



SAMiA
COMBUSTION

A COMPANY OF

ceba S.r.l.

OIL & GAS

www.cebasrl.com

BURNERS

In 2012 CEBA acquired 100% of **SAMIA COMBUSTION**, a company with more than 60 years of experience, becoming its single shareholder. The main type of burners designed and manufactured:

- Fuel Gas
- Fuel Oil
- Combined
- Air staged
- Fuel staged



- **Low NOx burners**
- **Conventional burners**

- **Radiant wall burners**

Suitable for:

- Hot Oil Heaters
- Crude Heaters
- Vacuum Heaters
- Coker Heaters
- Reformer Heaters
- Visbreaker Heaters
- Reboiler Heaters

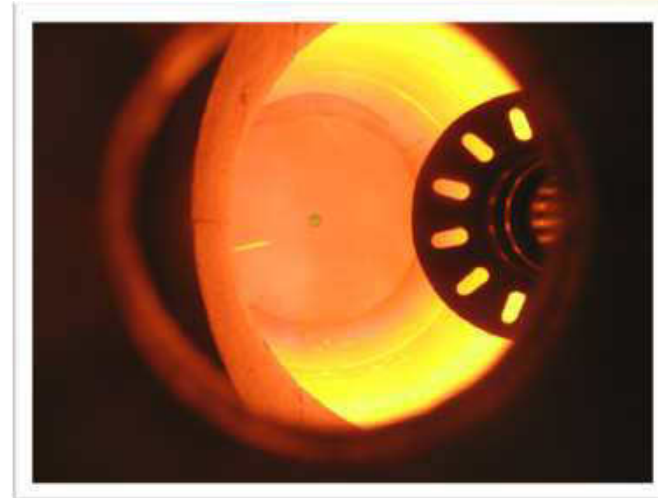


PROCESS BURNERS

FUEL GAS BURNERS – SRX MODEL

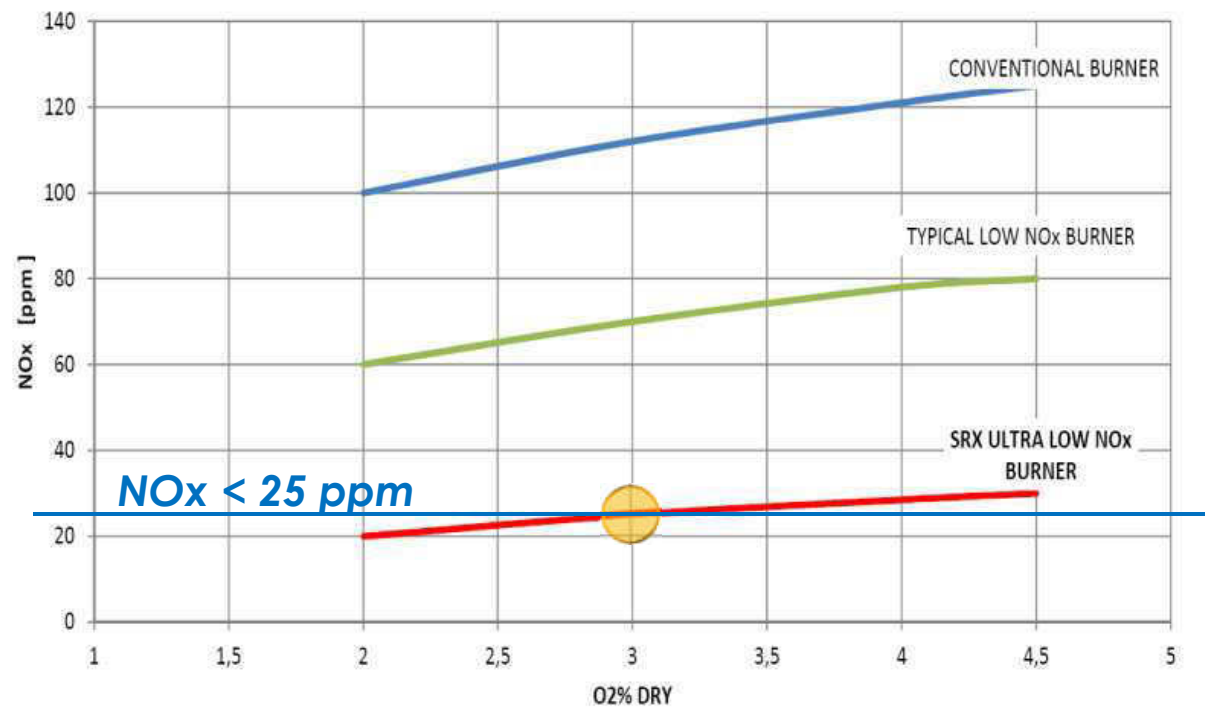
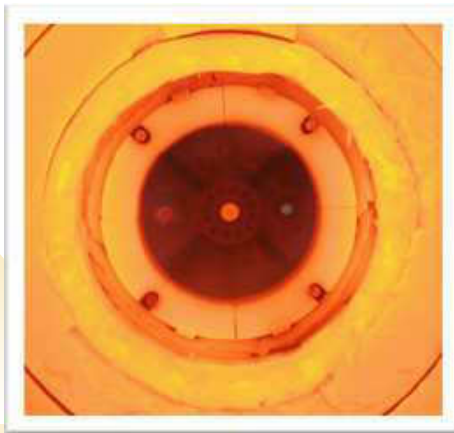
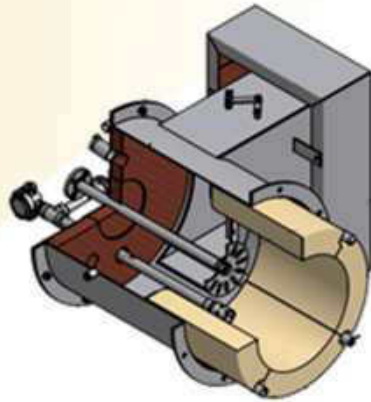
LOW NOX MECHANISM	FUEL STAGED
DRAFT	FORCED & NATURAL DRAFT
FUEL TYPE	GAS (SINGLE OR DUAL FIRING)
MAXIMUM POWER RANGE	0.1 ÷ 20 MW
NOISE	80 dB(A)
BURNER TURNDOWN	up to 10 ÷ 1
GAS PRESSURE	1 ÷ 2 barg
AIR TEMPERATURE	0 ÷ 300 ° C
TYPICAL EXCESS AIR	15 %

EMISSIONS (100% CH ₄ operation)	
NOx	< 25 ppm
CO	< 5 ppm



PROCESS BURNERS

FUEL GAS BURNERS – SRX MODEL

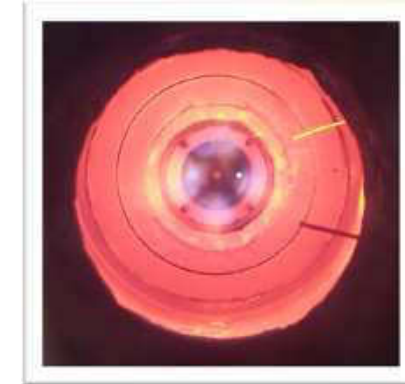


PROCESS BURNERS

FUEL OIL / COMBINED BURNERS – SRG MODEL

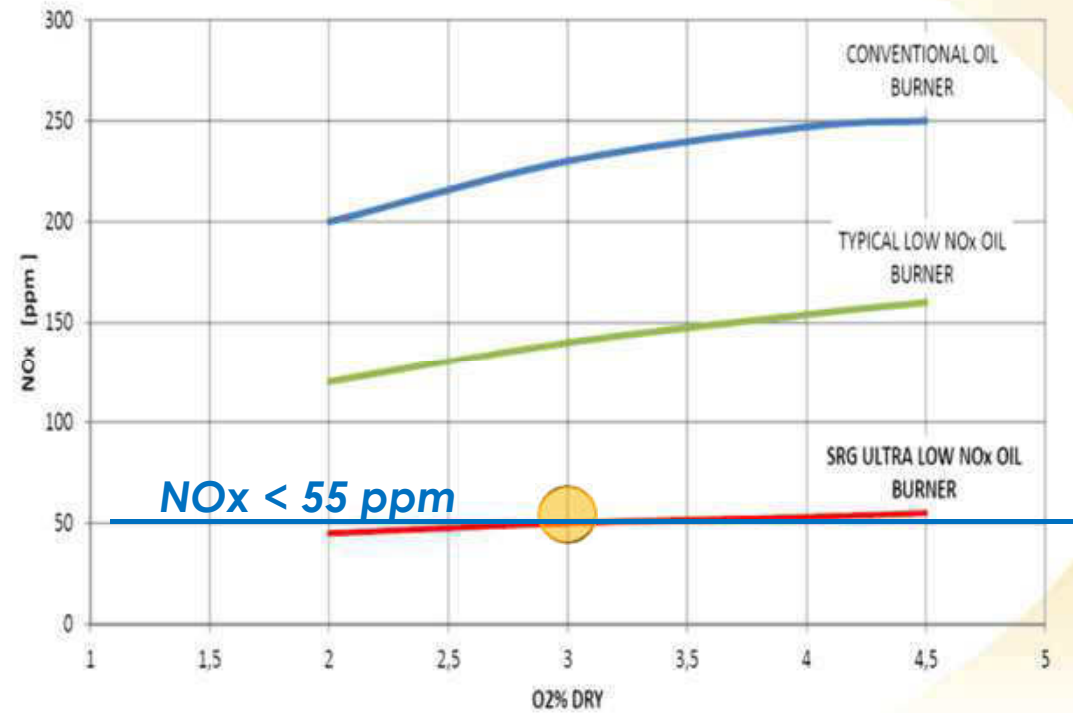
LOW NOX MECHANISM	AIR STAGED
DRAFT	FORCED & NATURAL DRAFT
FUEL TYPE	GAS AND OIL COMBINED
MAXIMUM POWER RANGE	0.1 ÷ 16 MW
NOISE	80 dB(A)
BURNER TURNDOWN	up to 6 ÷ 1
FUEL GAS PRESSURE	1 ÷ 2 barg
FUEL OPERATIVE PRESSURE	5 barg
ATOMIZATION SYSTEM	vapour injection
VAPOUR PRESSURE	6,5 barg
AIR TEMPERATURE	0 ÷ 300 ° C
TYPICAL EXCESS AIR	15 ÷ 30 %

EMISSIONS (0,03% N2 content)	
NOx	< 50 ppm
CO	< 20 ppm



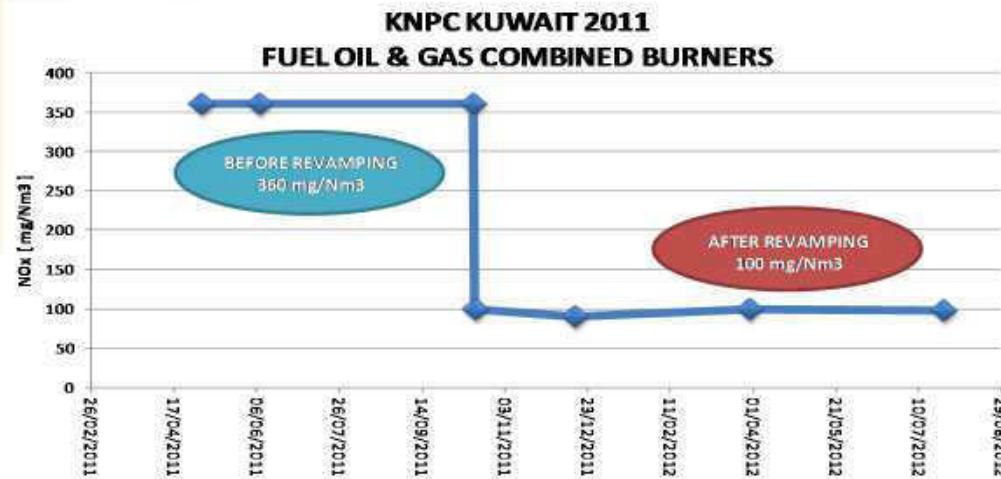
PROCESS BURNERS

FUEL OIL / COMBINED BURNERS – SRG MODEL



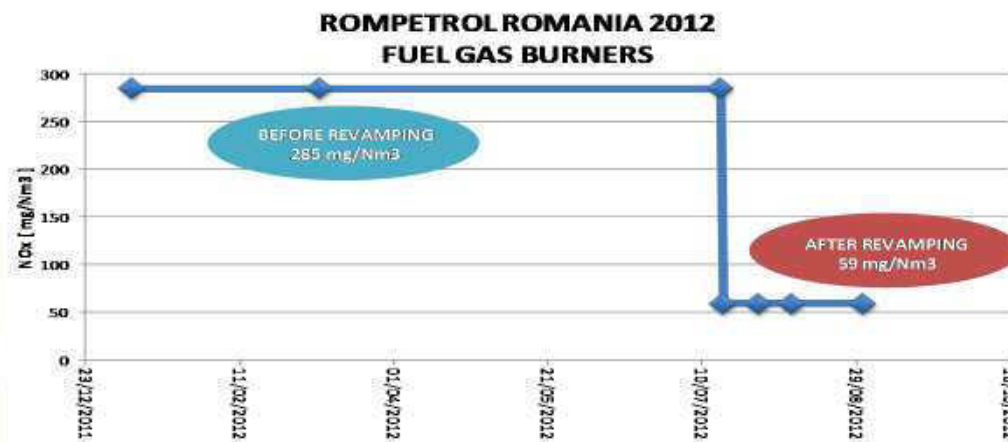
PROCESS BURNERS

LOW NOX BURNER - REVAMPING



ACHIEVABLE EMISSIONS

NOx < 30 ppm
CO < 5 ppm



NO MODIFICATIONS TO

Heater's floor
Piping
Operative specs

RADIANT BURNERS

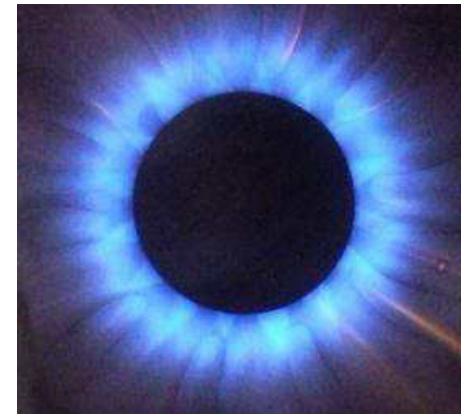
LOW NO_x RADIANT WALL BURNER

FUEL TYPE	NG/ OFFGAS / FLASHGAS
HEAT RELEASE	0.1 ÷ 1 MW
AIR TEMPERATURE	0 ÷ 500 ° C

- Higher heat release
- Low NO_x < 50ppm
- Improved flash back / lift off prevention

GUARANTEED POLLUTANT EMISSIONS

NO_x < 50 ppm
CO < 5 ppm



BURNERS TEST HAVE BEEN SUCCESSFULLY COMPLETED AND CEBA CAN BE CONSIDERED AS HALDOR TOPSOE VENDOR ON CASE BY CASE BASIS.

PROCESS BURNERS

CEBA'S BURNERS MAIN FEATURES

- **ULTRA LOW POLLUTANT EMISSIONS**

- Staged Air and Staged Fuel
- NOx < 25 ppm
- CO < 1 ppm

- **HIGH QUALITY STANDARDS**

- ISO 9001:2008
- API standards
- ASME standards
- UOP standards

- **SIMPLE AND EFFECTIVE DESIGN**

- 10 % Excess Air
- SPL < 80 dB(A)
- Castable parts
- Lightweight muffle blocks
- Sightglasses 170 visibility span

- **EASY MAINTENANCE**

- Less spare and consumable part compared to our competitors

PROCESS BURNERS

CEBA'S BURNERS MAIN FEATURES

- **HEAVY DUTY - TAILOR MADE**
 - Burners customized as per client's needs
- **MULTIPLE FUEL FIRING**
 - High flexibility to any type of fuel gas and fuel oil
- **FULLY TESTED & CERTIFIED**
 - Each burner is tested in our facility simulating in-site's conditions
 - Material certificates and traceability
- **ULTRA RESISTANT HANDLES**
 - Heavy duty construction
 - Suitable for sour environments and acid attack
 - High temperature friendly
- **CUSTOMER CARE**
 - Rapid response for assistance and spares
- **20-YEAR OPERATION BURNER**
 - Each burner is designed to operate at least 20 years

COMBUSTION PLANTS

CEBA can supply complete combustion plants according to Customer's specifications and main international standards, i.e.:

- Combustion air/fuel gas valve train complying with main international standards (EN, NFPA,...)
- Burner management system (BMS) and process control panel with programmable logic control (PLC)
- Burners ignition and control systems
- High energy ignition systems
- Shoulder-portable high energy ignition systems
- Carts for portable high energy ignition systems
- Ultra-Violet and Infra-Red flame scanners

