

BRIGON-Flue-Gas-Thermometer BIT

to measure temperature of flue gas

As a rule it is desirable to ensure complete, clean combustion with a maximum percentage of CO₂ and at the same time minimum temperature of flue gas. This of course is very difficult and depends on variations in fuel, draft, atmospheric conditions, and mechanical wear.

The ultimate CO₂ of oil- or gascombustion is only of theoretical value, because it depends on various influences and also domestic standards concerning combustion. Adjusting burner and boiler to maximum combustion efficiency and to meet domestic standards and laws is a difficult business, but possible if percentage of CO₂ and net temperature of combustion are known. Consult manufacturer of heating equipment or fuel supplier for specific recommendations.

Testing Device

Range: 0 to 500°C (0 to 900°F)

Scale Division: 10°C or 20°F

Accuracy: $\pm 1.5\%$ of reading

Diameter: 80 mm (3.15")

Stem: 150 mm ($\approx 6"$);
300 mm ($\approx 12"$)

Measurement

Insert the stem of BRIGON-Flue-Gas-Thermometer BIT into center flow if possible, but at least 60 mm (2.5") into smoke outlet and avoid secondary air by using a cone with the stem. Read off temperature when pointer remains stationary. Deduct temperature of basement or combustion air from measured flue gas temperature to obtain net flue gas temperature.

Maintenance

BRIGON-Flue-Gas-Thermometer BIT needs no special maintenance, but as all BRIGON-Testing-Equipment should be treated with care.

