



Fig. 1: CFD calculation

Fig. 2: Burner tip



- |   |                                |
|---|--------------------------------|
| 1 Pulverised fuel /<br>Cooling air across concentric duct | 4 UV / IR flame detector       |
| 2 Ignition / Pilot burner                                 | 5 Oil / Liquid secondary fuels |
| 3 Primary air nozzles                                     | 6 Solid secondary fuels        |

## For high product quality with every type of fuel

For the new polflame<sup>®</sup> VN burner, numerous design features have been decisively improved, thus setting new standards when it comes to the process firing system for rotary kiln plants. The polflame<sup>®</sup> VN can be optimally adjusted to the fuel, the product quality and the emission requirements. High substitution rates can be achieved when using substitute fuels, meaning that savings can be made on costly fossil fuels.

Thanks to its highly efficient primary air nozzles, the burner can be optimally adjusted to the ignition behaviour and burnout performance of the individual fuels during operation. The polflame<sup>®</sup> VN meets all process-technological requirements: from easily flammable fuels, such as oil, natural gas, brown coal or hard coal, via petcoke and anthracite coal, to entrainable substitute fuels. In special cases, supportive CFD calculations are carried out.

The external coal dust channel ensures rapid mixing of fuel and hot secondary air and also cools the outer shell of the burner, which means that additional cooling air is not required.

Thanks to removable connecting elements, the nozzles and parts of the mouthpiece can be easily replaced, if required.

### Your service advantages

- Easy operability
- Reproducible burner settings, thanks to patented nozzle adjustment system
- Long service life
- High momentum, thanks to highly efficient primary air nozzles
- Great effect on ignition behaviour and burnout performance of the fuel, and thus on product quality
- Short delivery time, thanks to modular design and a high level of standardisation