



Combustion Technologies – Pollutants and legislation

Ficha #3 (delivery, in pdf/excel, day 8 june 2020 until your oral examination)

A boiler is fed by fuel-oil with the following ultimate analysis (see table). Considering combustion with 25% excesso air:

- a) Calculate the (A/F)_{st}.
- b) Estimate the SO₂ concentration in the combustion products.
- c) Compare with the dry limit at 3% O₂ of 200 mg/Nm³ and discuss if the power plant complies with the legislation.
- d) Can you estimate the particle emissions at the exhaust? Explain and estimate in mg/Nm³.

C	86.4%
H	9.8%
N	0.35%
S	1.13%
O	2.28%
Cinzas/Ash	0.04%

Ultimate analysis fuel