



## **Does gas calorific value influence efficiency tests?**

The type of gas can highly influence the efficiency. The software of the test bench considers density and calorific power of the gas you declare when you run the test. If your actual gas has a higher calorific power than the declared one, you will obtain an unjustified high efficiency value.

On the contrary, if your actual gas has lower calorific value than the declared one, you will obtain a lower efficiency respect to the real one. This is true if you set your boiler to the nominal power, as we suppose you do. In case of low calorific value of the actual gas, a higher flow rate will be needed to produce the nominal heat input; in case of higher calorific value, a lower gas flow rate will be needed.

As a conclusion, regardless to other factors, you can judge the efficiency value only in case the calorific value you declare - when you run the test - is exactly the one of the gas you use.