

PROCESS FOR THE OXYCOMBUSTION OF A LIQUID FUEL

ABSTRACT

The invention relates to a process for the combustion of a liquid fuel by means of an oxygenated gas in a combustion zone, applicable to steam boilers, producing a longer, more uniform and cooler oxygen flame than a conventional oxygen flame. According to the invention, the liquid fuel is injected into the combustion zone in atomized form, the fuel being atomized by bringing a stream of fuel into contact with a stream of atomizing fluid, and:

- prior to its atomization, the liquid fuel has a viscosity of at least $30 \times 10^{-6} \text{ m}^2/\text{s}$,
- the stream of fuel is brought into contact with the stream of atomizing fluid only in the combustion zone, and
- oxygenated gas is injected into the combustion zone in stages.

FIGURE 1