Proven design – fuel versatility – highest efficiency

The POLFLAME® multifuel burner incorporates numerous innovative design ideas of ultra-modern pyroprocessing technology. Depending on the process-technological requirements, the burner is designed for fossil fuels such as coal, anthracite, oil, petcoke and natural gas or for the use of solid and liquid substitute fuels such as animal meal, sewage sludge, solid shredded waste, waste material, wood, biomass, production residues etc.

The unique patented burner design allows a high and precisely adjustable supply of air/oxygen to the heart of the flame. This ensures reliable ignition, good burnout of the materials used and low pollutant emissions. Furthermore, it is possible to substitute fossil fuels to a large extent by other fuels.

Due to the variable nozzle adjustment system, the flame shape of the POLFLAME® can be adapted continuously and within a wide range to the requirements of product quality, irrespective of the type of fuel. The design of the nozzle adjustment system and of the burner tip ensures that the adjustment mechanism functions reliably during operation even after a long period of use.

The innovative design of the new POLFLAME® thus provides outstanding process-technological product features for a variety of different fuels.

The POLFLAME® is therefore highly attractive, not only for new plants but also for system replacements in the course of plant upgrades, either as an individual component or in combination with the POLYTRACK® cooler.
Fields of application

Main firing system of rotary kiln systems for:
coal, lignite, coke, anthracite coal, wood dust, meat or bone meal, solid wastes, heavy and light oil, waste oil, natural gas

Main features

Variable adjustment of flame length, flame shape and temperature distribution during operation
Complete combustion of different fuels in the rotary kiln
High rate of fossil fuel substitution by secondary fuels
Constant flame stability at different burner settings
Easy operability
Reproducible setting of the flame shape depending on kiln operating conditions and type of fuel
Modular nozzle design

Design parameters

Thermal Power: 10 to 300 MW
Kiln capacities: 1.000 to 12.000 tpd (e.g. cement)
Adjustable swirl and divergence of the flame:
Swirl: 10° to 40°
Divergence: -5° to 15°

Contact

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