

1950

Ballanti and Tura establish Baltur S.r.l. The company produces oil burners for residential use

1960

The Fava family joins the company and builds the new factory

# 75 YEARS OF INNOVATION, THE E

2007

Initiating the conversion of business processes to the logic and techniques of Lean Management and Industry 4.0

2015

R&D is equipped with an ISO 1800 (25 MW) tube, the largest in the world

2004 The new TB burner range built on an automated line is born



2012 8000 kW burner development



1990 Baltur launches the first split-head burners



1995 Low NOx burner production



1994 Baltur is among the first Italian companies to obtain ISO 9001 certification



2000 Baltur inaugurates its office in Shanghai

**75**° 2023

2025 New burners with integrated motor inverter, class IE5

## **NERGY TO ALWAYS LOOK AHEAD**

burners



2019 Inauguration of the new R&D laboratory and automated production line for industral burners



2023 New biogas/syngas multi-fuel burners



2024 New burners operating with a mixture of methane and hydrogen

2021 New Super Low NOx

# ITALY IS OUR HEART, THE WORLD IS OUR HOME

66

Since 1950, Baltur has been a reference point in climate technologies. 75 years during which we have developed increasingly efficient and environmentally friendly products.

77

Dr. Riccardo Fava

CEO and General Manager







# Baltur network: a family that speaks all the languages of the world

Baltur flexible and competitive company that's capable of managing its international relationships in an entirely informal manner.

### **OUR NETWORK:**

Production site 100% MADE IN ITALY

Branch SHANGHAI



**60** countries around the world have chosen Baltur technologies

# INNOVATE FOR A RESPONSIBLE ENERGY MANAGEMENT

Every year we invest new resources in our Research and Development laboratories in order to innovate, reduce environmental impact and make the entire product range more efficient and effective.

# **50 MW TEST POWER**

14 test stations for burners

(CEN ISO test tubes and boilers)

1 test stations for burner fans
Up to 30.000 m3/h

3 test stations for free standing boilers

Up to 2 mw

1 test stations for free standing boilers

Up to 10 mw

Huge investments for medium/high power burners Constant development of alternative fuel burners





### NEW R&D LABORATORY, TECHNOLOGY AND DESIGN MADE IN ITALY

New combustion technologies, new materials, remote monitoring and transmission of operational parameters, applied to the development of ultra-low emission burners for the most energy-intensive industrial sectors. Every year we invest new resources in the research and development laboratory to conduct continuous tests and experiments on burners up to 50 MW of power.

Baltur has been able to bring Italian taste into its solutions, offering reliable and high-performance products and made in Italy with the best technologies and the utmost attention to detail, compact and elegant in design.

This combination of innovation and "Made in Italy" design has allowed the company to establish itself as a leader in its sector, exceeding customer expectations with ever-improving products.

# IN A CHANGING WORLD, WE ANTICIPATE THE FUTURE

Baltur's quality progresses day by day through continuous investment. Application engineering and pre-sales offices support customers with tailor-made burners and specific applications, both for large industrial plants and small thermal energy generation systems.

2 MIn €

Investment in new automated production line

**50** MW

test power

7,4 Mln €

Investment in new R&D laboratory

30.500<sub>sqm</sub>

area





### MAXIMUM CUSTOMARE FOCUS

Baltur has always placed customer service at the heart of its business philosophy, offering comprehensive support both during the pre-sales and the after-sales stages. Our team is always ready to provide tailored solutions, technical assistance, and training providing high-quality service sets us apart and strengthens our relationships with our customers.

Baltur's offer is tangible proof of its commitment to environmental sustainability. This comes from the company's working method aligned with the principles of Lean Management and Industry 4.0. They use advanced methodologies that reduce waste and improve the performance of company processes and services. The aim is to manage energy rationally and efficiently, respecting people and the environment.

# IB SERIE INDUSTRIAL DUAL-BLOCK

BURNERS WITH SEPARATED FAN



standard, FGR, SLX, high temperature operation for industrial application

The IB burner serie has been designed to meet the most demanding request of industrial applications.

The maximum flexibility of configuration thanks to

the modular design concept enables the IB burner to be the best solution for a variety of industrial applications. The IB burner is composed by different functional blocks:

- Combustion head
- Ventilating unit

IB serie:

- Control panel
- Gas valve train (for gas applications)
- Pumping skid (for liquid fuel applications)
- High modulation ratio up to 1:10.
- Available with different fuel type: gas, light oil, LPG, biogas and dual fuel.
- Super Low NOx and FGR version.

- Available with O2 and CO control system: for optimal combustion.
- Combustion air temperature: standard construction up to 50°C.
- Special construction for air temperature operation at 250°C.
- Flexible **air inlet** position: from above, below, right or left.
- Easy maintenance:

maintenance operations are quick and easy. The large lid opening grants total accessibility to the mixing head and internal components.

THE IB SERIE INCLUDES 8 MODELS FULLY CUSTOMIZABLE, FROM 200 KW TO 24000 KW



0	2000	4000	0009	8000	10000	12000	14000	16000	18000	20000	22000	24000



# TBR SERIE

INDUSTRIAL DUAL-BLOCK

**BURNERS**WITH ADJUSTABLE
FLAME GEOMETRY



### **TBR serie:**

standard, FGR, pre-heater air versions, tailor-made burners

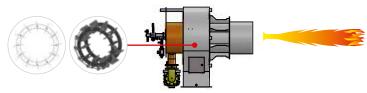
The new TBR serie features an innovative design and a very functional.

Burner's body made with special steel and painted to ensure greater protection and preservation over the years.

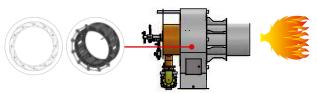
- Adjustable flame shape (diameter-length) to adapt it to the furnace geometry.
- Modulation ratio up to 1:8.
- Available with different fuel type: gas, light and heavy oil, LPG, biogas, dual fuel (gas-light oil, gas-heavy oil).
- ME version.
- Easy combustion head extraction system.
- Flame sensor for continuous operation.
- Version for pre-heated combustion air up to 250° C.

These burners are equipped with electronic control that allows a precise regulation of the air-fuel mix, reducing energy consumption.

Burners are designed to be installed on the heat generator in several directions, up and down.

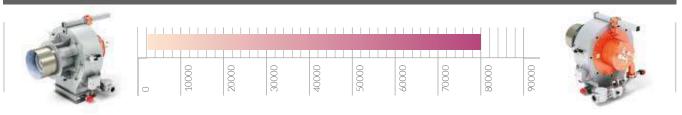


90° angle Radially positioned dampers, minimum air turbulence. Long, narrow flame.



20 angle High dampers inclination, strong air turbulence. Short, wide flame.

### TBR RANGE FROM 500 KW TO 80000 KW





Thanks to the design of the combustion head, Baltur burners are able to process biogas and syngas with power calorific value as low as 3.4 kWh/Nm³, while ensuring stable performance.

Baltur burners can ensure low NOx emissions for both natural gas and biogas/syngas as follows:

kWh/Nm³, while ensuring stable performance	ce. FUEL	EMISSION LEVEL
_	Natural gas & Biogas	NOx < 100 mg/kWh*
	Syngas	NOx < 200 mg/kWh*
	* Misured on three-pass stee	ım generator
1 I I I I I I I I I I I I I I I I I I I	Baltur solutions can also be integrate technologies to achieve additional g emissions reduction or energy savin	goals in the areas of safety,
• 1	Pilot flame integration (always prese	nt for Syngas applications).
bollur	ntegration of the <b>FGR system</b> to fu	rther reduce NOx emissions.
•1	ntegration of <b>O2/CO control</b> to pro	ovide further fuel economy.
	ntegration of <b>VFD control</b> to ensure	e further energy savings.



The new concept of combustion head is designed to ensure the maximum stability and performance with ease of operation.

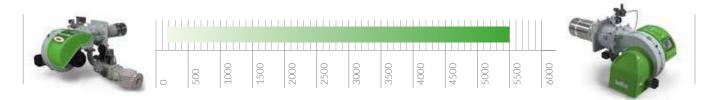
### FEATURES

- New head design with double distribution system.
- Independent gas regulation over two channels.
- **Hinged-opening** for a facilitated maintenance.
- Programmable electronic cam.
- Available in combination with inverter and O2/CO sensor.
- Suitable for 72 h continuous operation.
- LPG operation.

### BENEFITS

- Granted **NOx emission** < 30/50 mg/kWh.
- Lower electrical consumption.
- Higher combustion efficiency and fuel saving.
- Allows you to adapt the thermal power plants without replacing the boiler

### THE TBG SLX RANGE INCLUDES 5 MODELS FROM 165 KW TO 5500 KW

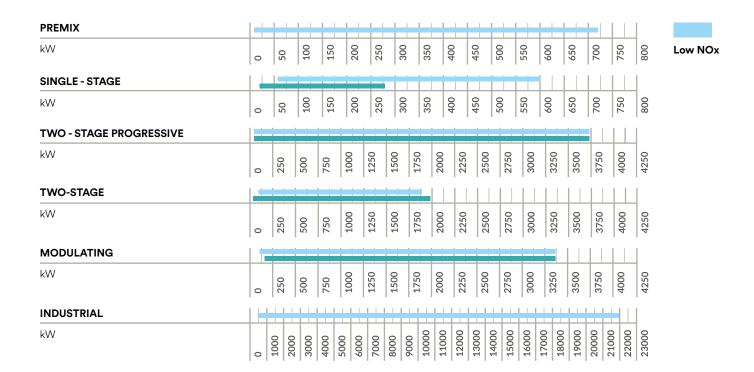


# BTG - TBG - BPM SERIE GAS BURNERS Wide range for every needs

- From 22 kW up to 22000 KW available in different varant.
- Possibility to add the inverter frequency converter as available with O2 and CO control system, for optimal combustion.
- Long head kit, to adapt burner for specific installation.
- Low NOx.
- Available with electronic or mechanical cam.

### CONFORM TO:

GAR DIRECTIVE 2016/426/CE | E.M.C. DIRECTIVE 2014/30/UE | L.V. DIRECTIVE 2014/35/UE | MACHINERY DIRECTIVE 2006/42/CE | REFERENCE STANDARD EN676.



# TBML - TBMN SERIE

DUAL FUEL BURNERS



Gas/Light Oil Gas/Heavy Oil



- Two configurations: two-stage both gas and oil, or modulationg with electronic cam on gas side and two stage on the oil side.
- Two combinations: gas and light oil or heavy oil.
- Manual switch from first to second fuel.
- Modulating ratio up to 1:10.

### **CONFORM TO:**

E.M.C. DIRECTIVE 2014/30/UE | L.V. DIRECTIVE 2014/35/UE | MACHINERY DIRECTIVE 2006/42/CE | REFERENCE STANDARD EN676.



# BT - BTL - TBL SERIE LIGHT OIL





- From 16 kW up to 12000 KW.
- Long combustion head available on request.
- Version with preheater for light oil.
- Fully closing air damper or shutdown to avoid loss of heat through the chimeney.
- Low NOx version from 150 kW to 750 kW (cass 3).
- Available with hydraulic jack, electronic or echanical cam.

### CONFORM TO:

E.M.C DIRECTIVE 2014/30/UE | L.V. DIRECTIVE 2014/35/EU | MACHINERY DIRECTIVE 2006/42/CE | COMMISSION REGULATION ERP 2013/811/UE | REFERENCE STANDARD EN267.

SINGLE-STAGE kW	0	25	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	Low NOx
TWO-STAGE kW	0	250	200	750	1000	1250	1500	1/50	2000	2500	2750	3000	3250	3500	3750	4000	4250	
kW	0	50	100	150	200	250	300	350	400	450	200	550	009	920	700	750	800	
TWO-STAGE PROGRESSIVE	0	250	200	750	1000	1250	1500	1750	2000	2250	2500	2750	3000	3250	3500	3750	4000	
TWO - STAGE PROGRESSIVE	1000	2000	3000	4000	2000	0009	7000	8000	0006	10000	11000	12000	13000	14000	15000	16000	17000	

# TBN SERIE

**HEAVY OIL** 

**BURNERS** 



- Heavy oil burners available in 5 models from 1000 kW to 10000 kW.
- Two stage pregressive or modulating version.
- Electronic motor for pump drive.
- Easy maintenance thanks to the two-slide hinge.
- Fully closing air damper on shut down to avoid loss af heat through the chimney.
- Suitable for fuel oil with a maximum viscosity of 50°E at 50°C.

### CONFORM TO:

E.M.C. DIRECTIVE 2014/30/UE | L.V. DIRECTIVE 2014/35/ UE | MACHINERY DIRECTIVE 2006/42/CE | REFERENCE STANDARD EN267

TWO - STAGE PROGRESSIVE																	
kW	1000	2000	3000	4000	2000	0009	7000	8000	0006	10000	11000	12000	13000	14000	15000	16000	17000



