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10.1.

(. 10.1),

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 b

1

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 I

2,

1.

 Δ_{I1} ,

2 -

 Δ_{21} .

2

2,

2

 Δ_{22} ,1 - Δ_{I2} . I

2

 Δ_{I2} Δ_{21}

1 2

:

 I

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2 ,

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2

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 I :

$$P_1 \cdot \Delta_{I2} = P_2 \cdot \Delta_{21}.$$

(10.1)

($I=2$)

-

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1,

,

2,

2,

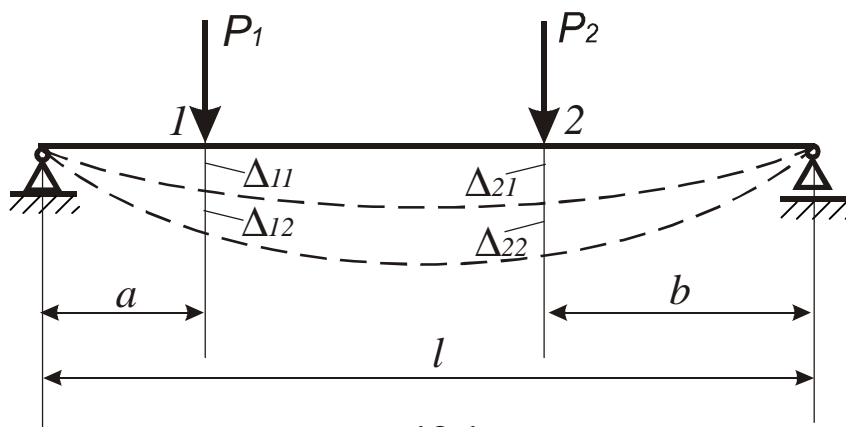
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-

1:

$$\Delta_{I2} = \Delta_{21}.$$

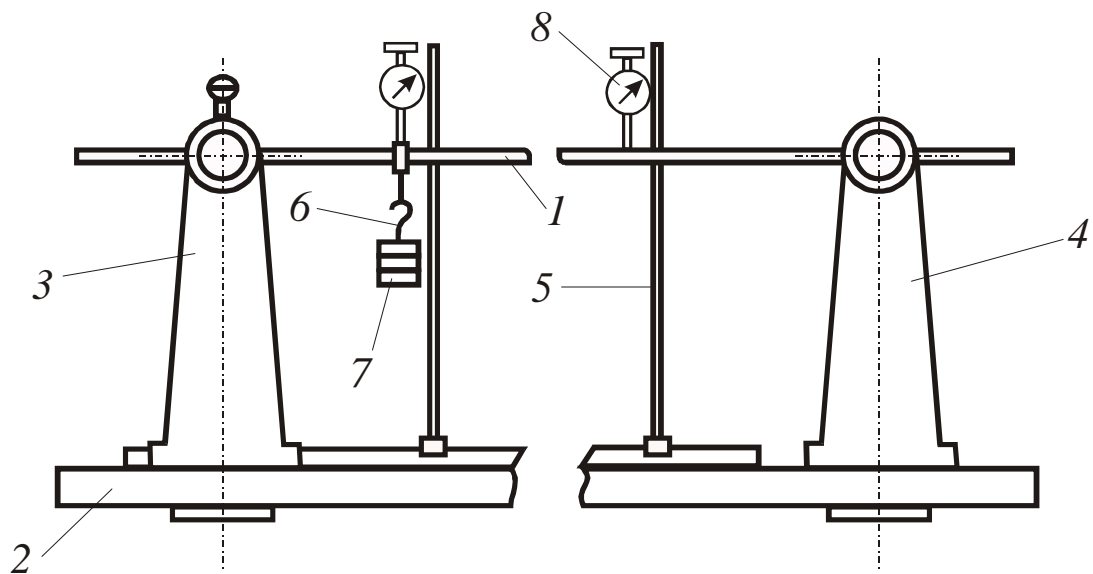
(10.2)



. 10.1

10.2.

. 10.2.



10.2

3 4 , 5 -
6. (= $2 \cdot 10^5$) -
(= 40 , = 7)
l = 1 .

($m = 0,5$ = 5) 7. -
1 2,
 $a = 0,2$ $b = 0,3$.

8 0,01 .

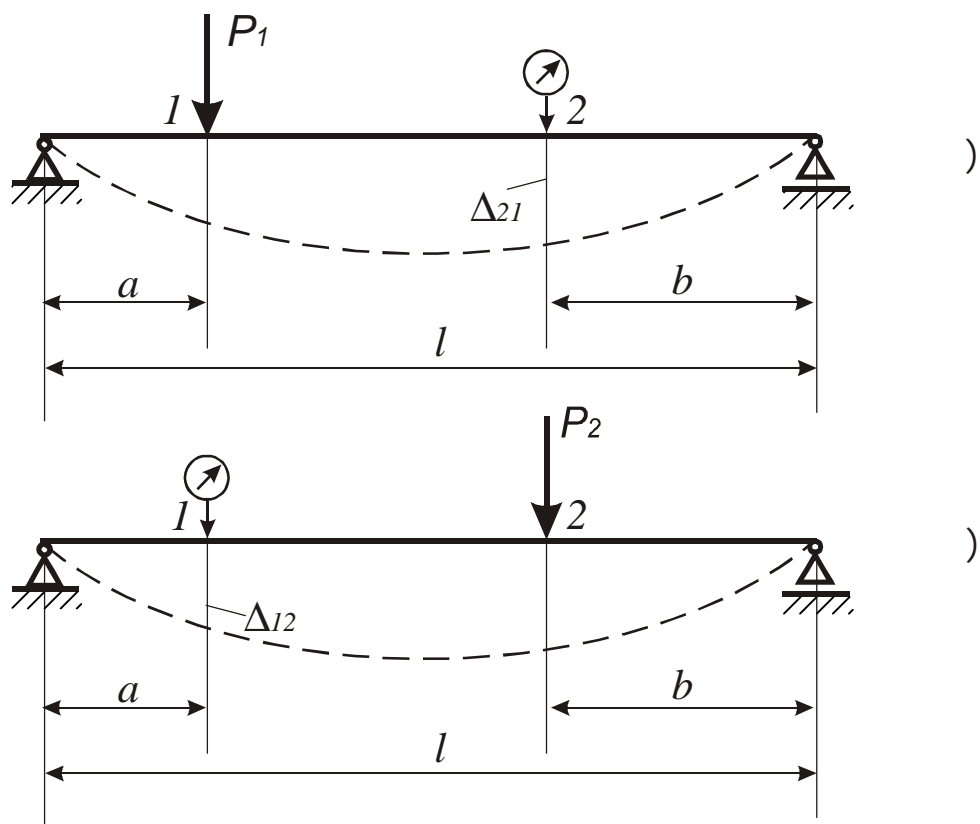
10.3.

10.3.1. = 0,2 $b = 0,3$ ($\frac{1}{20}$ $\frac{2}{70}$)
).

10.3.2. "0" -
 T_1 T_2 10.4.1

10.3.3. 1
 $I = 25$ () (.
10.3,) 2. -

10.3.4. 2
 $I = 35$ () (.
10.3,) 1. -



. 10.3

10.3.5. (. 10.3.2 - 10.3.4) ,

. 10.4.1.

10.3.6. Δ_1 Δ_2 , -
:

$$\Delta_1 = \Delta_{I2}, \quad \Delta_2 = \Delta_{2I}.$$

10.3.7. Δ_{I2} Δ_{2I} 1,
2:

$$\Delta_1 = \Delta_{I2} \cdot \Delta_{I2},$$

2 Δ_{2I} 2, Δ_{I2} :

$$\Delta_2 = \Delta_{2I} \cdot \Delta_{2I}.$$

. 10.4.1.

10.3.8. (10.1). :

$$\delta = \frac{\Delta_1 - \Delta_2}{\Delta_1} \cdot 100\%.$$

. 10.4.1.

10.3.9. (. 10.3.2 - 10.3.5), -

1 2 $\Delta_1 = \Delta_2 = 25$ -

. 10.4.2.

10.3.10. Δ_{12} Δ_{21} -

$$\Delta_{12} = \Delta_{12}, \quad \Delta_{21} = \Delta_{21}.$$

10.4.2.

10.3.11. -

(10.2).

$$\delta = \frac{\Delta_{12} - \Delta_{21}}{\Delta_{12}} \cdot 100\%.$$

10.4.2.

10.3.12. .

10.4.

10.4.1. .

10.4.2. (10.3).

10.4.3. .

10.4.1

1			2					-
I_1	I_2	Δ_{12}	I_1	I_2	Δ_{21}	Δ_{12}	Δ_{21}	$\delta, \%$
0			0					
25			35					
0			0					
25			35					
0			0					
25			35					

10.4.2

1			2			-
I_1	I_2	Δ_{12}	I_1	I_2	Δ_{21}	$\delta, \%$
0			0			
25			25			
0			0			
25			25			
0			0			
25			25			

10.5.

11

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11.1.

$$\lambda = \frac{\mu l}{i_{\min}}, \quad (11.1)$$

$$l = \frac{1}{2} \left(\frac{1}{\mu} + \mu \right) ; \quad \mu l = \frac{1}{2} \left(\frac{1}{\mu} - \mu \right) ; \quad i_{min} = \frac{1}{2} \left(\frac{1}{\mu} - \mu \right)$$

$$\lambda = \sqrt{\frac{E}{\sigma}}, \quad (11.2)$$

- ; σ -

$$\lambda = (40 \div 100).$$

$$\lambda > \lambda,$$

:

$$= \frac{\pi^2 EJ_{min}}{(\mu l)^2}, \quad (11.3)$$

J_{min} -

$$\lambda < \lambda$$

-

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-

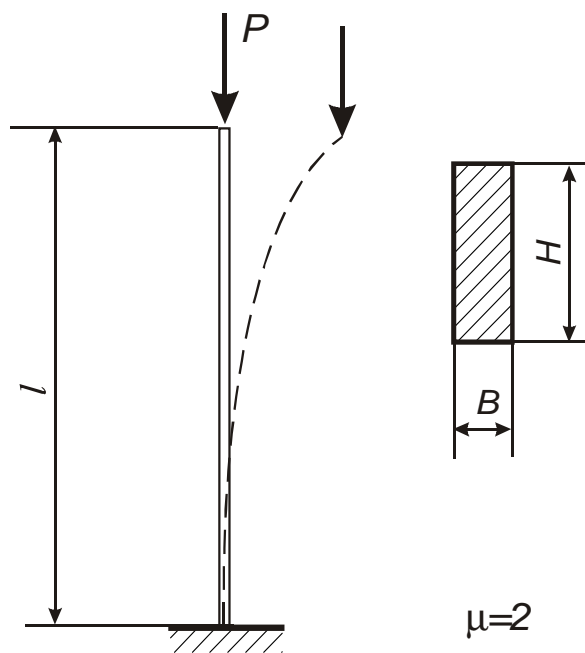
$$: \sigma = a - b\lambda.$$

:

$$= \sigma \cdot F = (a - b \cdot \lambda) \cdot F, \quad (11.4)$$

, b -

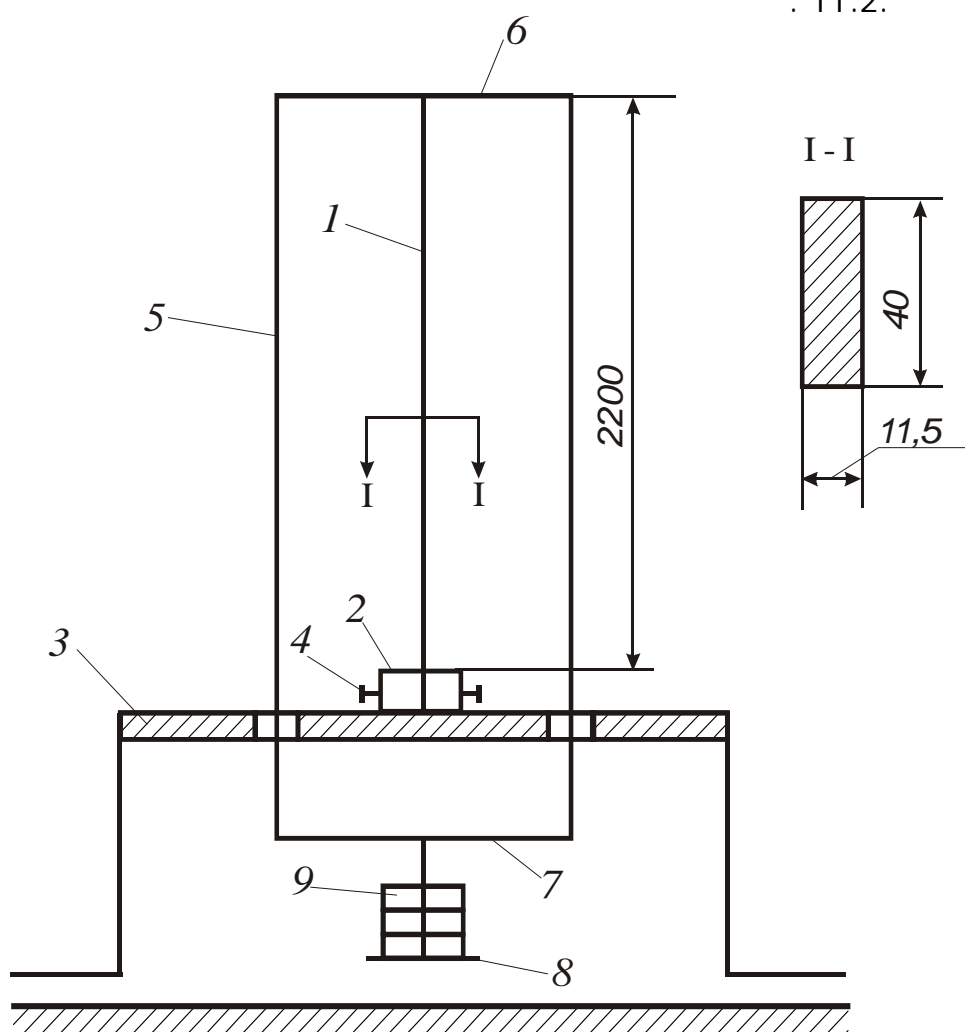
; F -



. 11.1

11.2.

(11.2) 2, 4, 5, 8 (11.1). 1 3, 6 7



11.2

11.3.

11.3.1.

11.4.1.

11.3.2.

11.3.3.

11.3.4.

8

6,5 (65).

11.3.5.

$$\delta = \frac{\quad}{\quad} \cdot 100\% \quad (11.4)$$

11.3.6.

11.4.

11.4.1.

11.4.2. (. 11.1).

11.4.3.

11.4.1

1		.5
2		
3	$l,$	
4	$F=b \cdot h, \quad ^2$	
5	min $J_{min} = \frac{HB^3}{12}, \quad ^4$	
6	min $i_{min} = \sqrt{\frac{J_{min}}{F}},$	
7	$\lambda = \frac{\mu l}{i_{min}}$	

11.4.4. _____ :

$$= \frac{\pi^2 EJ_{min}}{(\mu l)^2} = \quad (\quad).$$

11.4.5. _____ :

$$= 65 + \quad = \quad (\quad).$$

_____ . -

‘ ‘ ‘ ‘
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11.4.6. _____ .

11.4.2

		$\delta, \%$
‘	‘	

11.4.7. _____ :

_____ :
; ;
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_____ " _____ " _____ 20 _____ .

11.5.

1. _____ ?
2. _____ ?
3. _____ ?
4. _____ -
‘ ?
5. _____ -
‘ ?
6. EJ -
‘ ?