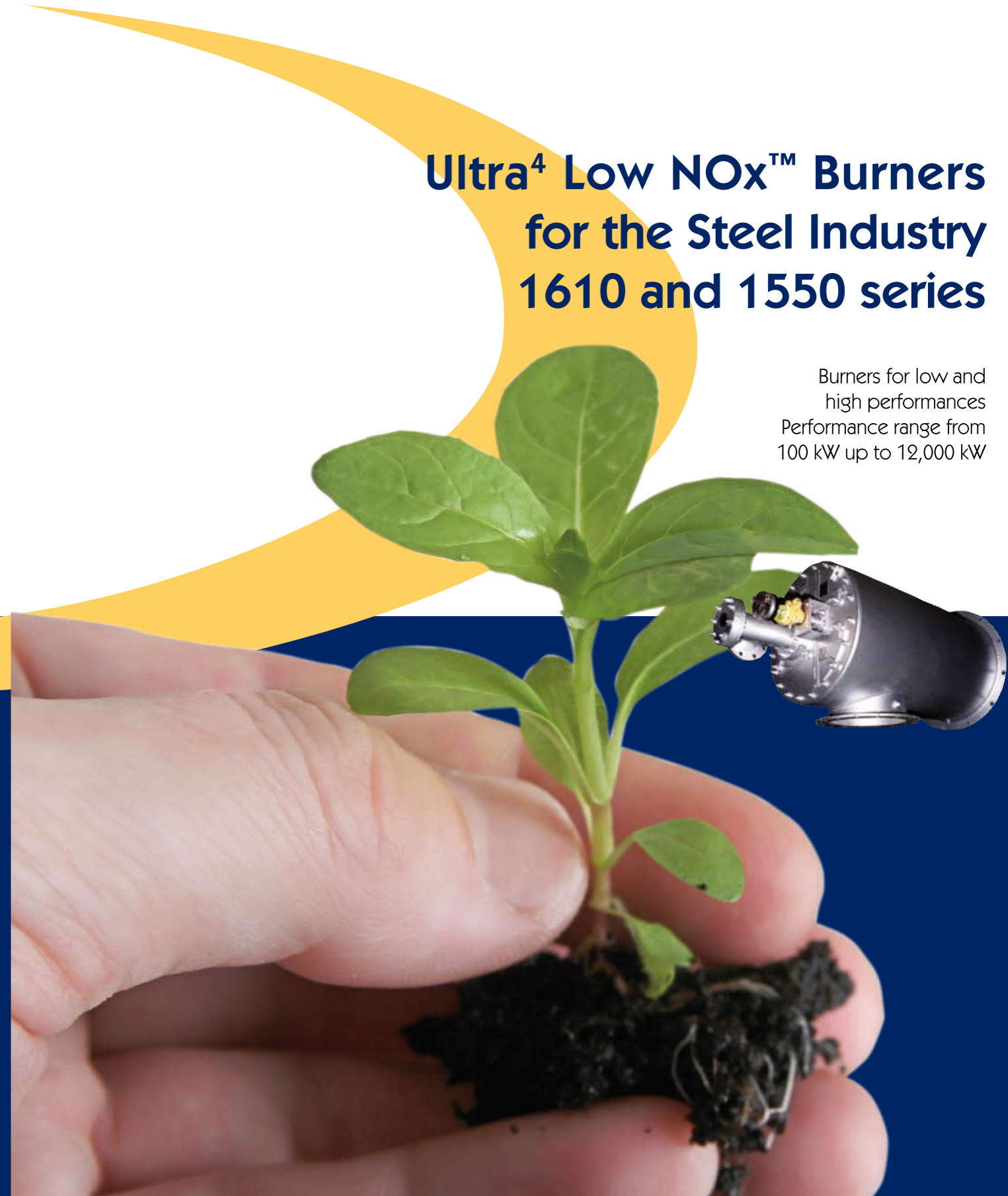


Ultra⁴ Low NOx™ Burners for the Steel Industry 1610 and 1550 series

Burners for low and
high performances
Performance range from
100 kW up to 12,000 kW



DEUTSCHLAND

BLOOM ENGINEERING
(EUROPA) GMBH

Büttgenbachstraße 14
D-40549 Düsseldorf

Telefon: +49-211-50091-0
Telefax: +49-211-50091-14

info@bloomeng.de
www.bloomeng.de

USA

BLOOM ENGINEERING CO.,
INC.

5460 Horning Road
Pittsburgh, PA 15236

Telefon: +1-412-6533500
Telefax: +1-412-6532253

info@bloomeng.com
www.bloomeng.com

CHINA

BLOOM COMBUSTION PRODUCTS CO. LTD.

No.128 Min Xue Road
Cao Lu Industrial Complex
Pudong New Area
Shanghai, 201209
VR China

Telefon: +86-21-68723278
Telefax: +86-21-68723279

info@bloomcomb.com
www.bloomcomb.com

For a Clean Future.

**BLOOM ENGINEERING
(EUROPA) GMBH**

Services

- Basic and detail engineering for burners and peripheral devices
- Supply of burners and peripheral devices
- Upgrading of existing burners and plant components
- Supply of ignition devices
- Modification and repair of existing burner systems
- Spare parts supply
- Service and commissioning



Burner 1610 series within a burner bridge



Burner 1610 series in hot mode with „flameless combustion“



Low performance burner 1550 series



Rebuild of a zone of „normal burners“ to an Ultra Low NOx burner 1610 series

**Ultra⁴ Low NOx™ Burners
for the Steel Industry
1610 and 1550 series**

Product properties

- Lowest NOx emissions due to air staging
- Suitable for cold and hot air up to about 500 °C
- Big control range with directional stability flame
- Patented Low NOx air baffle protecting all metallic burner parts from furnace reflections
- Rugged and low-maintenance construction
- „Flameless combustion“
- Available as cold or warm starting construction
- Converting into the Ultra Low NOx mode at 850 °C

Mode of operation

At burner start-up within the lower temperature range (< 850 °C) the central air/gas nozzle supplies the burner with 20 % of the needed combustion air. This guarantees a secure start performance.

As soon as the burner accelerates into the warm mode the central air/gas nozzle feeds the burner just with 5 % of the combustion air. This leads to the „flameless combustion“ with accordingly low NOx emissions.