

(4) – 가

1.

가

가



< 1>

< 1>

가

가

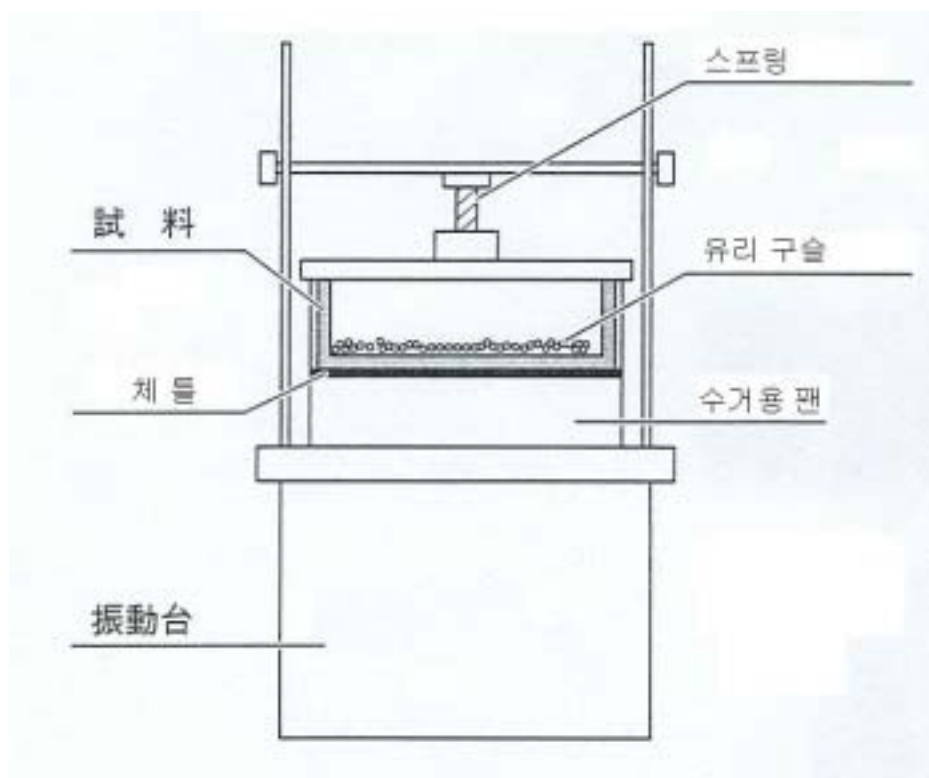
<

1>

가

2.

AOS(Apparent Opening Size)



< 2> AOS

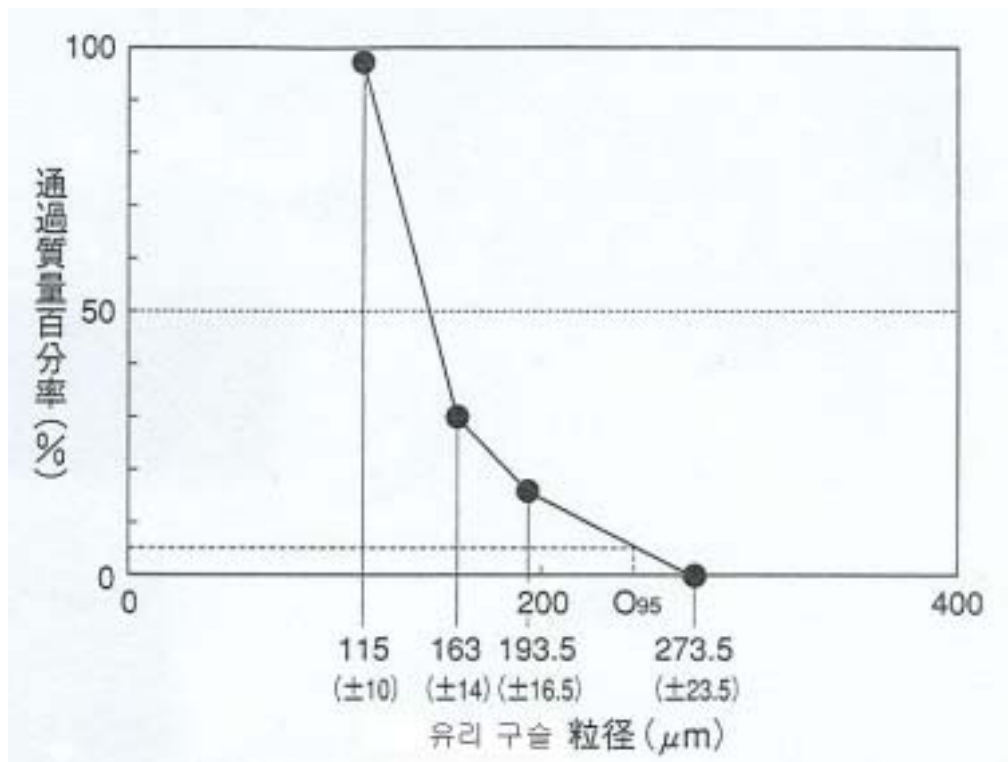
가

5%가

가 95% O_{95}

<

3>



< 3> AOS

< 4>

가 , (JIS A 1208) .

(1) k_v .

$$(2) \qquad \theta \qquad (3)$$

k_H 가 . ,

< 5> 3

.

$$k_V = Q \cdot l / (\Delta h \cdot A \cdot t) \dots\dots\dots (1)$$

k_V : (cm/s)

Q : (cm³)

l : (cm)

Δh : (cm)

A : (cm²)

t : (s)

$$\theta = Q \cdot L / (\Delta h \cdot W \cdot t) \dots\dots\dots (2)$$

θ : (cm²/s)

Q : (cm³)

L : (cm)

Δh : (cm)

W : (cm)

t : (s)

$$k_H = \theta / l \dots\dots\dots (3)$$

k_H :

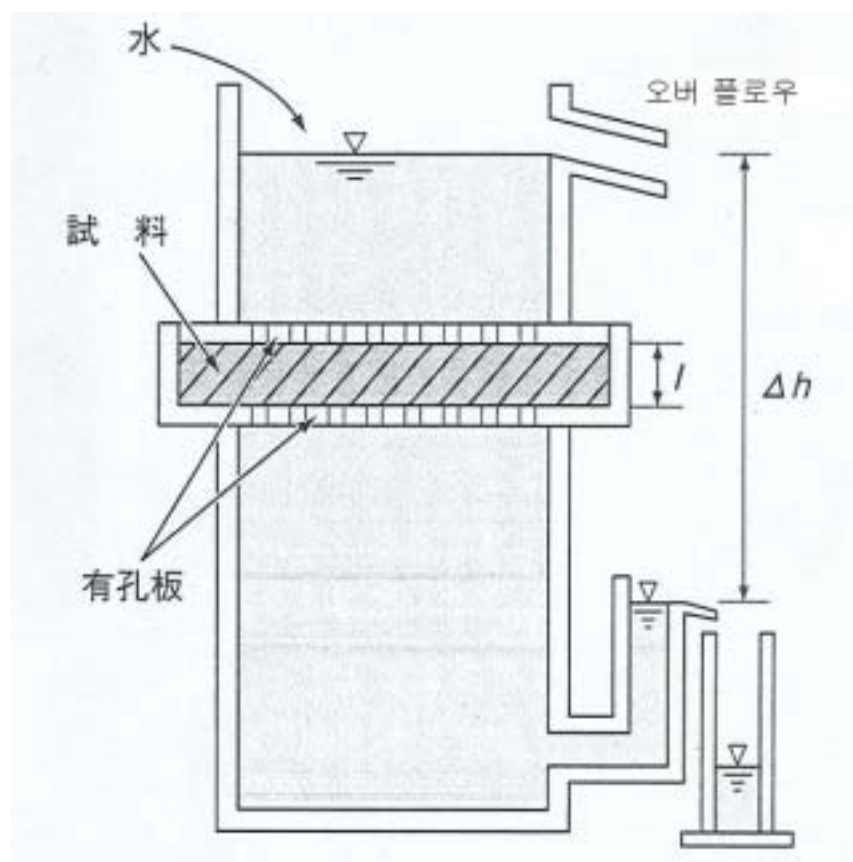
θ : (cm²/s)

l : (cm)

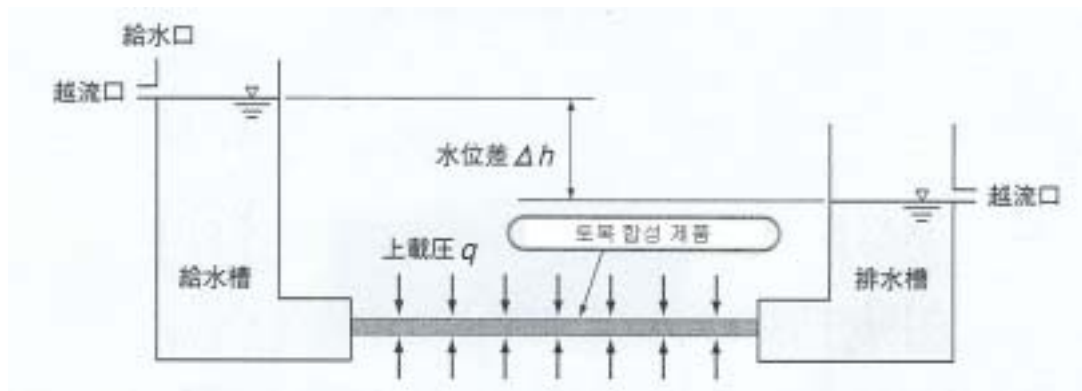
,

가

가 .



< 4 >

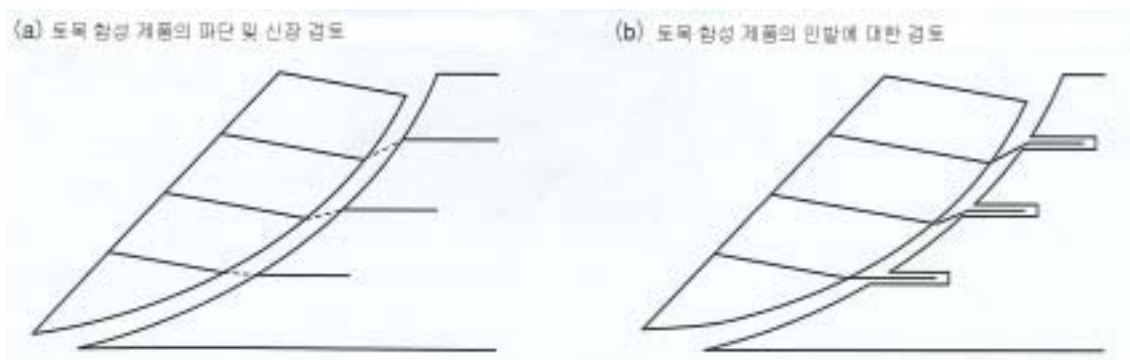


< 5>

3.

< 6>

, 가
가



< 6>

< 6> (b)

가

,

.

,

.

< 7>

,

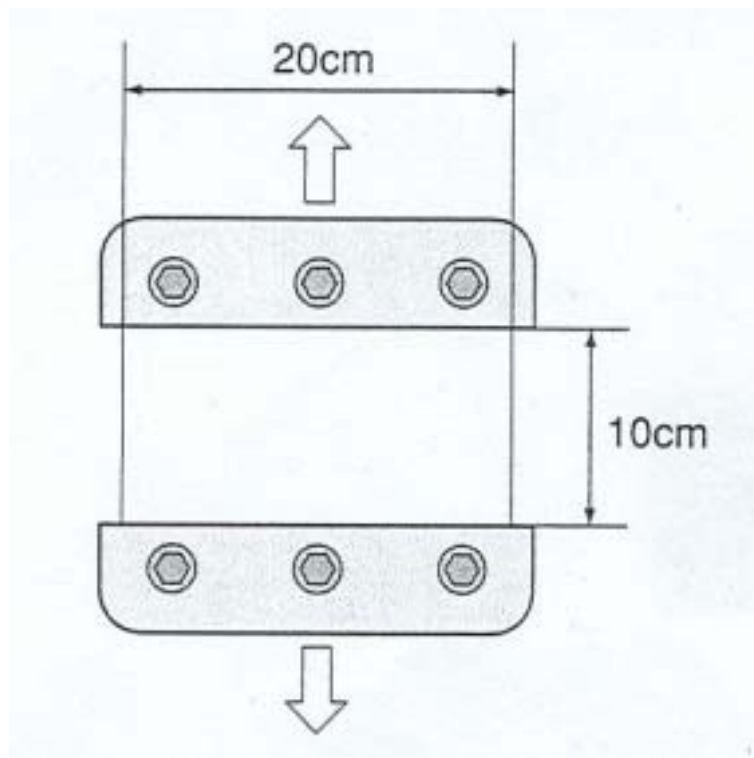
5cm

20cm

20cm

20cm

$(20 \pm 5)\%/min$



< 7>

가

< 8>

가가

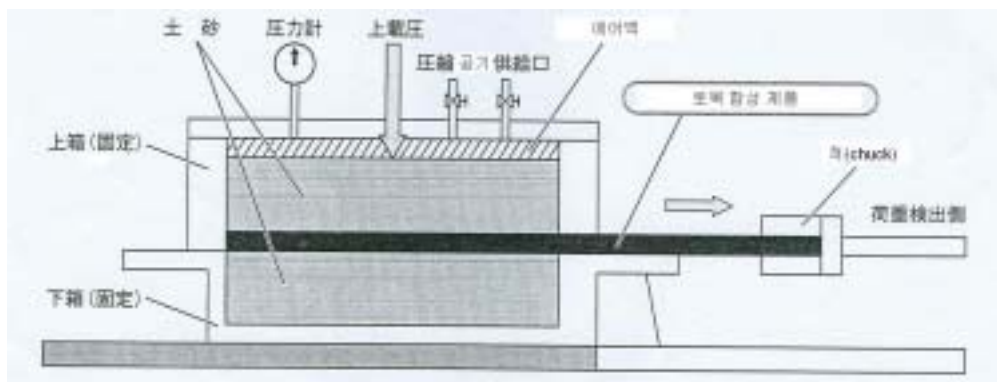
가

가가

< 9>

가

(A B 가).



< 8>

$$T_{Smax} \quad \sigma_N \quad k \quad (4)$$

$$(4) \quad C_s \quad (4)$$

$$k \quad \sigma_N \quad T_{Smax}$$

. < 10>

.

$$\tau_{\text{Smax}} = k \cdot \sigma_{\text{N}} (+C_{\text{S}}) \dots\dots\dots (4)$$

τ_{Smax} : (kPa)

k :

σ_{N} : (kPa)

C_{S} : (kPa)

가 .

, T_{max}

, T_{cr}

. T_{cr} T_{max} 10~90% 5

, .

T_{cr} T_{max}

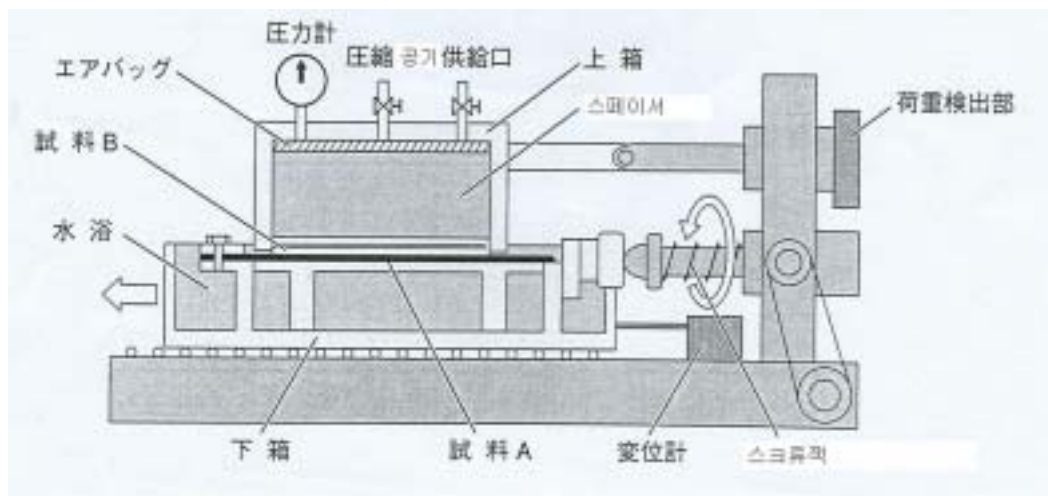
(5) .

$$T_{\text{cr}} = \mu \cdot T_{\text{max}} \dots\dots\dots (5)$$

T_{cr} :

μ :

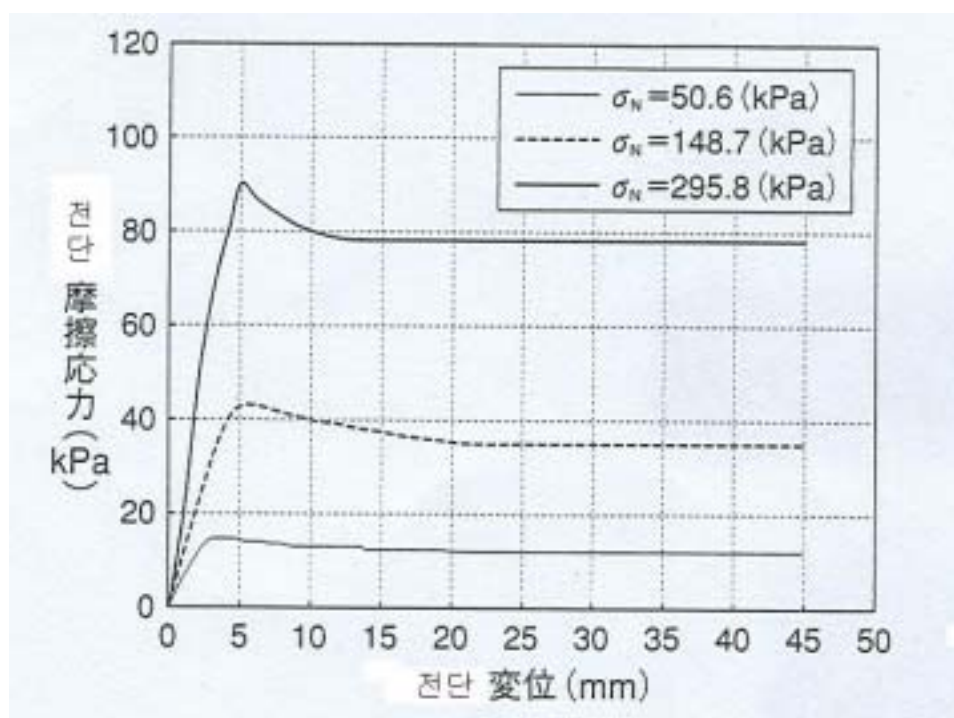
T_{max} :



< 9>

가(

)



< 10>

4.

가 .

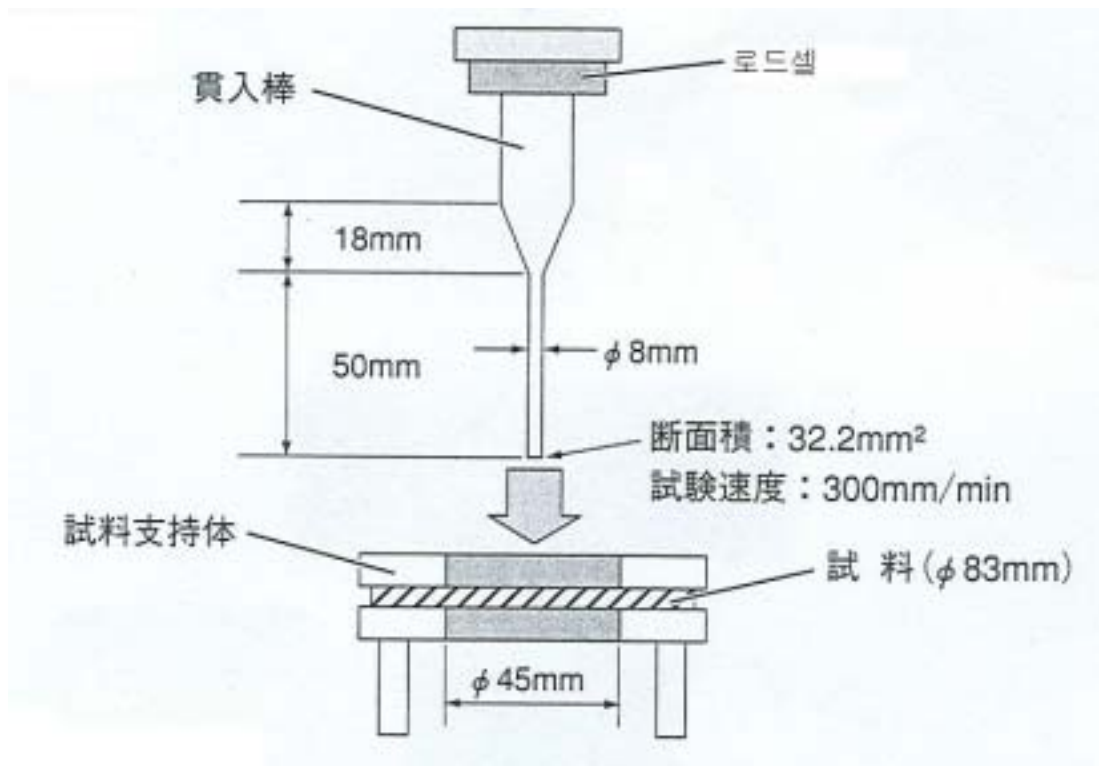
가

< 4>

JIS K

6549(가) JIS L 1099(

) A-1 ,



< 11>

가

가

가 ASTM D 4833

< 11>

(8mm)

가

가

5.

가

가

(RRR)

가 가

pH 12

가