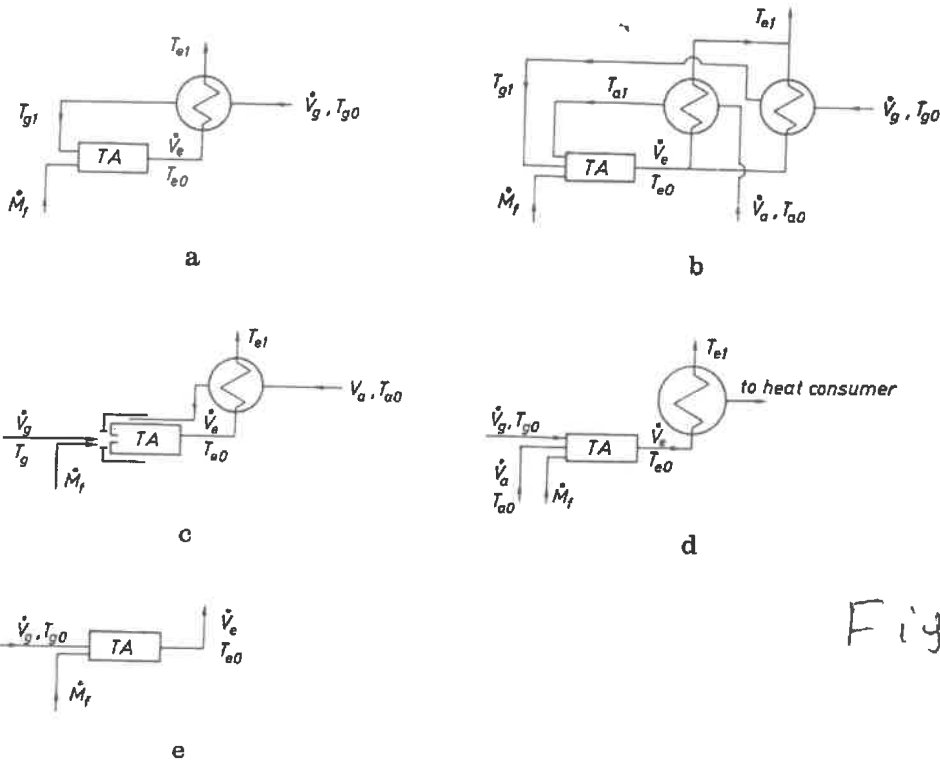
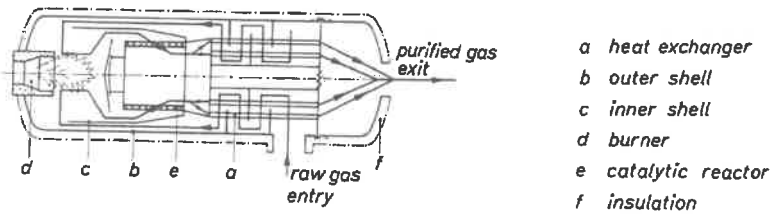


Air Pollution Control
Figures for chemical treatment



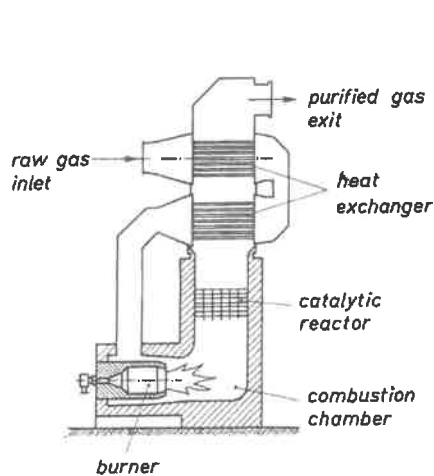
Various systems of heat recovery for thermal after-burners

Figure 3.



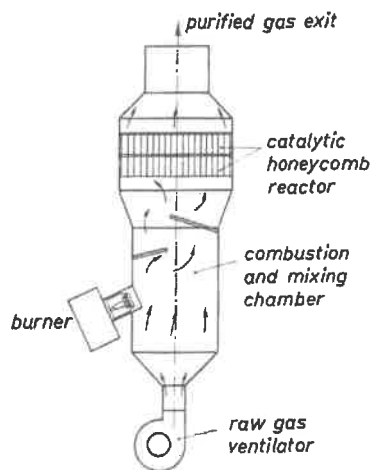
Catalytic after-burner with ring layer of particulate catalyst

Figure 5.



Catalytic after-burner with array of ceramic cylinders coated with active catalytic material

Figure 6.



Catalytic after-burner with coated monoliths as the catalyst

Figure 7

Kémiai véggáz kezelés

Potenergia-irány

A 2. ábra alapján hőegyenlet: or végeztélre:

$$\dot{m}_g + \dot{m}_f + \dot{m}_a = \dot{m}_e$$

Hőmennyiség or végeztélre:

$$\begin{aligned} \dot{m}_g (c_g T_g + \Delta h_g) + \dot{m}_f (c_f T_f + \Delta h_f) + \dot{m}_a c_a T_a &= \\ &= \dot{m}_e (c_e T_e + \Delta h_e) + Q_{he} \end{aligned}$$

Tömegmérleg behelyettesítése:

$$\begin{aligned} \dot{m}_g (c_g T_g + \Delta h_g) + \dot{m}_f (c_f T_f + \Delta h_f) + \dot{m}_a c_a T_a &= \\ &= (\dot{m}_g + \dot{m}_f + \dot{m}_a) (c_e T_e + \Delta h_e) + Q_{he} \end{aligned}$$

Rendezés a hőenergia-irányra:

$$\dot{m}_f (c_f T_f + \Delta h_f - c_e T_e - \Delta h_e) = \dot{m}_g (c_e T_e + \Delta h_e - c_g T_g - \Delta h_g) + \dot{m}_a (c_e T_e + \Delta h_e - c_a T_a) + \dot{Q}_{he}$$

Rendezés a fajlagos mennyiségre:

$$\frac{\dot{m}_f}{\dot{m}_g} = \frac{\dot{m}_g (c_e T_e + \Delta h_e) - c_g T_g - \Delta h_g}{\dot{m}_g (c_f T_f + \Delta h_f - c_e T_e - \Delta h_e)} + \dot{m}_a (c_e T_e + \Delta h_e - c_a T_a) + \dot{Q}_{he}$$

Ebből $\Delta h_e > 0$ $s_2 \uparrow$; $N \downarrow$; $\dot{m}_e / \dot{m}_g \uparrow$
 $T_a, T_f \uparrow$ $s_2 \downarrow$; $N \uparrow$; $\dot{m}_f / \dot{m}_g \uparrow$
 $\dot{Q}_{he} \uparrow$ $s_2 \uparrow$ $\dot{m}_f / \dot{m}_g \uparrow$

Egyszerűsítve:

$$\frac{\dot{m}_f}{\dot{m}_g} \sim -c_1 T_g - c_2 \Delta h_g \Rightarrow T_g \uparrow, \Delta h_g \uparrow \Rightarrow \frac{\dot{m}_f}{\dot{m}_g} \downarrow$$

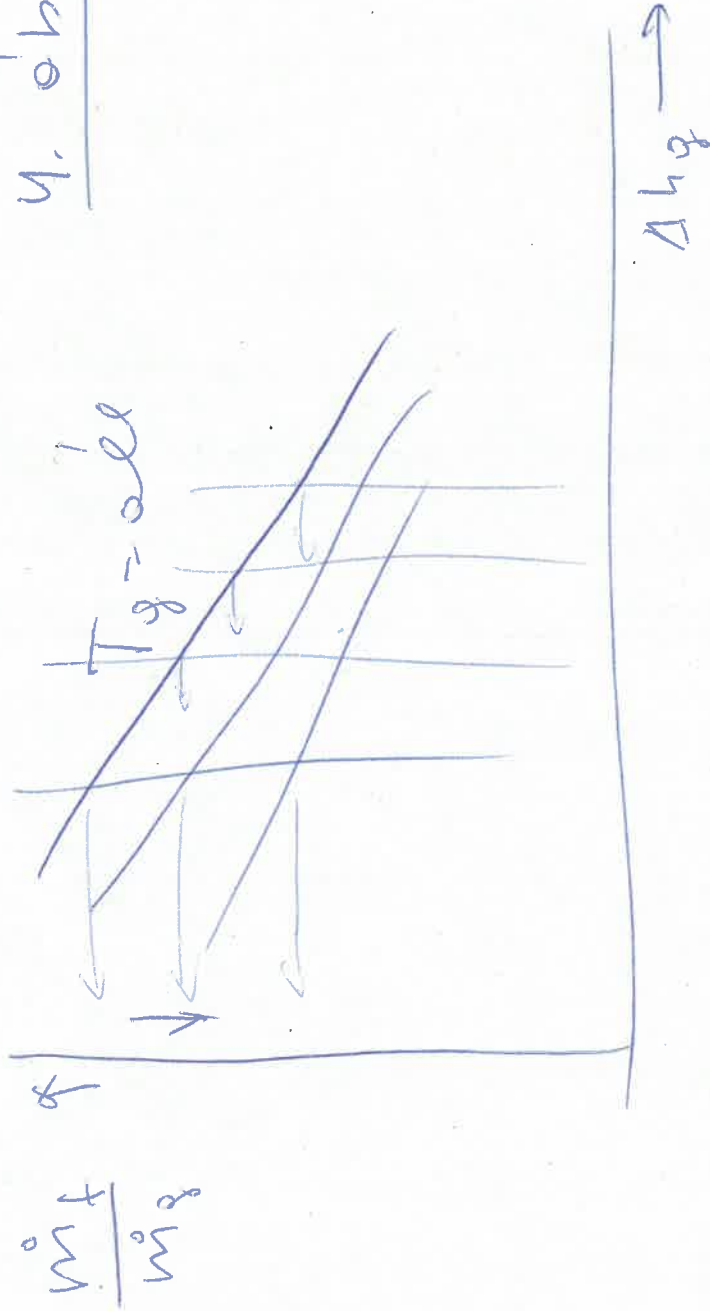
Hűviszonyerős, hőmellepítés.

levegő $T_a \uparrow$

tűzelőanyag $T_f \uparrow$

vegyőz $T_g \uparrow$

y. öbrre



✓