either above or below;
- Heated combustion air supply up to 200°C;
- Mechanical or electronic air/fuel ratio adjustment;
- Control of oxygen level through continuous movements of the linkages;
- Remote mounting electric control panels (console type, cabinet type, or wall-mounted).



Type	HR91A	HR92A	HR93A	HR512A	HR515A	HR520A	HR525A	HR1025	HR1030 DN65	HR1030	HR1040
Min output kW	480	480	550	600	770	1.000	2.000	2.550	2.550	2.550	2.550
Max output kW	2.670	3.050	4.100	4.500	5.200	6.400	8.000	8.700	9.500	10.600	13.000

dual fuel gas-light oil burners

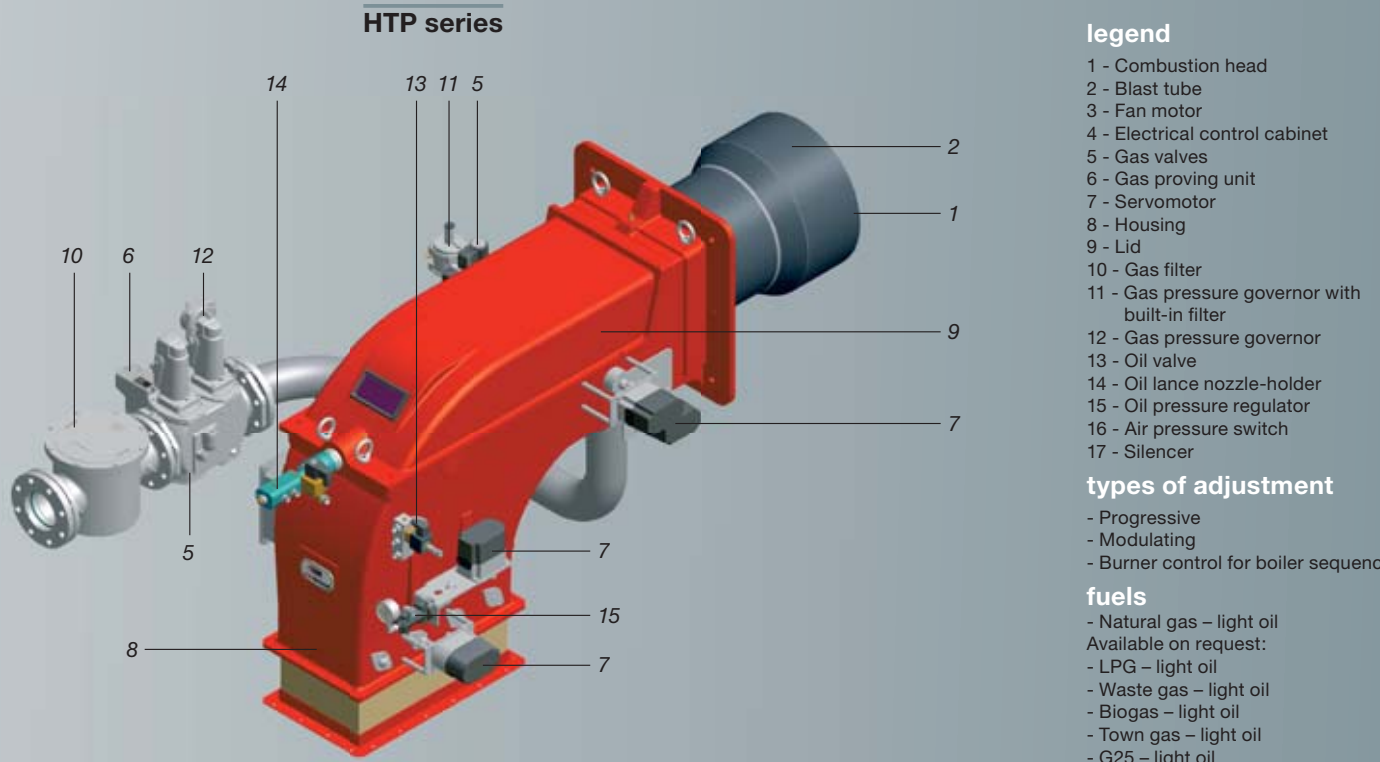
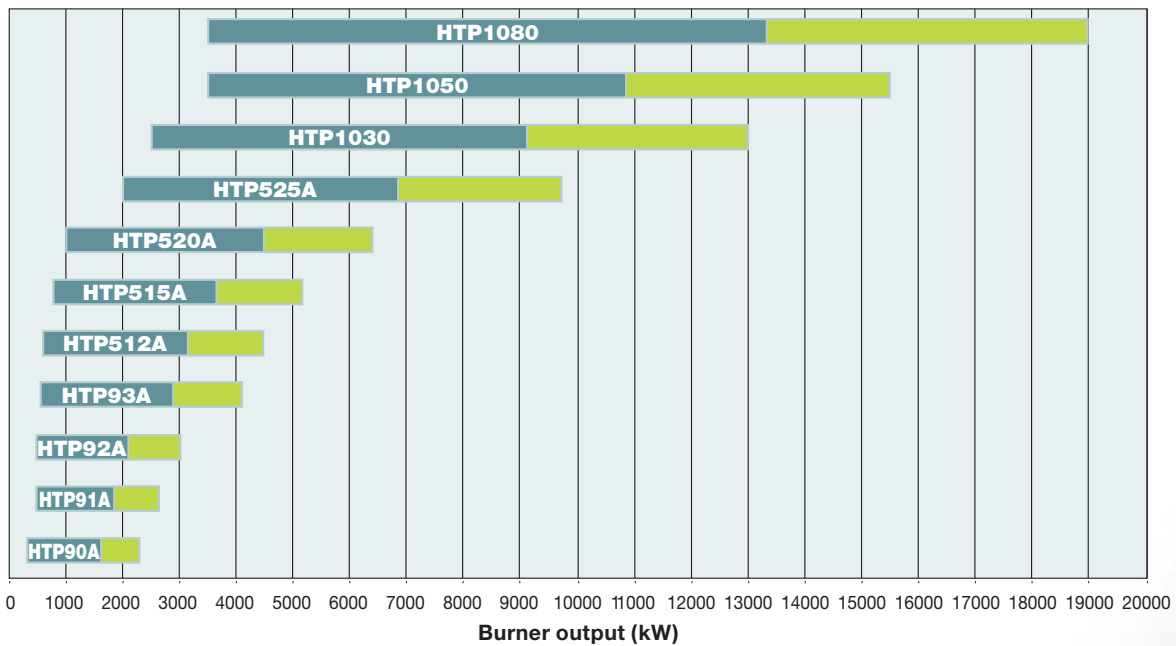


Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Type	HTP90A	HTP91A	HTP92A	HTP93A	HTP512A	HTP515A	HTP520A	HTP525A	HTP1030	HTP1050	HTP 1080
Min modulation output kW	320	480	480	550	600	770	1.000	2.000	2.500	3.500	3500
Min output for matching range kW	1.610	1.869	2.135	2.870	3.150	3.640	4.480	6.825	9.100	10.850	13300
Max output kW	2.300	2.670	3.050	4.100	4.500	5.200	6.400	9.750	13.000	15.500	19000

KR-KTP series

KR series

Monoblock burners

All these burners are designed to burn the two fuels separately and are suitable for fuel oil with standard 7°E at 50°C viscosity.

A version for 50°E at 50°C high viscosity heavy oil is also available.

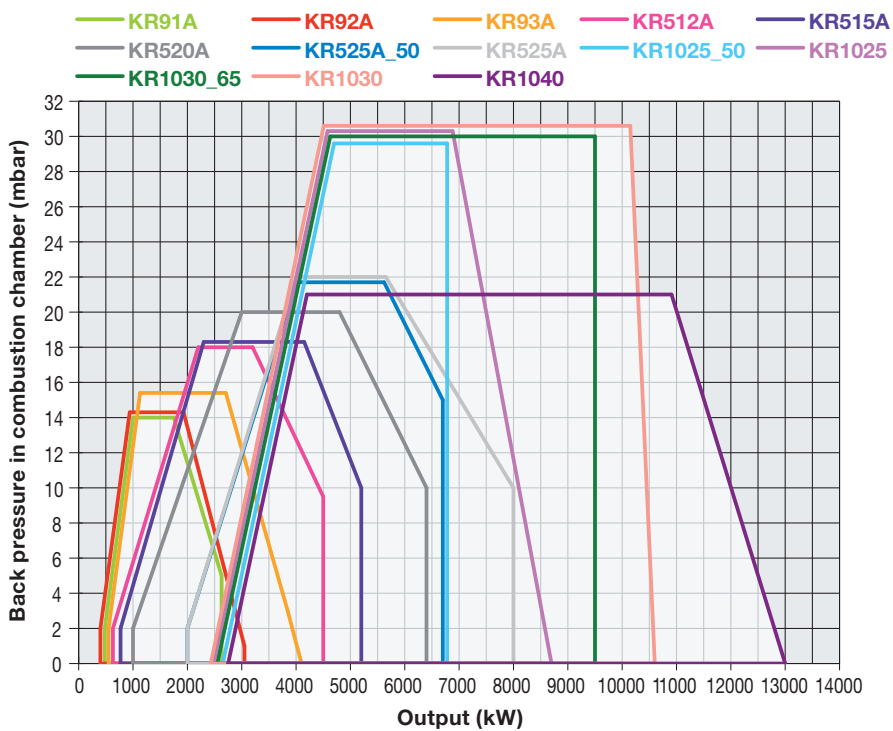
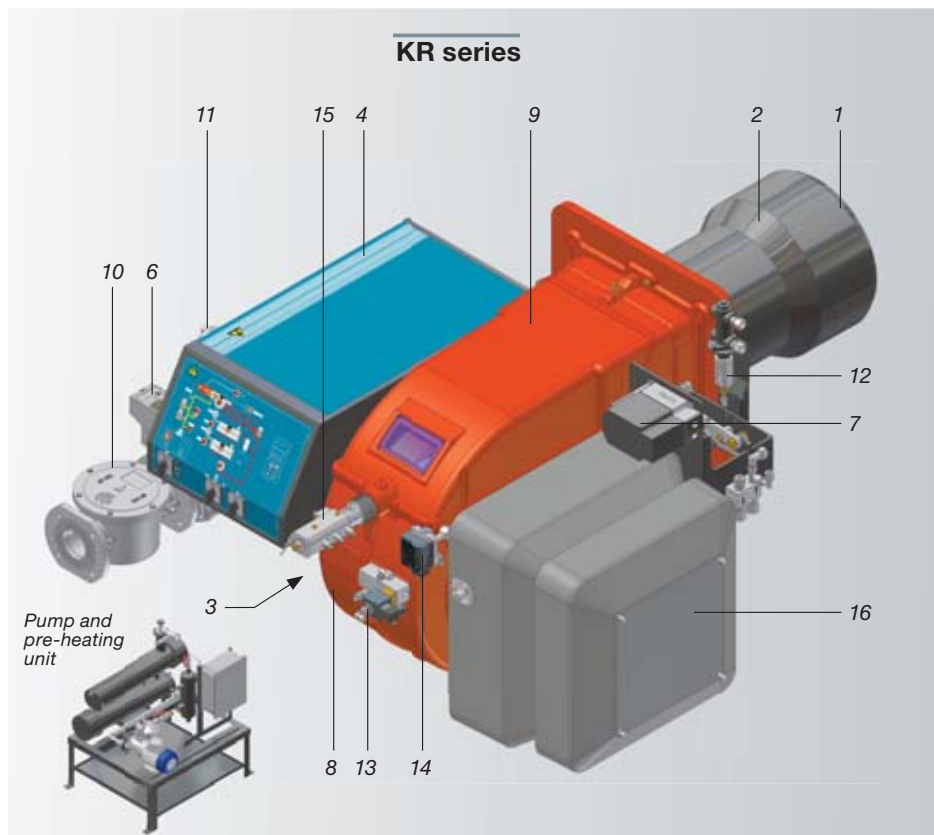
KTP series

Burners with separate fan

These burners were designed to obtain the greatest flexibility for the achievement of the various objectives posed by the client and therefore the widest range of technical specifications.

Optionals available:

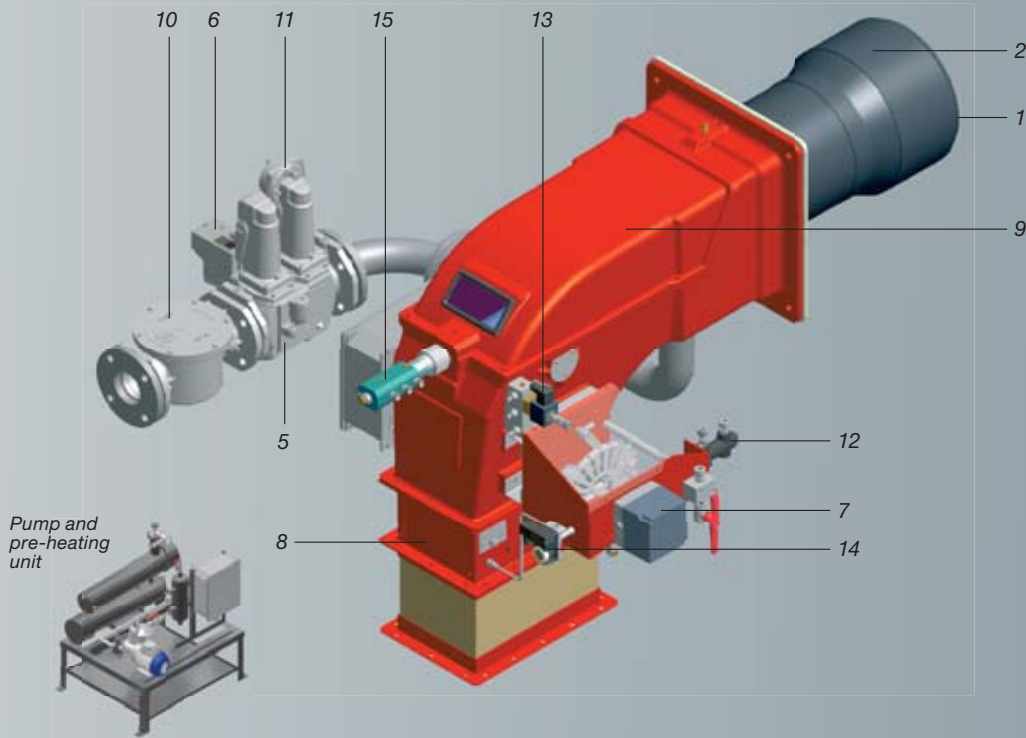
- Centrifugal fan;
- Pump unit for oil;
- Electric, steam, or combined electric/steam heavy oil pre-heating unit;
- Combustion air inlet from either above or below;
- Heated combustion air supply up to 200°C;
- Mechanical or electronic air/fuel ratio adjustment;
- Remote mounting electric control panels (console type, cabinet type, or wall-mounted).



Type	KR91A	KR92A	KR93A	KR512A	KR515A	KR520A	KR525A	KR1025	KR1030 DN65	KR1030	KR1040
Min output kW	480	480	550	600	770	1.000	2.000	2.550	2.550	2.550	2.550
Max output kW	2.670	3.050	4.100	4.500	5.200	6.400	8.000	8.700	9.500	10.600	13.000

dual fuel gas-heavy oil burners

KTP series



legend

- 1 - Combustion head
- 2 - Blast tube
- 3 - Fan motor
- 4 - Electrical control cabinet
- 5 - Gas valves
- 6 - Gas proving unit
- 7 - Servomotor
- 8 - Housing
- 9 - Lid
- 10 - Gas filter
- 11 - Gas pressure governor
- 12 - Gas pressure governor with built-in filter
- 13 - Oil valve
- 14 - Air pressure switch
- 15 - Oil lance nozzle-holder
- 16 - Silencer

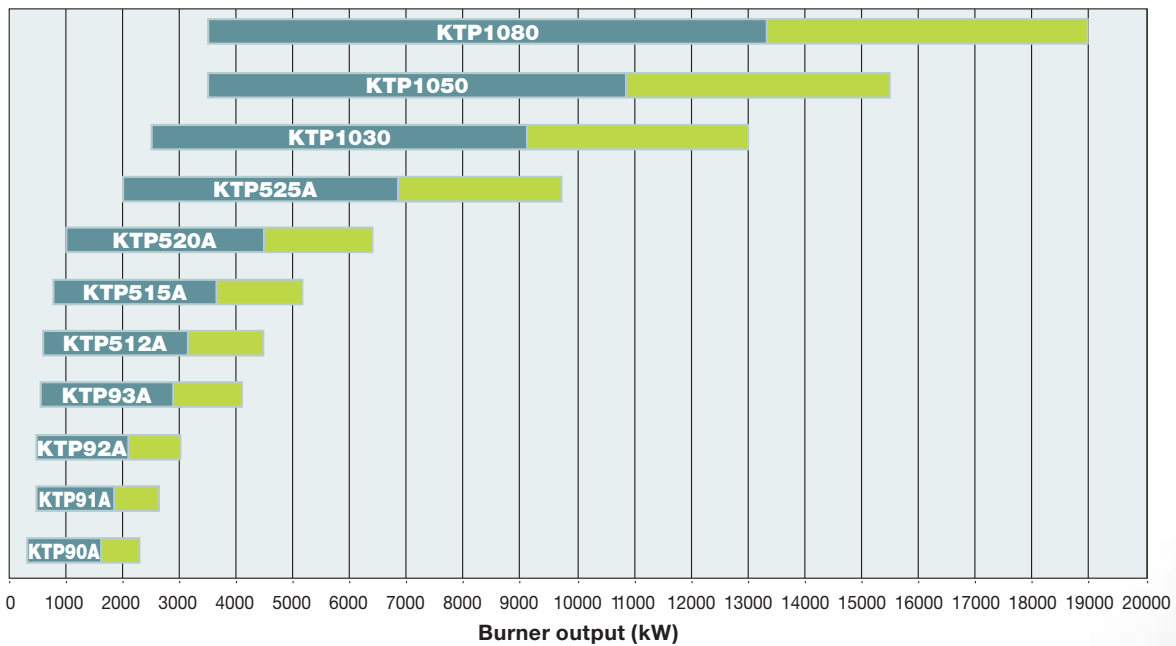
types of adjustment

- Progressive
- Modulating
- Burner control for boiler sequence

fuels

- Natural gas – Combustion oil
- Available on request:
- L.P.G. – Combustion oil
- Waste gas – Combustion oil
- Biogas – Combustion oil
- Town gas – Combustion oil
- G25 – Combustion oil

Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Type	KTP90A	KTP91A	KTP92A	KTP93A	KTP512A	KTP515A	KTP520A	KTP525A	KTP1030	KTP1050	KTP 1080
Min modulation output kW	320	480	480	550	600	770	1.000	2.000	2.500	3.500	3500
Min output for matching range kW	1.610	1.869	2.135	2.870	3.150	3.640	4.480	6.825	9.100	10.850	13300
Max output kW	2.300	2.670	3.050	4.100	4.500	5.200	6.400	9.750	13.000	15.500	19000

R...VS - TP...

R...VS series

Monoblock burners

These burners were conceived and designed to be used on boilers with very short combustion chambers where the boiler walls or tube head are very close to the flame.

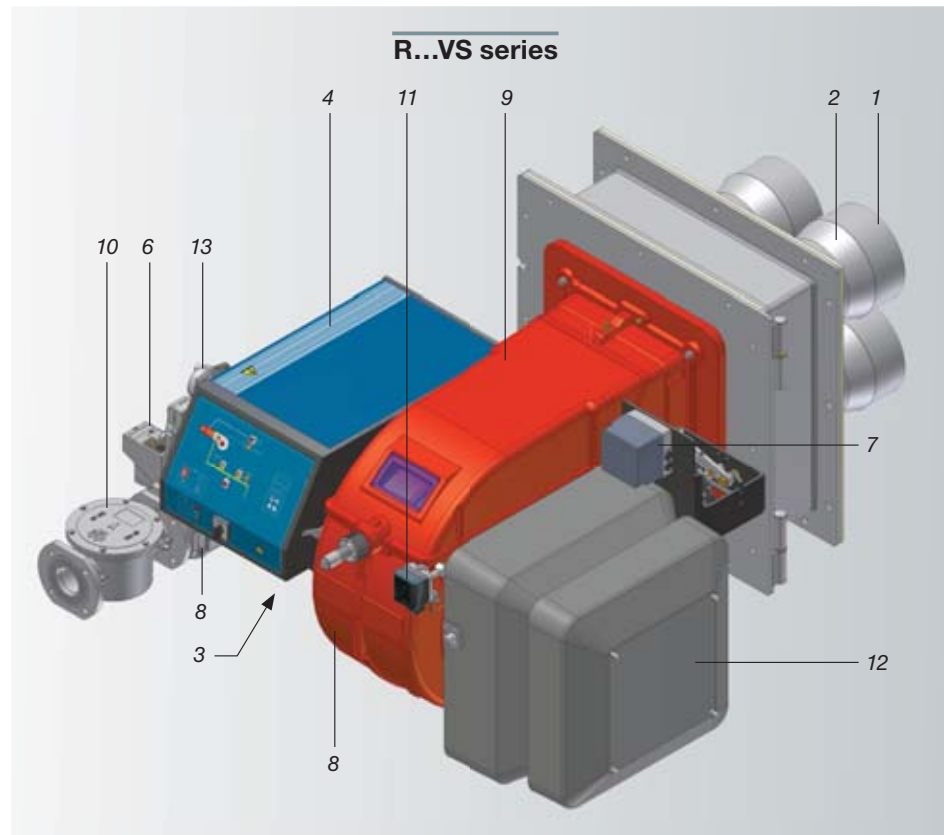
The flame was divided in four combustion heads to significantly reduce flame length.

Burner features remain the same:

- Distributed power;
- Flame modulating (where applicable);
- Modulation ratio;
- Regulation ease;
- Combustion quality.

The power range runs from 2,670 to 13,000 kW.

Regulation can be either mechanically or electronically controlled.



TP...VS series

Burners with separate fan

Like the monobloc series, these burners are also characterised by a very short flame combustion system.

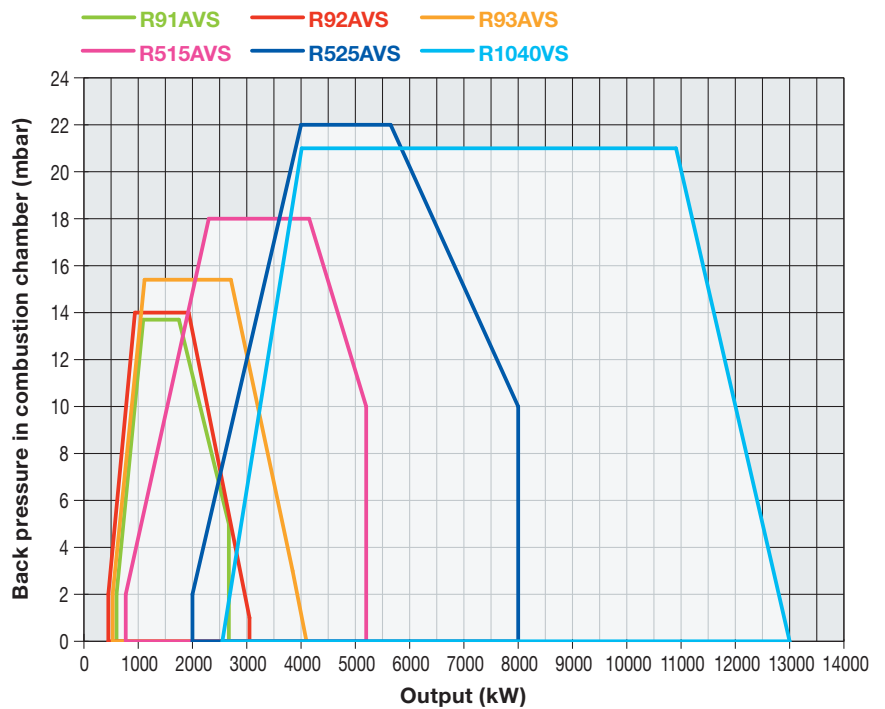
The power range runs to 19,000 kW.

They are especially designed to be used in application where monobloc burner conditions are not met.

Regulation can be either mechanically or electronically controlled.

The supply can be completed with the following optional accessories:

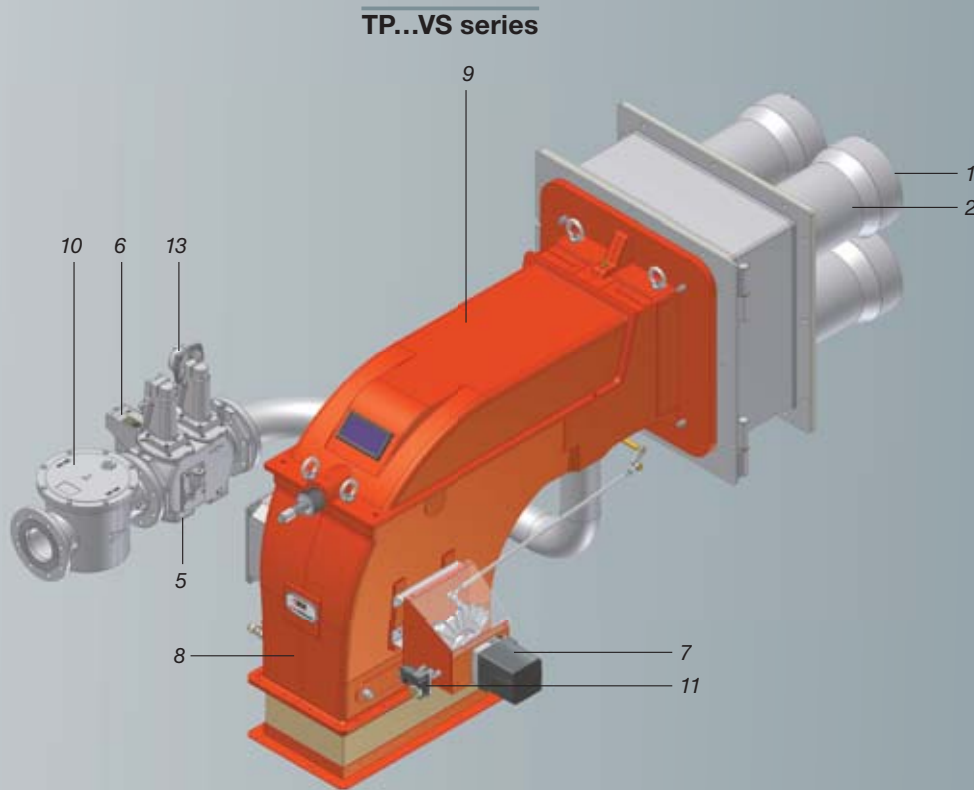
- Centrifugal fan;
- Fuel preparation unit;
- Combustion air inlet from either above or below;
- Heated combustion air supply up to 200°C;
- Oxygen level control with continuous system regulation;
- Separate electric control panels, console type, cabinet type, or wall-mounted.



Type	R91A VS	R92A VS	R93A VS	R515A VS	R525A VS	R1040 VS
Minimum power kW	480	480	550	770	2.000	2.550
Max output kW	2.670	3.050	4.100	5.200	8.000	13.000

VS series

short flame burners



legend

- 1 - Combustion head
- 2 - Blast tube
- 3 - Fan motor
- 4 - Electric panel
- 5 - Gas valves
- 6 - Leakage control
- 7 - Servocontrol
- 8 - Volute
- 9 - Lid
- 10 - Gas filter
- 11 - Air pressure switch
- 12 - Silencer
- 13 - Gas pressure governor

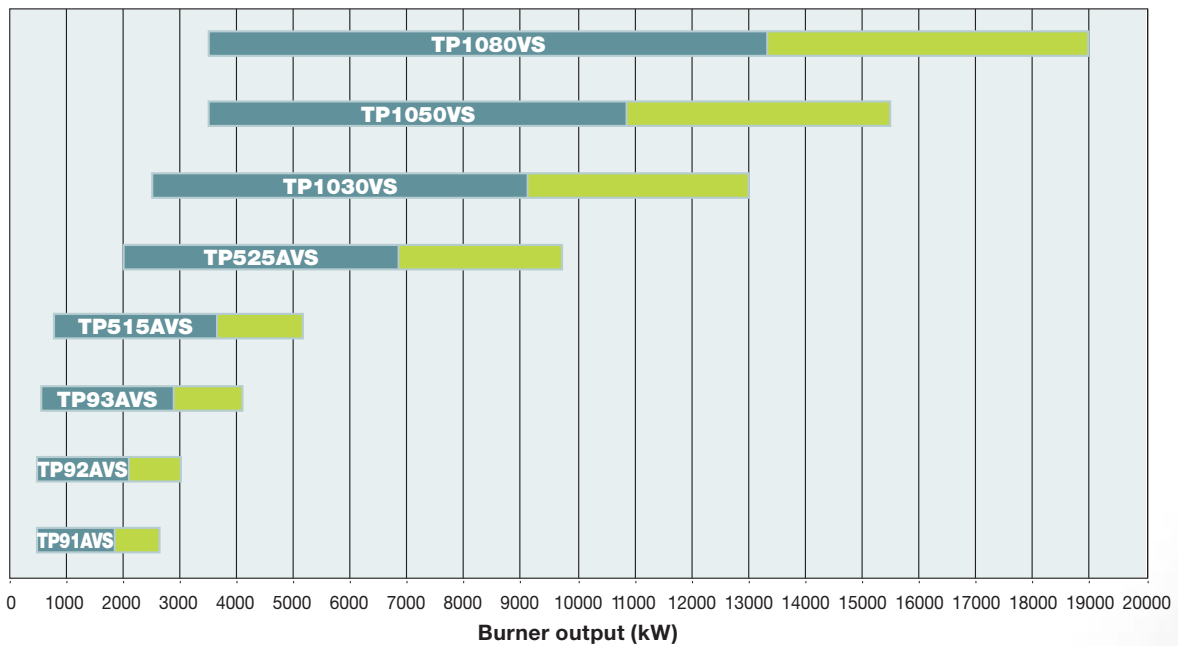
types of adjustment

- Progressive
- Modulating
- Burner control for boiler sequence

fuels

- Natural gas
- Available on request:
 - L.P.G.
 - Waste gas
 - Biogas
 - Town gas
 - G25
 - Diesel fuel
 - Combustion oil
- Mixed
 - Gas - Diesel fuel
 - Gas - Combustion oil

Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Type	TP91A VS	TP92A VS	TP93A VS	TP515A VS	TP525A VS	TP1030 VS	TP1050 VS	TP1080 VS
Min modulation output kW	480	480	550	770	2.000	2.500	3.500	3.500
Min output for matching range kW	1.869	2.135	2.870	3.640	6.825	9.100	10.850	10.850
Max output kW	2.670	3.050	4.100	5.200	9.750	13.000	15.500	19.000

URB series

URB series

Register burners with separate fan

These burners are especially suited to be used on water pipe steam generators and on large-sized combustion chambers.

The register that characterises this burner series consists in the even flame geometry, adapting it to the combustion chamber dimensions.

They are built with a standard electronic control system and, upon request, can also be produced with mechanical control.

The attentive design makes the system flexible and reduces assembly and start-up times to a minimum.

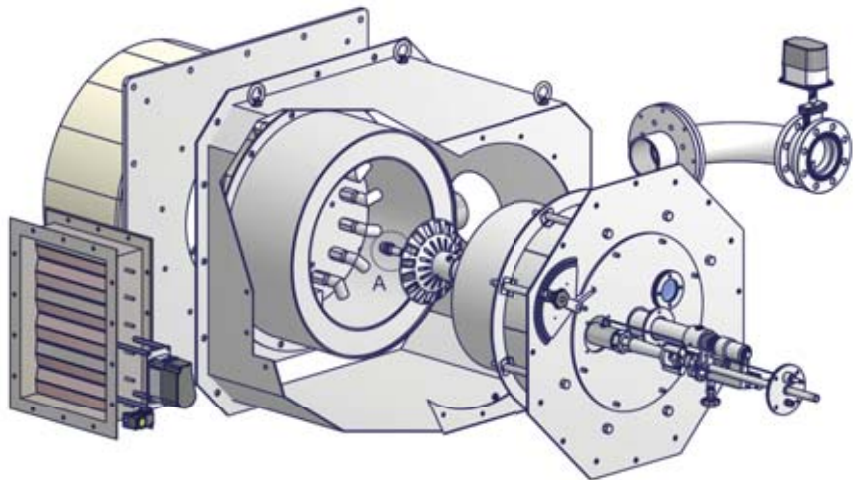
The combustion oil burner series was designed to use compressed air or, alternatively, steam as a fuel atomization fluid to improve combustion efficiency over traditional atomization systems.

These burners are equipped with a low pressure nozzle that limits overall atomization system wear.

The power range runs to 67 MW.

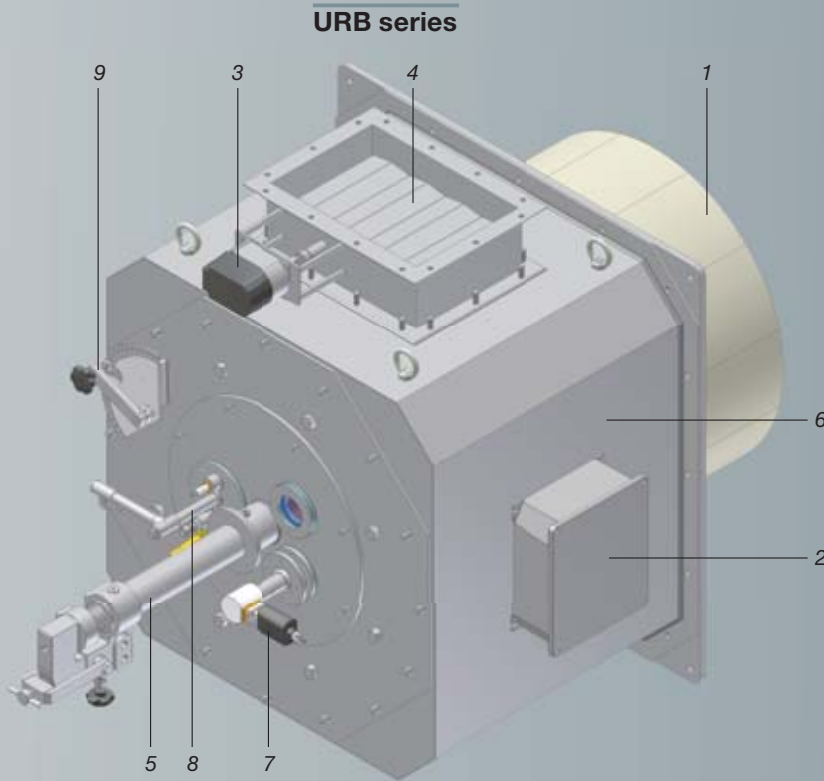
The range can be completed with:

- Centrifugal fan;
- Combustion air inlet on 4 sides;
- Heated combustion air supply up to 200°C;
- Oxygen level control with continuous system regulation;
- Separate electric control panels, console type, cabinet type, or wall-mounted;



Type	URB 5	URB 10	URB 15
Min modulation output kW	1.167	1.700	2.567
Min output for matching range kW	4.900	7.000	10.200
Max output kW	7.000	10.200	15.400

register burners with separate fan



legend

- 1 - Blast tube
- 2 - Shunt box
- 3 - Servocontrol
- 4 - Air damper
- 5 - Oil lance nozzle holder
- 6 - Air tank
- 7 - Photocell
- 8 - Pilot burner
- 9 - Register

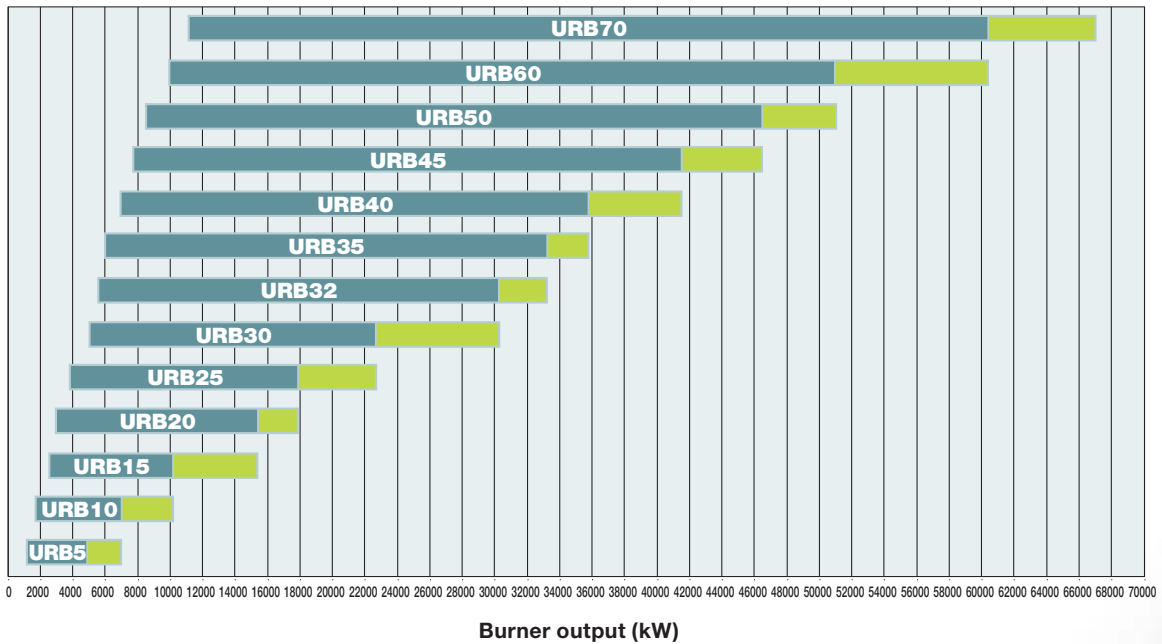
types of adjustment

- Progressive
- Modulating
- Burner control for boiler sequence

fuels

- Natural gas
- Diesel fuel
- Combustion oil
- Mixed gas-diesel fuel
- Mixed gas-combustion oil
- L.P.G.
- Waste gas
- Biogas
- Town gas
- G25

Diagram of burner output according to air temperature at 15°C
(green zone: recommended choice)



Burner output (kW)

URB 20	URB 25	URB 30	URB 32	URB 35	URB 40	URB 45	URB 50	URB 60	URB 70
2.983	3.783	5.050	5.533	5.967	6.917	7.750	8.500	10.067	11.167
15.400	17.900	22.700	30.300	33.200	35.800	41.500	46.500	51.000	60.400
17.900	22.700	30.300	33.200	35.800	41.500	46.500	51.000	60.400	67.000

Complementary systems



low NOx emission

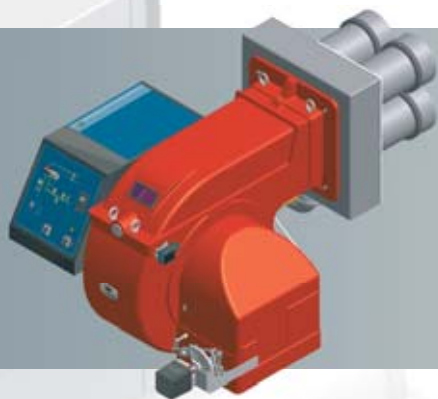
These low emissions burners (low NOx and low CO) comply with the most restrictive standards (< 80 mg/kWh). Can be supplied on request.

The range output goes from 14 kW to 8600 kW. Low emissions mean more respect of the ambient and energy saving.



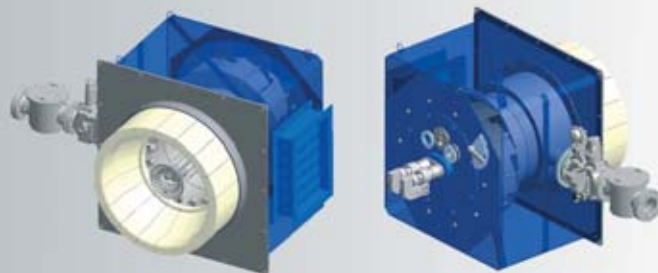
air atomization burners - PBY version

This special combustion oil burner series up to 4000 cSt at 50°C (530°E at 50°C) was designed to use compressed air or, upon request, steam, as the combustion atomization fluid



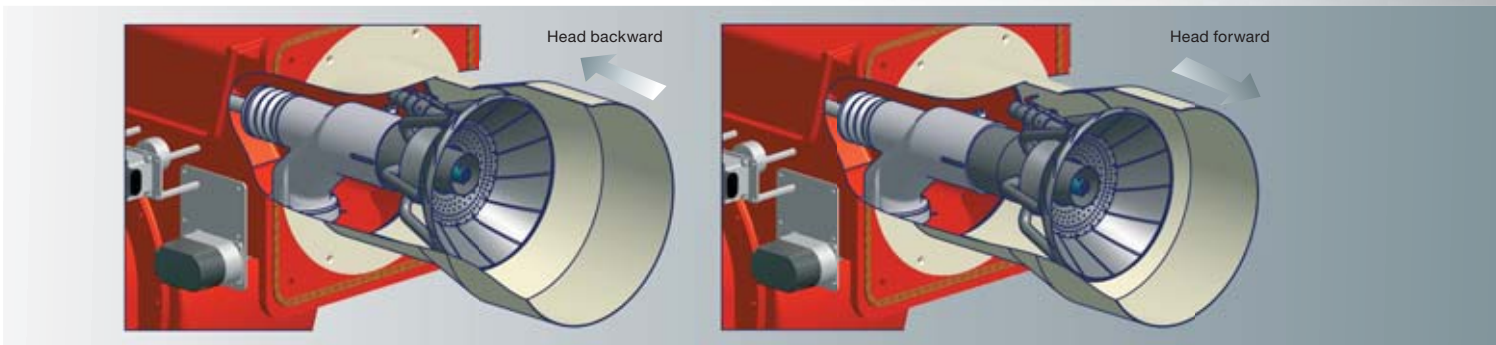
short-flame burners (VS series)

This special solution developed recently permits the achievement of extremely short flames that optimise the application of the burners used in boilers with combustion chambers that have reduced overall length.



URB burners

This type of burner permits the variation of flame shape as required for adaptation to the configuration of the combustion chamber, and are particularly suited for high-power water-tube steam boilers (up to 67 MW).



movable combustion heads

This technical solution permits the achievement of a modulation ratio of 1:10 in appliances where the first stage must be very small.

For example:

steam generators

industrial appliances

low temperature boilers

The ratio we achieve allows us to save a lot of energy by reducing burner on/off cycling to a minimum.



electronic cam

The electronic cam permits the control of the various elements that contribute to the correct mixture of fuel and combustion air through particular system programming. The system can also be expanded for interfacing with probes for oxygen control and/or fan speed control by inverter in order to improve performance and achieve the greatest energy savings both in terms of fuel and the electric power required.



pumping unit

For the preparation of the fuel oil supply to the burner, pumping and heating units with electric, mixed electric/steam, or steam-only preheating can be supplied on request.



electric control panels

Remote console type, cabinet type or wall-mounted electric control panels can be supplied on request.



fans

For the combustion air supply to the burner, separate fans suitably sized to the specific needs of the system can be supplied on request.



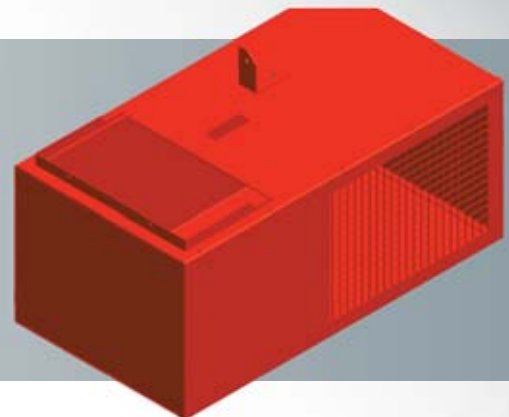
gas trains

The gas trains supplied as standard with the burners can be complete with gas pressure reducing stations if required.



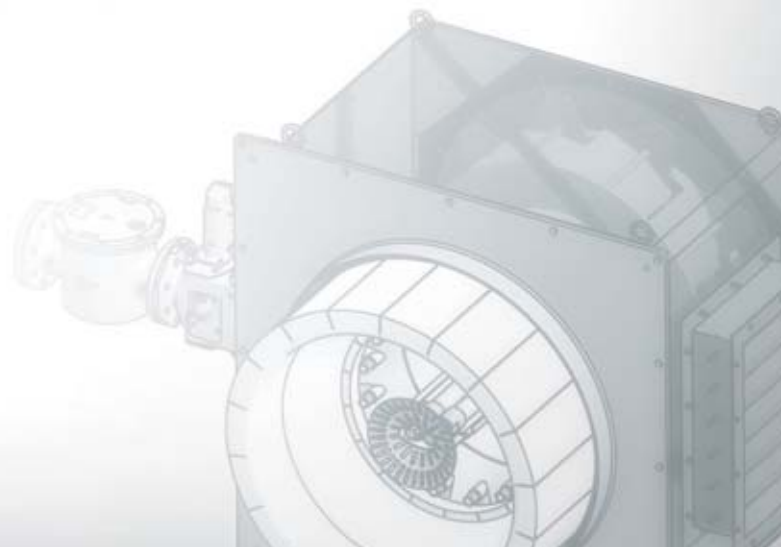
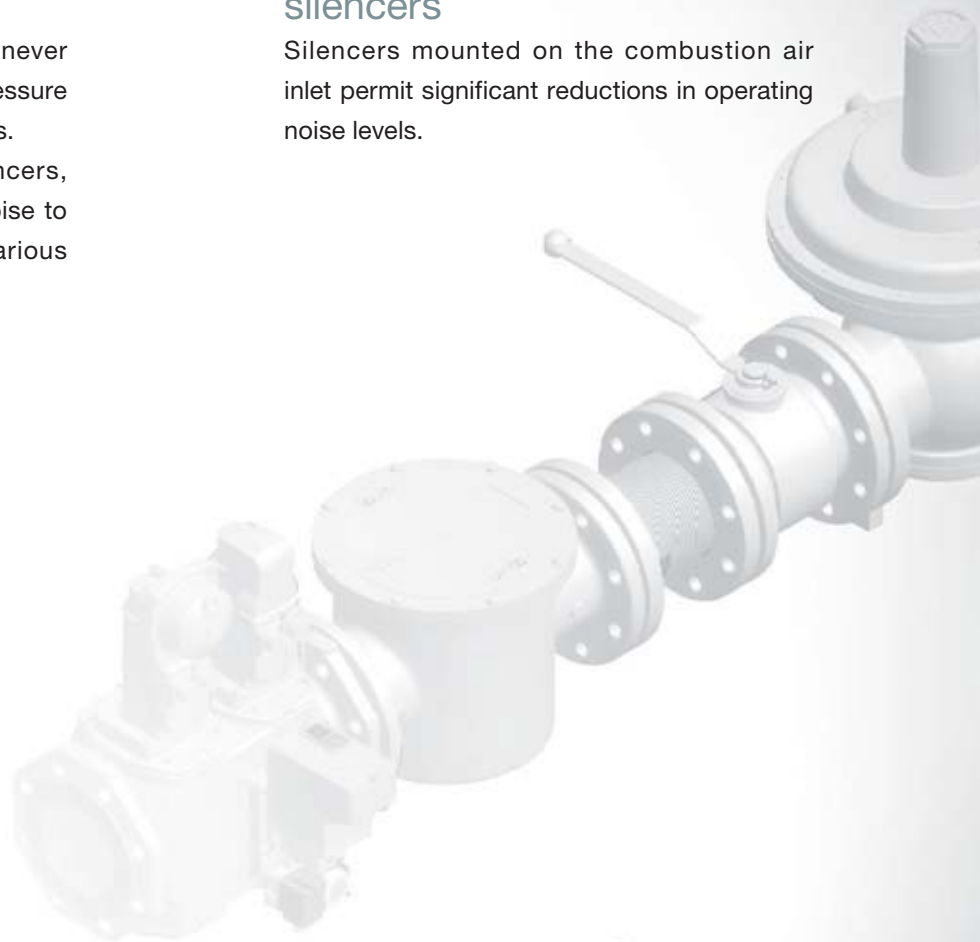
acoustic hoods box

Acoustic hoods can be supplied whenever requested in order to reduce sound pressure levels in medium and high power burners. When used alone or coupled to silencers, these devices can reduce operating noise to well below the levels prescribed in various national standards.

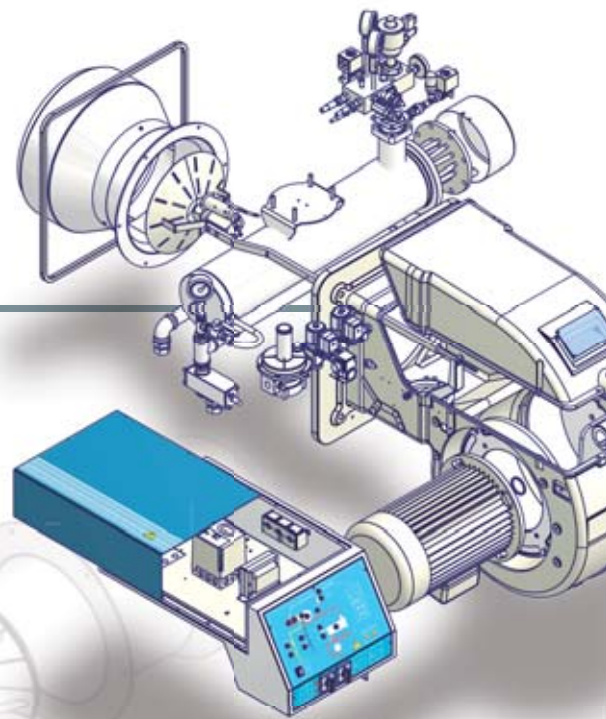
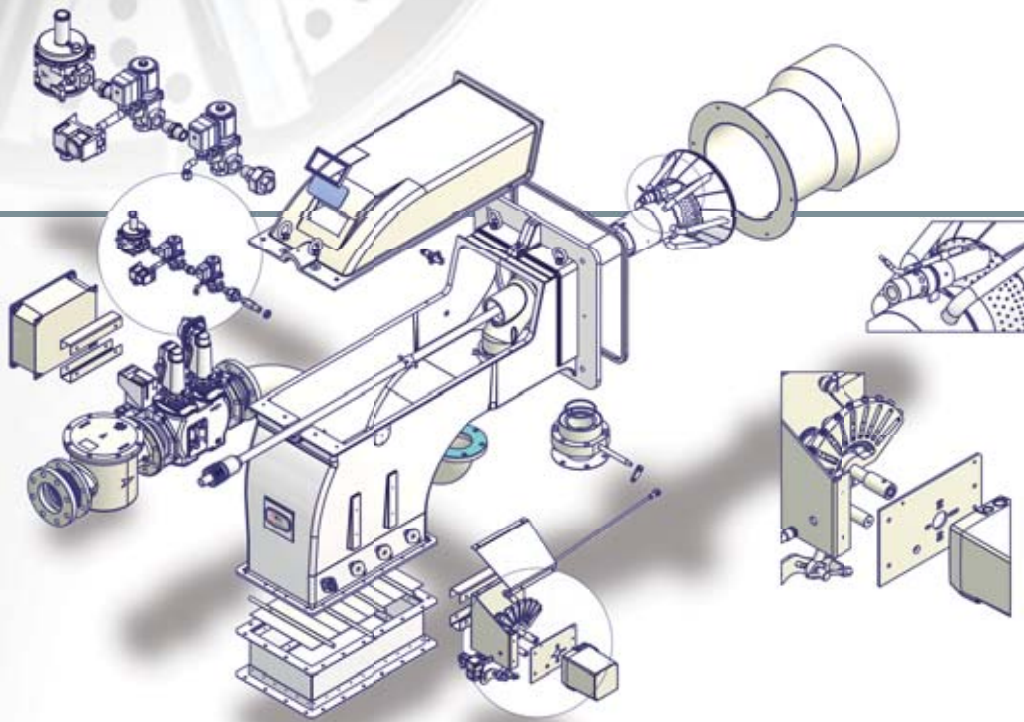


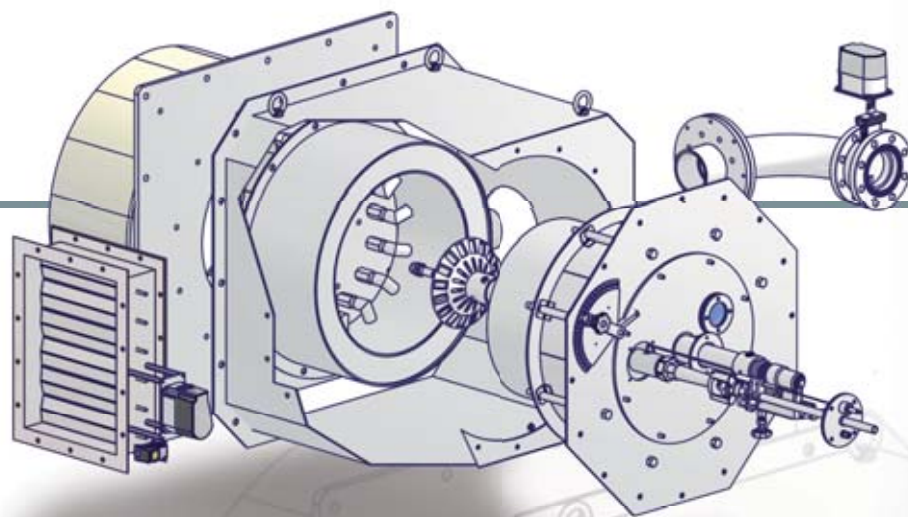
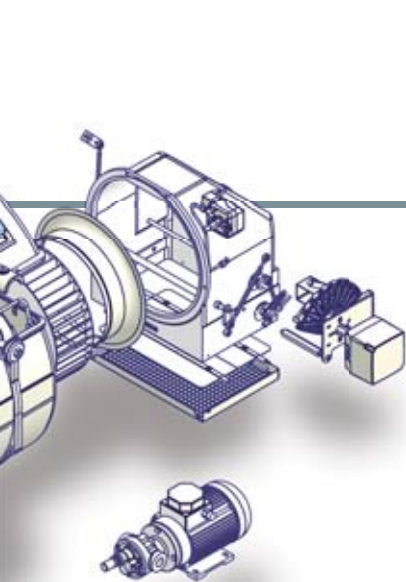
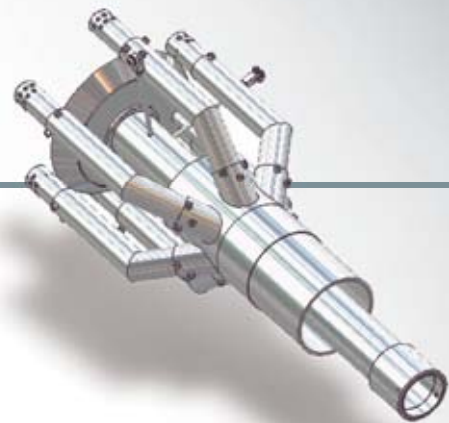
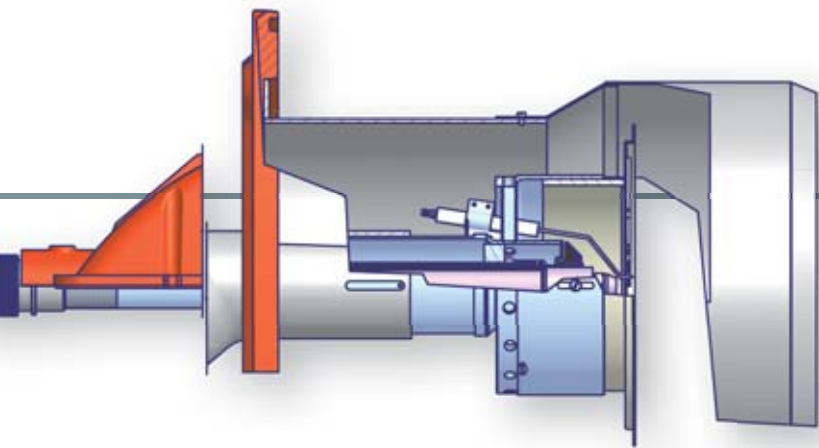
silencers

Silencers mounted on the combustion air inlet permit significant reductions in operating noise levels.



Exploded views







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