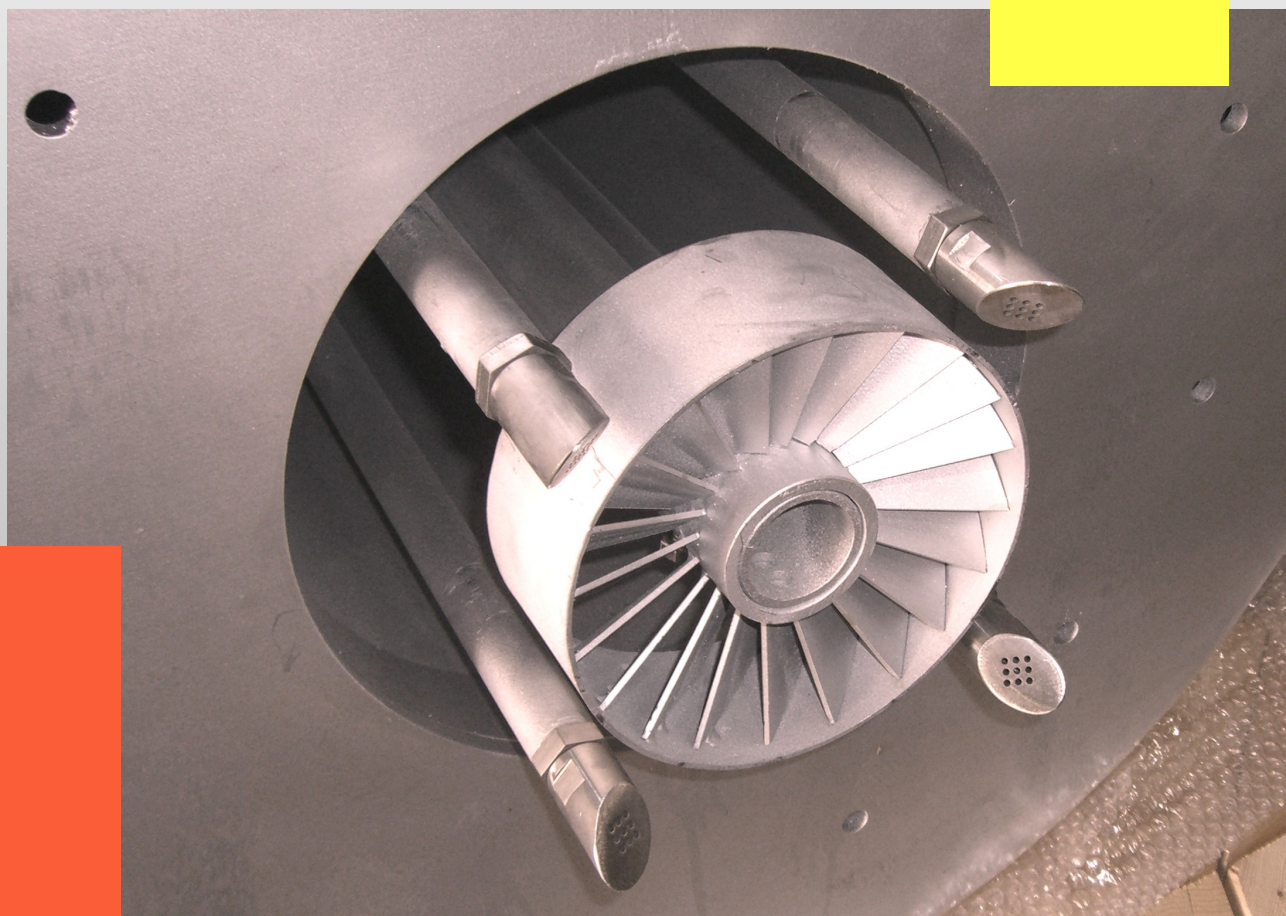


VRGO Burners



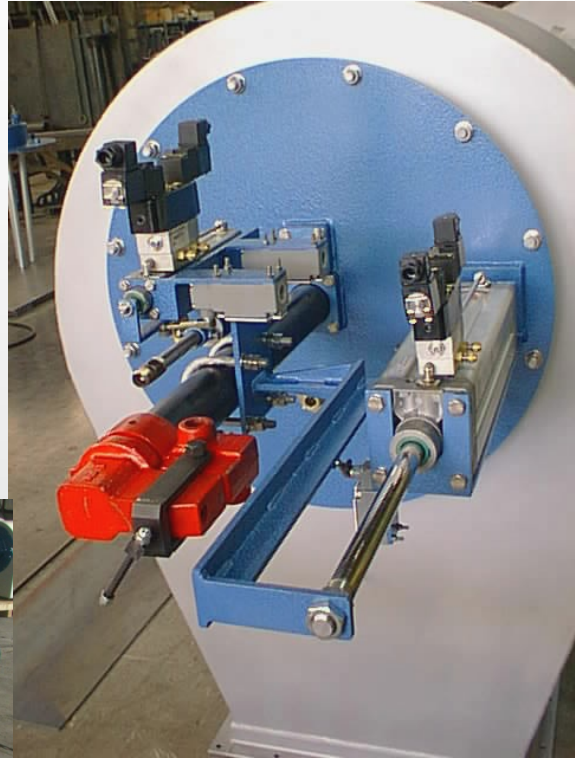
B.C.E. S.r.l. – cap. soc. Euro 10.400,00 i.v. – Via S. Margherita 450 – 21042 Caronno Pertusella (Va) – Italy
tel. +39 02 965 77 88 r. a. fax +39 02 965 73 03 – CF 08776140157 – part. IVA 01711260123

www.bceitalia.com
info@bceitalia.com

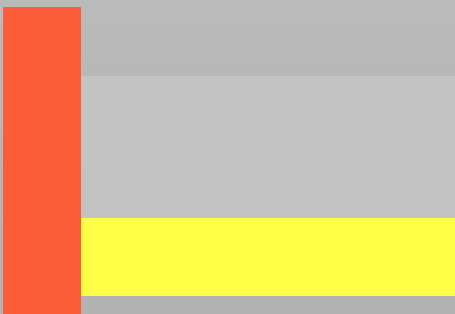


B.C.E. burners type “VRGO” are typically equipped with a series of gas lance and one central gas lance. If designed to burn heavy fuel oil or diesel oil, the central gas lance is replaced with fuel oil/diesel atomizer.

The “VRGO” burners are designed to reach high efficiency combustion level and can be supplied as part of new combustion systems as well as revamping of existing plants.



The typical supply is completed with combustion air wind box and combustion air isolating and balancing damper. In “VRGO” burner the air vorticity is guaranteed by a swirler made from stainless steel installed near the burner throat on an apposite tube. The simple and compact design enable the use of these burners in a wide range of application and in particular they are largely use in small systems as heaters or preheaters or where is necessary a series of burners like in furnaces.





MAIN CHARACTERISTICS

- Highly customisable: each burner is designed to meet Client's specific requirements
- Reliable and efficient as demonstrated by a large number of installations worldwide
- One central swirler to control combustion air distribution and vorticity
- Fuel gas distributed through a plenum with adjustable nozzles and a central gas lance
- Capable of burning one or more fuels at the same time
- Can be operated either with ambient temperature or pre – heated combustion air
- high flame stability over a wide turndown range

BURNER DATA

- Firing rate up to 25 MW
- Flame dimensions^(*) adjustable
- Materials carbon steel
stainless steel
- Combustion air up to 400 °C
- Turndown 5:1
- Pressure drop 50 - 100 mm H₂O

() Flame dimensions vary with firing rate*

TYPICAL GUARANTEED EMISSIONS^(*)

Natural gas firing

- NO_x 200 mg/Nm³
- CO 50 mg/Nm³

Heavy fuel oil firing (N content 0,2 % by weight)

- NO_x 450 mg/Nm³
- CO 100 mg/Nm³
- Particulate 50 mg/Nm³

() ref. to 3% O₂ dry flues, combustion air @ ambient temperature*

TYPICAL BCE SUPPLY

- Burner complete with fuel equipment
- Refractory throat
- Air wind box complete with multi louver combustion air damper for air isolating and balancing
- Central gas lance/Liquid fuel atomizer
- Fuel gas distributor and stainless steel nozzles
- Pilot igniter
- Flame detection system
- Burner management system (BMS)
- Fuel gas/oil/atomizing steam or air valve and instrumentation trains



SOME REFERENCE

ANSALDO CALDAIE - Modugno (Italy)

RAFO - ONESTY REFINERY (Romania)

ITP - QASR GAS DEV. (Egypt)

CCT - APPIA ENERGY - Massafra (Italy)

TECNIMONT - PARAFFINE SARDE SARROCH (Italy)

VERGA ENG. - MONTEDIPE - Porto Marghera (Italy)

1 Biomass furnace, 2 burners 20 MW each

3 Furnaces, 14 burners each furnace, 3,7 MW each

1 Bath heater, 6 burners 2,7 MW each

1 Biomass furnace, 2 burners 11,3 MW each

1 Diathermic oil heater, 1 burner 2,4 MW

1 Diathermic oil heater, 3 burners 2,8 MW each



For any further information please contact:

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