

# Application Note – Iron & Steel Industry

## Measurement Points for LaserGas

- Blast furnace off gas, combustion control, O<sub>2</sub>, CO<sub>2</sub>, CO
- Converter (Basic oxygen furnace), gas recycling and safety, CO and O<sub>2</sub>
- Electric arc furnace off gas, combustion control, CO, O<sub>2</sub>, H<sub>2</sub>O
- Coke oven gas, O<sub>2</sub> and CO also NH<sub>3</sub> and H<sub>2</sub>S
- Reheating furnaces

## Stack gas recovery after BOF

- Installed in hazardous zone (Ex version)
- O<sub>2</sub> range 0-5% (typ. < 2%)
- CO range 0-100% (typ. > 25%)
- Benefits
- Speed of response
- Accuracy (no false alarms)

## O<sub>2</sub> Measurement in reheating furnace

- 10 m path
- 1200 deg C
- Benefits
- Speed of response
- Line measurement reflects true O<sub>2</sub> concentration
- Reduced fuel consumption
- No sampling (less maintenance)



### ProDetec Pty. Ltd.

P. +61 (02) 9620 8700

E. [info@prodetec.com.au](mailto:info@prodetec.com.au)

A. 17/38 Powers Rd, Seven Hills NSW 2147

W. [www.prodetec.com.au](http://www.prodetec.com.au)



- Air purge
- Gas temp 1050 deg C
- OPL 3.2 meters
- Measure mean furnace O2 concentration

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