

Some Words About Humidity

(가)

가?

rh . , 乃

() () .
100 가 .

(179 B.C.) 가 . (가).

가 / (1m3) (g) . D=g/m3 .
 , D .
D .

(e) (es/100%). rh=e/es × 100% .

가 / .

(esi) 0 , 가 JIS-Z-8806 () . (esw)

가 , 가 ,
가 . ,
가 . 0 , .

"THI"

1959
(td + tw) × 0.72 + 40.6
TOME POSEN
, THI = (td + tw) × 0.72 + 40.6, 70 75 가
. 80

"X" 가 (, ,) .

"X"

가 () 1kg X kg X(kg/kg) .

, , . X . ,

() , (i) (X)

(kcal/kg)

() .

"S"(Specific humidity)

(1kg) kg/kg .

"φ"

(1kg0 (X) (1kg)

(X) .

$\varphi = X/X_s \times 100\%$, $\varphi = 0$,

$\varphi = 100$.

"λ"

es-e Ds-D .

(JIS - 8703)

1	:	65 ± 2% rh
2	:	65 ± 5% rh
3	:	65 ± 20% rh

1	:	20 ± 1	65 ± 2% rh
2	:	20 ± 2	65 ± 2% rh
3	:	20 ± 2	65 ± 5% rh

65 ± 20% rh 20 ± 15 .

"tw"

(tw) (t)

() .

"ts"

가 , 5m/sec

"Aw"

Sensible heat, "kcal/kg"

sensible heat kcal/1kg

(T) 0.24 . 0.24

specific heat(kcal/kg)

"kcal/kg"

가

(T) 1kg

(597.3+0.44T) . 597.3

kcal/kg

0

"μ"

(, ,)

(i) (X)

$\mu = \Delta i / \Delta X$

Air-bourne Mist

()

Air-bourne Snow

Specific Weight "γ"

(0 , 760mm Hg,

가 g= 980, 665cm /s2)

specific weight γ

1.293kg/Nm3

1%

2%

specific weight 1.2kg/m3

Specific Volume

1kg

specific weight

1/1.2=0.833m3/kg (DA) kg

, 1kg (DA) 1kg

Specific Heat "Cp"

1

Cp=0.240+0.

44..

, Cp specific heat[kcal/kg (DA)-]
 X
 sensible "SHF"
 가 , sensible

$$SHF = (C_p \cdot \Delta t) / \Delta i$$

, Cp : specific heat
 Δt :
 Δi :

"E"

,

$$E = (1 - 0.7)H_0 + 0.7H_1 + (0.7)(0.7)H_2 + \dots$$

, H0 :
 H1 :
 H2 :

- -