

*

-

-

(// , //)

:

[]

C₂

()

[]

()

C₂

[]

Mn/Na₂WO₄/SiO₂

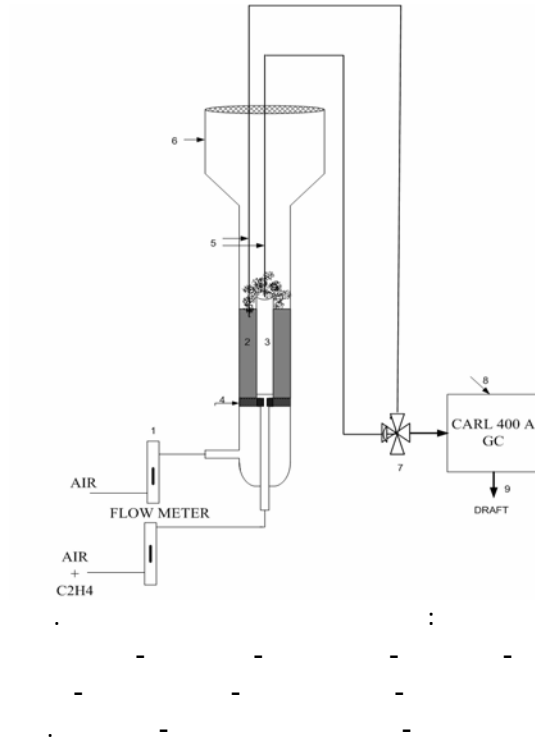
[]

[]

[-]

[]

(W_s)



[-]

() []

(())

/ - /

(U_{mf})

/ -

$$d_p = \dots \mu\text{m} \quad \rho_s = \dots \text{g/cm}^3$$

$$\varepsilon_{mf} = \dots$$

Carl 400 A

[]

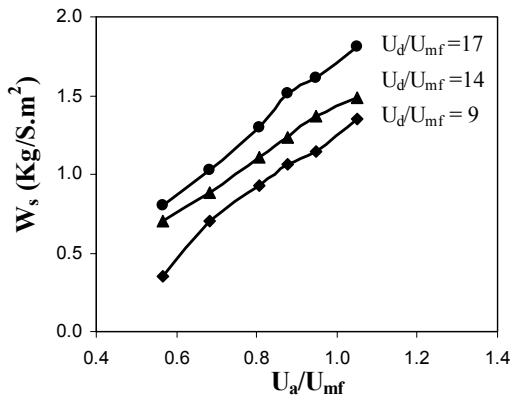
$$U_{mf} = \dots \text{cm/s}$$

μm

()

/ - /

/ / U_a/U_{mf}



()

$$(V_a = L/t)$$

$$W_s = \rho_s V_a (1 - \varepsilon_{mf}) \quad ()$$

U_a

cm

cm

/ mm

/ cm

U_a

W_s

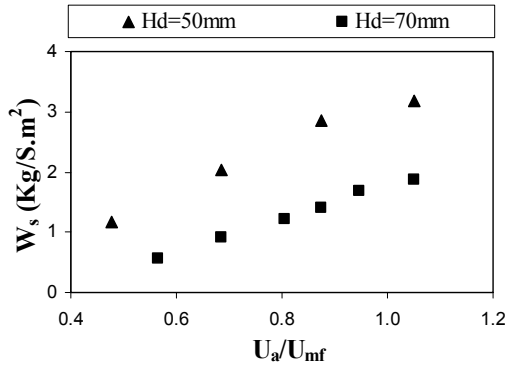
() U_a

/ - /

$U_d/U_{mf} =$

()

U_d/U_{mf} W_s U_d



U_a

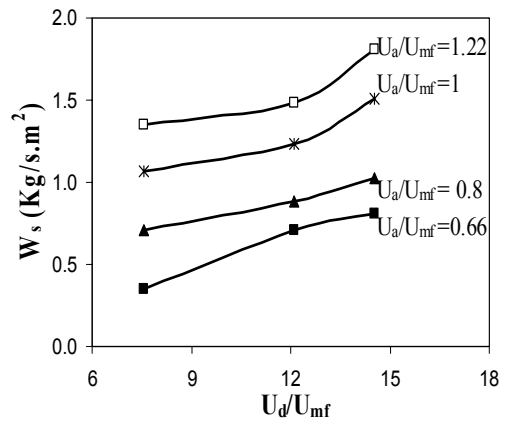
() ()

U_d

/ cm cm

$U_d/U_{mf} =$ / mm

()



U_a

cm

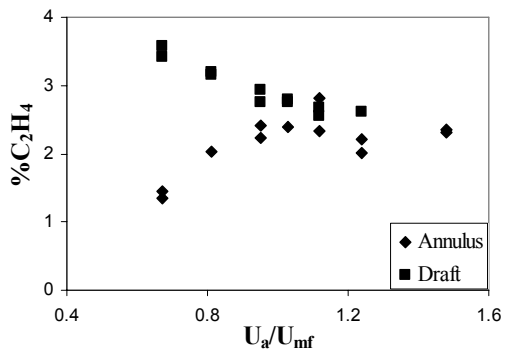
()

()

/ mm

/ cm

cm

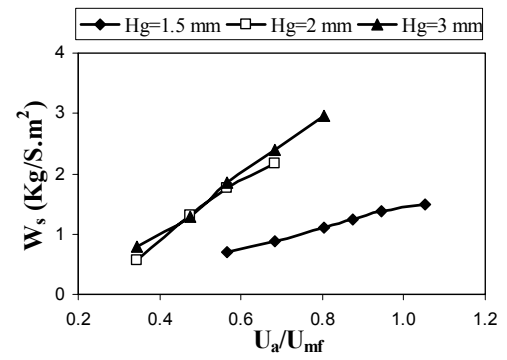


cm
/ mm
%
U_a/U_{mf}=

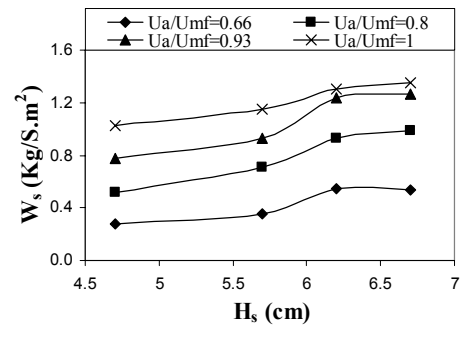
)
(U_a/U_{mf} = U_a/U_{mf} = / %

cm	%
/	/
/	/
/	/
/	/
/	
/	

() ()



cm
U_a/U_{mf} = / cm



cm
U_a/U_{mf} = / mm

()

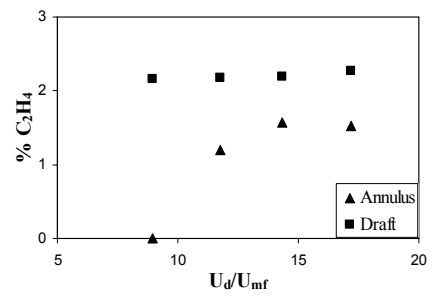
()

()

()

()

U_d



cm
/ mm
%
cm
 $U_d/U_{mf} = /$

- : d_p [μm]
- : H_d [cm]
- : H_s [cm]
- : H_g [mm]
- : U_d [cm/s]
- : U_a [cm/s]
- : U_{mf} [cm/s]
- : V_a
- [m/s]

: ρ_s [Kg/m³]: W_s [kg/m²s]: ϵ_{mf}

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1 - Hot Spot

3 - Two Zone Fluidized Bed Reactor-TZFBR

5 - Internally Circulating Fluidized Bed-ICFB

7 - Annulus

9 - Tracer

2 - Oxidative Coupling of Methane-OCM

4 - Redox Catalyst

6 - Draft Tube

8 - Cold Model