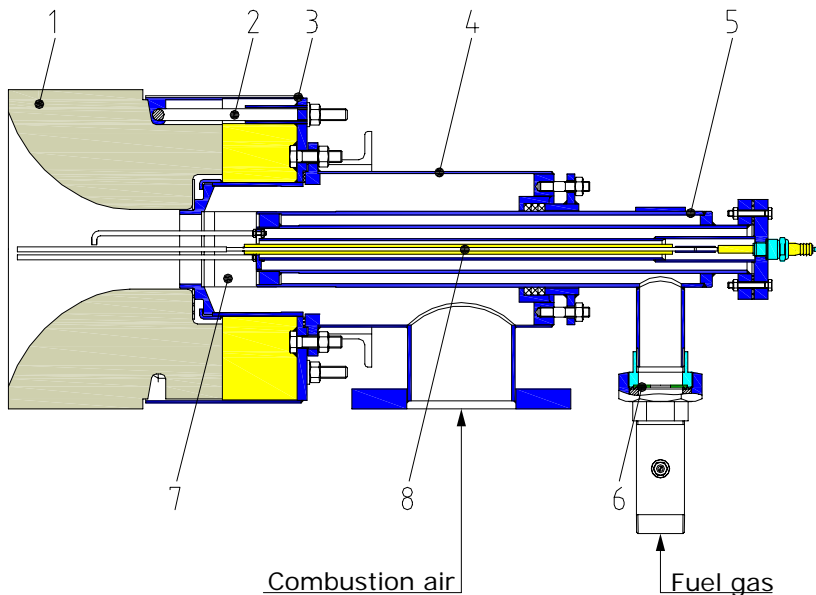


Flat Flame Burner NOXMAT® FFB

Constructive design / Mode of function

- 1... Burner block
- 2... Strap U-bolt
- 3... Burner block housing
- 4... Burner housing with air connection fitting
- 5... Gas tube
- 6... Gas throttle plate
- 7... Mixing part
- 8... Direct ignition and monitoring facility



The **burner** is comprised of a burner housing with air connection fitting, a burner block housing to accommodate the ceramic burner block, and an adjustable gas tube with fuel-gas connection. The burner is suitable both for horizontal and vertical installation.

NOXMAT Flat Flame Burners generate a radially extending flat flame upon combustion of fuel gas and air.

Combustion air and **fuel gas** are flowing through burner housing and/or gas tube to the mixing system. There, both media are separately swirled by an adequate facility and finally ignited by means of high-voltage ignition spark. The rotating gas-air mix is then passing through bell-shaped burner block thus effecting formation of the distinct flat flame.

Said flat flame heats-up intensively both the burner block and the surrounding furnace wall.

On the one hand, the high portion of solid-matter radiation in heat transfer is resulting therefrom and, on the other hand, waste gas is exhausted from the furnace chamber over the open recirculation zone and mixed with the flame root. This process counteracts the generation of NO_x .

Flame monitoring takes place via ionization current of electrode, concurrently acting as ignition and monitoring electrode (direct ignition and monitoring facility).