



ceba S.p.A.

# IRON & STEEL

[www.cebasrl.com](http://www.cebasrl.com)

# CEBA CLEAN

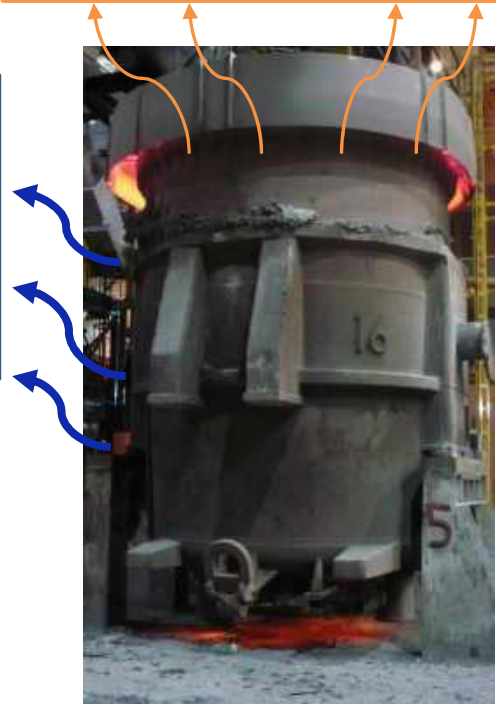
During the drying of the new ladle refractory, organic pollutants coming from humidity and chemical binders are released into the atmosphere.

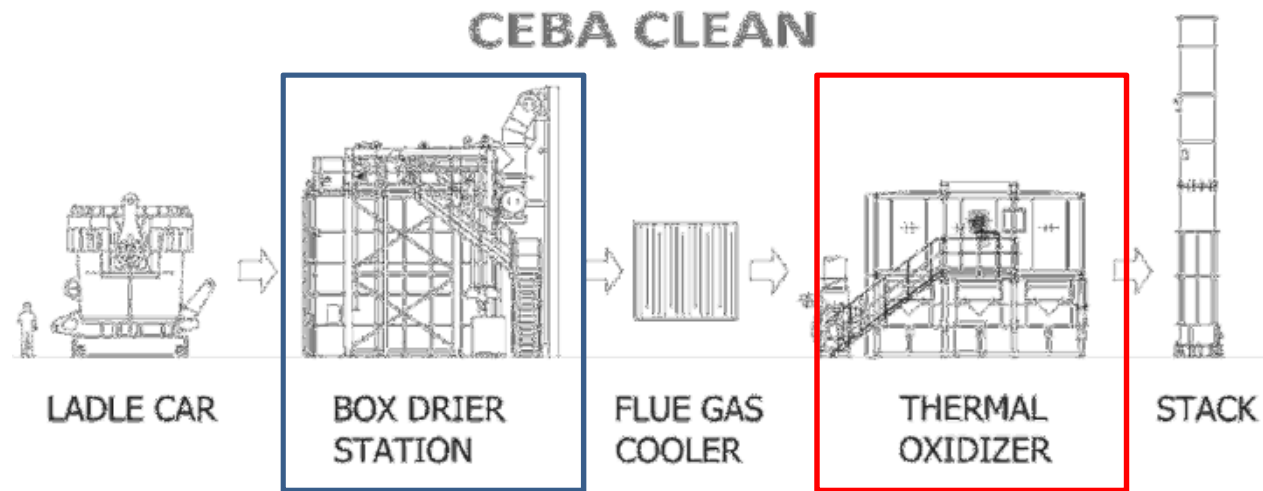
These pollutants must be collected and thermally destroyed.

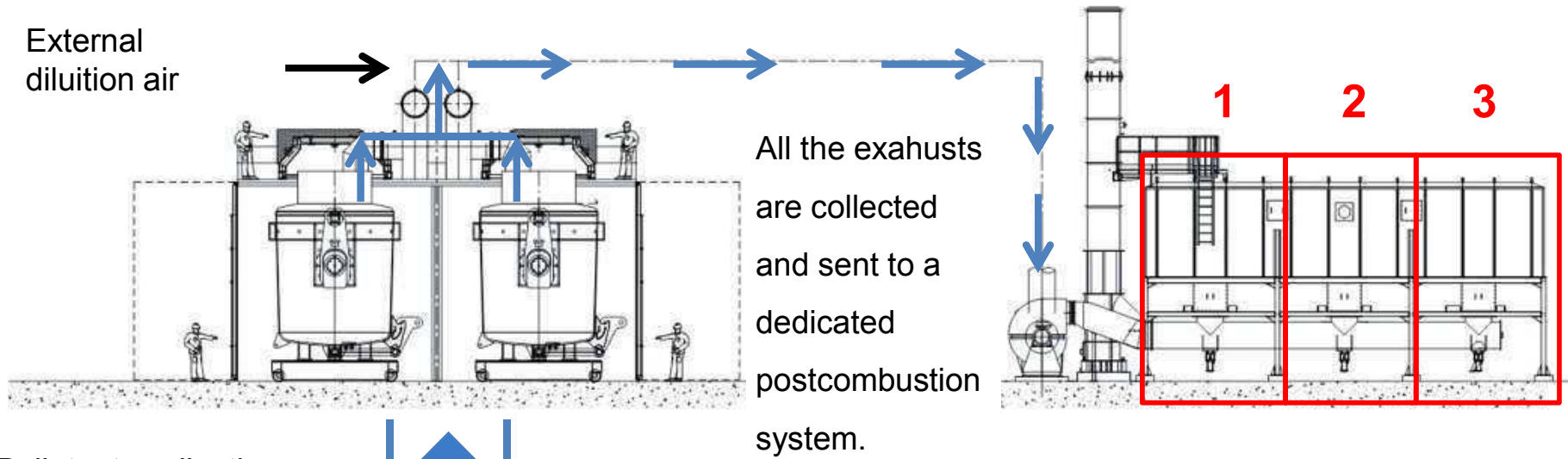
Part of organic pollutants comes out from the holes which are present on the ladle shell.

Part of organic pollutants comes out from internal surface and are partially burned from flame.

CEBA produces modular solutions for the drying of the new refractory and the treatment of the exhaust:  
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Pollutants collection



The ladle is closed into a completely sealed box by a dedicated ladle car.



Three regenerative towers with ceramic beds

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The use of ceramic beds reduces the fuel gas consumption and guarantees at the same time a very high thermal efficiency.



Three towers thermal oxidizer: high efficiency ceramic beds are used for increasing the temperature of the stream at the inlet of combustion chamber and for decreasing the temperature of the gases at the outlet reducing the request of auxiliary fuel gas.



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## MAIN BENEFITS - 1

- Complete oxidation of the organic pollutants
- Avoid of any odours in the surrounding environment
- Control of composition of treated gas at the outlet
- Comply with most restrictive environmental regulations
- High reduction of auxiliary fuel consumption compared to a recuperative oxidizer (**up to 75% less**)



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## MAIN BENEFITS - 2

- Complete turn key system (full integrated solution for drying station and postcombustion)
- Short pay back time
- Low NOx system
- Simple operation and maintenance.



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**GUARANTEE EMISSION AT THE STACK UP TO  
(CERTIFIED BY A NOTIFIED BODY)**

- Temperature of exhaust at the chimney:  $< 400^{\circ} \text{C}$
- NOx:  $250 \text{ mg/Nm}^3$
- CO:  $100 \text{ mg/Nm}^3$
- COV:  $20 \text{ mg/Nm}^3$
- Dust:  $10 \text{ mg/Nm}^3$
- PAH:  $0.05 \text{ mg/Nm}^3$

**Emissions in the area around the machine comply  
with the most restrictive laws requirements.**

