

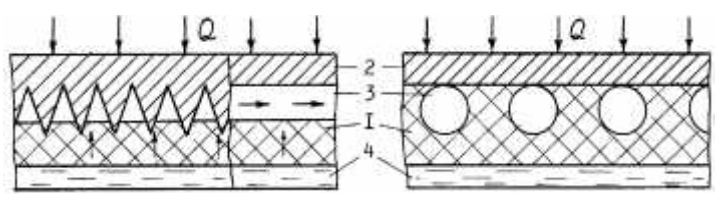
. 1

,
2
()

«

1,

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».
-
3,
,



. 1.

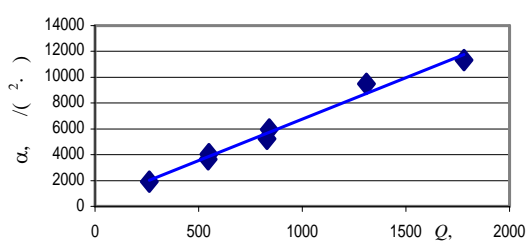
; 3 - () : 1 - ; 2 -
; 4 - ()

[2].

. 2

1 (. 1)

$1,2 \cdot 10^{-12}$
40 %
15

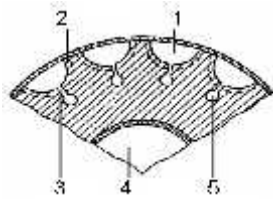


. 2.

$$\alpha = 1027,4q^{0,9537}, \quad q -$$

(. 3)

16 , $h = 0,5$, $2 - 60$, $1 - 12$, -1 (. 3):
 $3 - 0,05$, $-0,8$, $4 -$
 $5 - 1$.



50000...70000 / (2).
 [3]

$$Nu^* = \alpha h \sqrt{\frac{\sin \Theta \operatorname{tg} \varphi}{\lambda_w \lambda_l}} = 1 \quad (1)$$

$$Nu^* = \frac{\alpha h}{f_F} \sqrt{\frac{\sin \phi \operatorname{tg} \varphi}{\lambda_w \lambda_l}} = 1, \quad (2)$$

$Nu^* -$; $f_F -$, ; $\sin \phi -$

$$\sin \phi = \sin \Theta. \quad f_F = F/F_d, \quad F -$$

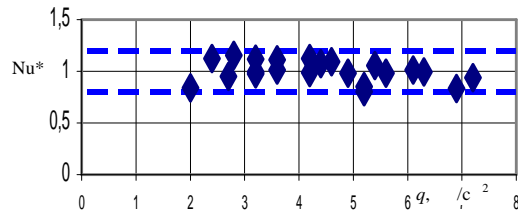
(2) ; $F_d -$ 29° .

$$\sin \phi = 0,16,$$

$\phi = 9,3^\circ$.

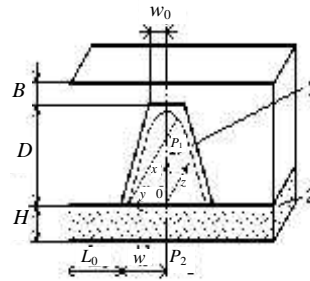
(2) . 4.

$\pm 20\%$



0,6...1

(. 5).



. 5.

: 1 -

; 2 -

40 %

15

$1,2 \cdot 10^{-12} \text{ }^2$

9 ;

-1

$-0,01 \text{ }^2$

-1

$= (\Delta t/q - \delta/\lambda)^{-1}$.

: $\alpha =$

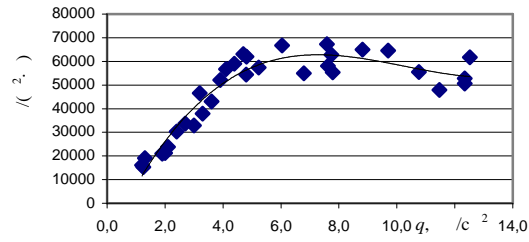
6...9 / 2

(. 6).

$Nu = CRe^n$

20 %

$$= 889,59 \text{Re}^{1,0068}, \quad \text{Re} > 0,2 \quad \text{Nu} = 147,98 \text{Re}^{-0,1452}.$$



Re,

$$\text{Re} = \frac{Q(s/2)}{A_b h_{fg} \mu}, \quad s -$$

$$\text{Nu} = \frac{\alpha \left(\frac{s}{2} \right)}{\lambda_l}.$$

$$: \text{We} = \frac{\rho_v v_v^2 A_{ch}}{\sigma} = 1, \quad A_{ch} -$$

A_{ch}

$$r_{ent}: A_{ch} = r_{ent} a_{ent}, \quad a_{ent} = \dots$$

$$: A_h = 1,32415t^{-1,41228}; \quad a_{ent} = 5767,6t^{-1,3065}.$$

$$: A_{ch} = 0,00295;$$

$$a_{ent} = 22,18.$$

$k_{eff,exp}$

(20...30 c)

()

()

()

C

—

).

1. , , , -
 2. « », , -
 3. ±20 %. -
 4. (30...100°). -
 5. (2...10) -
 6. -
-
1. // . - 1986. - 3. - C. 31-33. -
 2. // -
 3. : . - , 1990. -
- // . - 1980. - 5. - C. 393-399. -

20.01.2005